As filed with the Securities and Exchange Commission on September 17, 2008

Registration No. 333-150227

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 9 TO

Form S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

FLUIDIGM CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware	**3826**	**77-0513190**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

7000 Shoreline Court, Suite 100
South San Francisco, CA 94080
(650) 266-6000
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Gajus V. Worthington
President and Chief Executive Officer
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080
(650) 266-6000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, as amended, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Ruler 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer o	Non-accelerated filer o	Smaller reporting company o
		(Do not check if a smaller reporting company)	

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	**Proposed Maximum Aggregate Offering Price(1)**	**Amount of Registration Fee(2)(3)**
Common Stock $0.001 par value per share	97,520,000	$3,832.54

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act. Includes $12,720,000 of shares that the underwriters have the option to purchase to cover over-allotments, if any.

(2) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum offering price.

(3) $3,593.00 previously paid.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to such Section 8(a), may determine.

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PROSPECTUS (Subject to Completion)
Issued September 17, 2008

5,300,000 Shares

COMMON STOCK

Fluidigm Corporation is offering 5,300,000 shares of its common stock. This is our initial public offering, and no public market currently exists for our shares. We anticipate that the initial public offering price will be between $14.00 and $16.00 per share.

We have applied to list our common stock on the NASDAQ Global Market under the symbol "FLDM."

Investing in our common stock involves risks. See "Risk Factors" beginning on page 8.

PRICE $ A SHARE

	Price to Public	Underwriting Discounts and Commissions	Proceeds to Fluidigm Corporation
Per Share	*$*	*$*	*$*
Total	*$*	*$*	*$*

We have granted the underwriters the right to purchase up to an additional 795,000 shares of common stock to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Morgan Stanley & Co. Incorporated expects to deliver the shares to purchasers on , 2008.

MORGAN STANLEY
UBS INVESTMENT BANK

LEERINK SWANN *PACIFIC GROWTH EQUITIES, LLC*

, 2008

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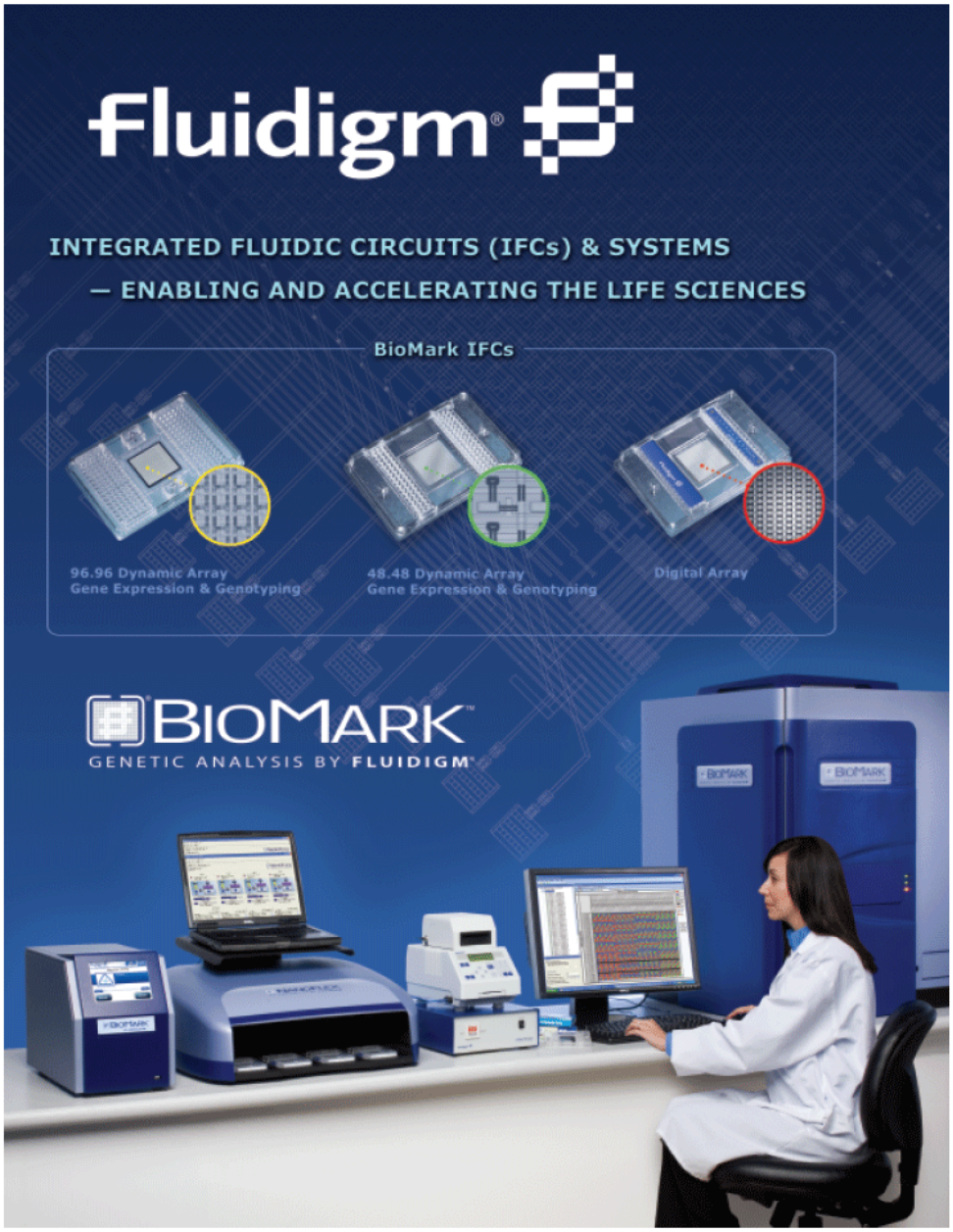

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You should rely only on the information contained in this prospectus and in any free writing prospectus prepared by or on behalf of us. We have not, and the underwriters have not, authorized anyone to provide you with information different from, or in addition to, that contained in this prospectus or any related free writing prospectus. This prospectus is an offer to sell only the shares offered hereby but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

Through and including, , 2008 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere in this prospectus. This summary may not contain all the information that you should consider before investing in our common stock. You should read the entire prospectus carefully, including "Risk Factors" beginning on page 8 and our consolidated financial statements and related notes included elsewhere in this prospectus, before making an investment decision. Unless otherwise indicated, the terms "Fluidigm," "we," "us" and "our" refer to Fluidigm Corporation.

FLUIDIGM CORPORATION

Overview

We develop, manufacture and market proprietary Integrated Fluidic Circuit systems that significantly improve productivity in the life science industry. Our Integrated Fluidic Circuits, or IFCs, address critical industry needs by providing very large-scale integration of essential laboratory functions on a single microfabricated device. IFCs can measure, combine, diffuse, fold, mix, separate or pump nanoliter volumes of fluids with precise control and reproducibility. Based on their similarities to the integrated circuit that revolutionized the microelectronics industry, we often refer to our IFCs as "integrated circuits for biology." These devices enable our customers to perform thousands of sophisticated biochemical reactions and measurements in parallel on samples smaller than the content of a single cell, while reducing the consumption of expensive laboratory chemicals. Particularly for large-scale experimentation, our IFC systems increase throughput, decrease costs and enhance sensitivity compared to conventional laboratory systems.

We have commercialized IFC systems, consisting of instrumentation, software and single-use IFCs, for a wide range of life science applications. Researchers and clinicians have successfully employed our products in achieving breakthroughs across diverse scientific disciplines such as genetic variation, cellular function and structural biology. These advances include using our systems to help detect life-threatening mutations in patients' cancer cells, discover indicators of susceptibility to cancer, manage some of the world's most valuable fisheries, analyze the genetic composition of individual stem cells, identify fetal chromosomal abnormalities from maternal blood samples, analyze the aggressiveness of the avian flu virus and assess the quality of agricultural seed products. We believe that the flexible architecture of our IFC technology will lead to the development of IFC systems for a wide variety of additional markets and applications, including high-throughput DNA sequencing and molecular diagnostics.

We believe our success and continued growth prospects are attributable to the following:

- *Disruptive Technology.* We believe we have achieved a level of miniaturization in microfluidics that allows us to integrate the components required to automate a broad range of life science applications in an area less than half the size of a credit card. Our IFCs deliver orders of magnitude improvements in cost and labor efficiencies, while being easily incorporated into existing laboratory workflows and allowing the use of broadly accepted chemistries.
- *Proven Customer Adoption.* We have sold our IFCs to over 100 customers. These customers include many leading biotechnology and pharmaceutical companies, academic institutions and life science laboratories worldwide.
- *Broad Application in the Life Science Market.* We have developed and commercialized IFCs for several significant life science research applications and believe that the inherent flexibility of our technology will enable the development of IFCs for a wide variety of additional markets and applications.
- *Strong Research and Development Capabilities and Intellectual Property Position.* We have and will continue to invest substantially in research and development to increase the density, throughput and functionality of our IFCs. We have developed an extensive portfolio of intellectual property, including more than 81 issued U.S. patents and 240 patent applications pending worldwide either owned by or licensed to us.
- *Efficient Manufacturing and Process Development.* Our sophisticated manufacturing process, which combines standard semiconductor methods with proprietary techniques, enables us to produce large

quantities of IFCs to stringent quality standards. We have established our manufacturing facility in Singapore because of the availability of a skilled workforce, an extensive supplier and partner network, lower operating costs and significant government support.

Our Target Markets

The life science industry is currently facing challenges similar to those faced by the information technology industry when computational power was constrained by the inherent limitations of the vacuum tube. Life science research efforts, ranging from large-scale initiatives, such as the Human Genome Project, to more traditional academic and commercial research projects, are continuing to reveal the complex biological and chemical processes that are fundamental to living organisms. Developing and applying this knowledge increasingly requires performing experimentation on a scale and with a precision that can be achieved only through automation. However, the most common forms of life science automation rely on cumbersome robotic systems that are slow, expensive and labor intensive and, we believe, fundamentally constrain life science research. In much the same way that integrated circuits overcame the limitations of early computers by placing an increasing number of transistors on a single silicon chip, our IFCs are designed to overcome many of the limitations of conventional laboratory systems by integrating an increasing number of fluidic components on a single microfabricated IFC.

Currently, researchers and clinicians use our IFCs to perform large-scale experimentation in the fields of genomics and proteomics. Genomics is the in-depth study of the genetic makeup, or genome, of microorganisms, plants, animals and people, including analyzing variations in genes and gene activity. Proteomics is the large-scale study of the structure and function of proteins. Our IFC systems support the following types of genomic and proteomic studies:

- *Genotyping:* determining the specific genetic traits of an individual or individuals.
- *Gene expression analysis:* measuring the activity of genes.
- *Protein crystallization:* determining the three-dimensional structure of proteins.
- *Digital PCR:* quantifying scarce genetic sequences in a biological sample.

According to Strategic Directions International, in 2005 the principal segments of the genomic analysis market, gene expression and genotyping, accounted for $4.9 billion worldwide in expenditures and are expected to grow annually by 8% through 2010. We believe that our products may further be developed for use in high-throughput DNA sequencing and molecular diagnostics. High-throughput DNA sequencing is the large scale analysis of DNA sequences, including, for example, determining an organism's genome. Molecular diagnostics is a rapidly growing market that seeks to apply information learned from genomic and proteomic analysis to clinical practice in diagnosing, monitoring and treating disease.

The Fluidigm Solution

Our IFC systems are designed to overcome many of the limitations of conventional laboratory systems by enabling researchers and clinicians to rapidly perform a large number of experiments at one time and in nanoliter volumes, significantly increasing throughput, reducing reagent costs, conserving patient samples and reducing workflow complexity.

We commercially introduced our Topaz IFC system in the first quarter of 2003 and our BioMark IFC system in the fourth quarter of 2006. Our first IFC, the 1.96 Dynamic Array for our Topaz system, was introduced in the first quarter of 2003 and allowed researchers to test a single sample against 96 different reagents. In May 2008, we introduced the 96.96 Dynamic Array IFC for our BioMark system. This IFC is based on a matrix architecture that allows a researcher to test each of 96 different samples against each of 96 different reagents in parallel, and thus perform 9,216 individual experiments simultaneously.

The advantages of our IFC systems over conventional laboratory systems include:

- *Reduced Complexity.* Loading our IFC requires orders of magnitude fewer liquid handling steps than conventional systems for the same experiment.

- *Improved Throughput.* Our most advanced IFCs can conduct up to 24 times more experiments than a conventional system can perform in a single run.
- *Nanoliter Precision.* Our IFC systems allow researchers to dispense samples and reagents in nanoliter, or billionths of a liter, volumes, which supports high sensitivity techniques.
- *Reduced Reagent and Sample Requirements.* Our systems operate on volumes of reagents and samples that are typically less than 1% of the volumes required by conventional systems.
- *Decreased Capital Cost.* For high volume users, the cost of purchasing one BioMark system is much lower than the cost of purchasing the number of conventional systems required to provide the same throughput.
- *Ease of Adoption.* Our IFC systems support widely-used chemistries and are compatible with standard laboratory equipment, allowing researchers to easily incorporate our products into their laboratory workflow and processes.

We believe that our IFC systems also offer significant advantages over other high-throughput methods for large scale experimentation. These alternative approaches have one or more limitations such as lack of flexibility, poor data quality, complex and slow workflows or high running costs. However, some of these methods are able to detect thousands of genetic markers in a single sample and may be more suitable for certain applications than our products. In addition, some of these alternative approaches are more widely adopted and better validated than our systems.

Our IFC systems address the needs of researchers and clinicians who perform large-scale studies in the areas of genomics, proteomics and molecular diagnostics. Nevertheless, researchers and clinicians may be slow to adopt our IFC systems as they are based on technology that is not yet well-established in the industry. Moreover, many of the existing laboratories have already made substantial capital investments in their existing systems and may be hesitant to abandon that investment. In addition, our IFC systems are less well suited for smaller scale research initiatives where complexity and workflow issues may be less pressing and conventional systems may be more economical. As life science research continues to evolve and is commercialized, we believe that there will be increasing demand for life science automation solutions that enable experimentation on the scale supported by our IFC systems.

Risks Affecting Us

Our business is subject to numerous risks, as more fully described in the section entitled “Risk Factors” immediately following this prospectus summary, including the following:

- We have incurred significant losses since our inception, had an accumulated deficit of $149.1 million as of June 28, 2008 and expect to incur losses for the foreseeable future.
- If our products fail to achieve and sustain market acceptance, our revenue will be adversely affected.
- Our sales cycle for the BioMark and Topaz systems is lengthy and unpredictable, which makes it difficult for us to forecast revenue and could cause significant quarterly fluctuations in revenue and other operating results.
- We receive a substantial portion of our revenues from a limited number of customers and other entities, and the loss of, or a significant reduction in, orders or grants from one or more of our major customers or grantors would adversely affect our operations and financial condition.
- The life science industry is highly competitive and subject to rapid technological change, and we may not be able to successfully compete.
- We have limited experience in producing our products, and we may experience development or manufacturing problems or delays that could limit the growth of our revenue or increase our losses.
- We are dependent on single source suppliers for some of the components and materials used in our systems, and the loss of any of these suppliers could harm our business.
- Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain, and we are dependent on certain licensed-in technology. In addition, our suit seeking declaratory judgments of non-infringement and invalidity against Applied BioSystems, Inc. and Applera Corporation, as well as future third-party claims of intellectual property infringement could adversely affect our operations and financial condition.

Corporate History and Information

We were incorporated in California in May 1999 as Mycometrix Corporation, changed our name to Fluidigm Corporation in April 2001 and reincorporated in Delaware in July 2007. Our principal executive offices are located at 7000 Shoreline Court, Suite 100, South San Francisco, California 94080. Our telephone number is (650) 266-6000. Our website address is www.fluidigm.com. Information contained on our website is not incorporated by reference into this prospectus, and should not be considered to be part of this prospectus.

THE OFFERING

Common stock offered by us	5,300,000 shares
Common stock to be outstanding after this offering	24,790,535 shares
Use of proceeds	We intend to use the net proceeds from this offering to expand our sales force, support the commercialization of our products, continue research and development, expand our facilities and manufacturing operations and for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire other businesses, products or technologies. However, we do not have agreements or commitments for any specific acquisitions at this time. See "Use of Proceeds."
Proposed NASDAQ Global Market symbol	FLDM

The number of shares of our common stock to be outstanding following this offering is based on 19,490,535 shares of our common stock outstanding as of June 28, 2008, which includes 6,785 shares of common stock subject to repurchase but excludes:

- 2,373,978 shares of common stock issuable upon exercise of options outstanding as of June 28, 2008 at a weighted average exercise price of $5.44 per share;
- 216,409 shares of common stock issuable upon the exercise of warrants outstanding as of June 28, 2008 at a weighted average exercise price of $11.41 per share, after conversion of our convertible preferred stock;
- 2,601,584 shares of common stock reserved for future issuance under our stock-based compensation plans, including 2,000,000 shares of common stock reserved for issuance under our 2008 Equity Incentive Plan, which will become effective on the date of this prospectus, and any future automatic increase in shares reserved for issuance under such plan; and

Unless otherwise indicated, this prospectus reflects and assumes the following:

- a one (1)-for-three and a half (3.5) reverse split of our outstanding common stock and convertible preferred stock, which was effected on September 16, 2008;
- the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 16,625,970 shares of common stock upon the closing of this offering;
- the filing of our amended and restated certificate of incorporation immediately prior to the effectiveness of this offering; and
- no exercise by the underwriters of their over-allotment option.

SUMMARY CONSOLIDATED FINANCIAL DATA

We have derived the summary consolidated statement of operations data for the years ended December 31, 2005, December 31, 2006 and December 29, 2007 from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the summary consolidated statement of operations data for the six months ended June 30, 2007 and June 28, 2008 and the consolidated balance sheet data as of June 28, 2008 from our unaudited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. The following summary consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

	Year Ended			Six Months Ended	
	December 31, 2005	December 31, 2006	December 29, 2007	June 30, 2007	June 28, 2008
				(unaudited)	
	(in thousands, except per share amounts)				
Consolidated Statement of Operations Data:					
Revenue:					
Product revenue	$ 6,076	$ 3,959	$ 4,451	$ 1,489	$ 4,382
Collaboration revenue	1,568	1,376	460	310	70
Grant revenue	30	1,063	2,364	1,198	1,068
Total revenue	7,674	6,398	7,275	2,997	5,520
Cost and expenses:					
Cost of product revenue	4,764	2,773	3,514	1,490	2,988
Research and development	11,449	15,589	14,389	7,053	7,151
Selling, general and administrative	7,955	9,699	12,898	6,183	9,843
Total costs and expenses	24,168	28,061	30,801	14,726	19,982
Loss from operations	(16,494)	(21,663)	(23,526)	(11,729)	(14,462)
Interest expense	(898)	(2,261)	(2,790)	(1,790)	(1,100)
Interest income	340	565	1,140	565	557
Other income (expense), net	30	(194)	(170)	37	(214)
Loss before provision for income taxes and cumulative effect of change in accounting principle	(17,022)	(23,553)	(25,346)	(12,917)	(15,219)
Provision for income taxes	—	—	(105)	(52)	(43)
Loss before cumulative effect of change in accounting principle	(17,022)	(23,553)	(25,451)	(12,969)	(15,262)
Cumulative effect of change in accounting principle	637	—	—	—	—
Net loss	$ (16,385)	$ (23,553)	$ (25,451)	$ (12,969)	$(15,262)
Net loss per share of common stock, basic and diluted[1]	$ (6.35)	$ (8.82)	$ (9.21)	$ (4.74)	$ (5.39)
Shares used in computing net loss per share of common stock, basic and diluted[1]	2,580	2,671	2,765	2,736	2,832
Pro forma net loss per share of common stock, basic and diluted[1] (unaudited)			$ (1.52)		$ (0.78)
Shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)			16,577		19,149

(1) Please see Note 2 to our consolidated financial statements included elsewhere in this prospectus for an explanation of the method used to calculate basic and diluted net loss per share of common stock and pro forma net loss per share of common stock.

	As of June 28, 2008		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)(3)
		(in thousands) (unaudited)	
Consolidated Balance Sheet Data:			
Cash and cash equivalents and available-for-sale securities	$ 32,469	$ 32,469	$ 103,304
Working capital	28,644	29,913	100,748
Total assets	49,678	49,678	120,513
Total long-term debt	16,558	16,558	16,558
Convertible preferred stock warrant liabilities	1,269	—	—
Convertible preferred stock	167,538	—	—
Total stockholders' equity (deficit)	(144,908)	23,899	94,734

(1) The pro forma balance sheet data in the table above reflects (i) the conversion of all outstanding shares of convertible preferred stock into common stock and (ii) the reclassification of the convertible preferred stock warrant liabilities to additional paid-in capital, each effective upon the closing of this offering.

(2) The pro forma as adjusted balance sheet data in the table above also reflects the pro forma conversions and reclassifications described immediately above plus the sale of 5,300,000 shares of our common stock in this offering and the application of the net proceeds at an initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) A $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) cash, cash equivalents and available-for-sale securities and each of working capital, total assets and total stockholders' equity by $4.9 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase of 1.0 million shares in the number of shares offered by us would increase cash, cash equivalents, available-for-sale securities and each of working capital, total assets and total stockholders' equity by approximately $14.0 million. Similarly, each decrease of 1.0 million shares in the number of shares offered by us would decrease cash, cash equivalents and available-for-sale securities and each of working capital, total assets and total stockholders' equity by approximately $14.0 million. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before deciding whether to purchase shares of our common stock. If any of the following risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the price of our common stock could decline and you could lose part or all of your investment.

Risks Related to our Business and Strategy

We have incurred losses since inception, and we expect to continue to incur substantial losses for the foreseeable future.

We have a limited operating history and have incurred significant losses in each fiscal year since our inception, including net losses of $16.4 million, $23.6 million, $25.5 million and $15.3 million during 2005, 2006, 2007 and the six months ended June 28, 2008. As of June 28, 2008, we had an accumulated deficit of $149.1 million. These losses have resulted principally from costs incurred in our research and development programs and from our selling, general and administrative expenses. We expect to continue to incur operating and net losses and negative cash flow from operations, which may increase, for the foreseeable future due in part to anticipated increases in expenses for research and product development and expansion of our sales and marketing capabilities. Additionally, following this offering, we expect that our selling, general and administrative expenses will increase due to the additional operational and reporting costs associated with being a public company. We anticipate that our business will generate operating losses until we successfully implement our commercial development strategy and generate significant additional revenues to support our level of operating expenses. Because of the numerous risks and uncertainties associated with our commercialization efforts and future product development, we are unable to predict when we will become profitable, and we may never become profitable. Even if we do achieve profitability, we may not be able to sustain or increase our profitability.

If our products fail to achieve and sustain sufficient market acceptance, our revenue will be adversely affected.

Our success depends, in part, on our ability to develop and market products that are recognized and accepted as reliable, enabling and cost effective. Most of our potential customers already use expensive research systems in their laboratories and may be reluctant to replace those systems. Market acceptance of our instrument systems will depend on many factors, including our ability to convince potential customers that our systems are an attractive alternative to existing technologies. Compared to other technologies, our Integrated Fluidic Circuit, or IFC, technology is new and unproven, and most potential customers have limited knowledge of, or experience with, our products. Prior to adopting our technology, potential customers generally need to devote significant effort to testing and validating our systems and benchmarking them against their current systems and performance requirements. Any failure of our systems to meet these customer benchmarks could result in customers choosing to retain their existing systems or to purchase systems other than ours.

In addition, many customers intend to publish the results of their experiments in scientific and medical journals. Therefore, it is important that our systems be perceived as accurate and reliable by the scientific and medical research community as a whole. Many factors influence the perception of a system including its use by leading research groups and the publication of their results in well regarded journals. A significant part of our sales and marketing efforts have been directed at convincing industry leaders of the advantages of our systems and encouraging such leaders to publish or present the results of their evaluation of our system. If we are unable to induce leading researchers to use our system or if such researchers are unable to achieve and publish or present significant experimental results using our system, acceptance and adoption of our systems will be slowed.

Our sales cycle is lengthy and unpredictable, which makes it difficult for us to forecast revenue and could cause significant quarterly fluctuations in revenue and other operating results.

The sales cycles for our instrument systems is lengthy, which makes it difficult for us to accurately forecast revenues in a given period, and may cause revenue and operating results to vary significantly from period to period.

Due in part to the high up-front cost associated with our systems, potential customers for our instrument systems typically need to commit significant time and resources to evaluate our technology and their decision to purchase our instruments may be further limited by budgetary constraints and several layers of internal review and approval, which are beyond our control. Even after initial approval by appropriate decision makers, the negotiation and documentation processes for a purchase can be lengthy. As a result of these factors, our sales cycle has varied widely and, in certain instances has been longer than 12 months. The complexity and variability of our sales cycle has made it difficult for us to accurately project quarterly revenues, and we have frequently failed to meet our internal quarterly projections. Moreover, we do not recognize revenue on sales of our systems until the system has been delivered to the customer and, in many instances, installed and our other revenue recognition criteria have been met. This further complicates our ability to project quarterly revenue as we may have entered into a sale agreement with a customer for a system but cannot predict when that customer will take delivery of the system and when we will be able to recognize the revenue. We expect that our sales will continue to fluctuate on a quarterly basis and that our financial results for some periods may be below those projected by securities analysts. Such fluctuations could have a material adverse effect on our business and on the price of our common stock.

Our sales efforts require significant time and effort and could hinder our ability to increase sales.

Before purchasing one of our systems, customers typically require input from one or more scientific evaluators, as well as a review by personnel with finance or operational expertise. As a result, during our sales effort, we must identify all persons involved in the purchasing decision and devote a sufficient amount of time to presenting our systems to those individuals. The newness and complexity of our products often requires us to spend substantial time and effort assisting potential customers in evaluating our instruments, including providing demonstrations and benchmarking our products against other available technologies. This process can be costly and time consuming. We expect that our sales process will become less burdensome as our products become more widely known and used. However, if this change does not occur, we will not be able to expand our sales effort as quickly as anticipated and our sales will be adversely affected.

Our future success is dependent upon our ability to expand our customer base and introduce new applications.

Our customer base is primarily composed of pharmaceutical and biotechnology companies, academic institutions and life science laboratories that perform large-scale experimentation for life science research purposes. Our success will depend in part upon our ability to increase our market share amongst these customers, attract life science research customers who do not currently perform large-scale experimentation, attract customers outside the life science research market and market new applications to existing and new customers as we develop such applications. Attracting new customers and introducing new applications requires substantial time and expense. For example, it may be difficult to identify, engage and market to customers who do not currently perform large-scale experimentation or are unfamiliar with our current applications. In addition, certain new applications that we are considering developing are not practical to perform with conventional techniques. Any failure to expand our existing customer base or launch new applications would adversely affect our ability to increase our revenues.

Our inability to develop new systems and enhance the capabilities of our IFC systems to keep pace with rapidly changing technology and customer requirements could adversely affect our business.

Our success depends on our ability to develop new applications for our IFC technology in existing and new markets, while improving the performance and cost effectiveness of our systems. New technologies, techniques or products could emerge that might offer better combinations of price and performance than our current or future product lines and systems. Existing markets for our products, including gene expression analysis, genotyping, digital polymerase chain reaction, or PCR, and proteomics, as well as potential markets for our products such as high-throughput DNA sequencing and molecular diagnostics, are characterized by rapid technological change and innovation. It is critical to our success for us to anticipate changes in technology and customer requirements and to successfully introduce new, enhanced and competitive technology to meet our customers' and prospective customers' needs on a timely basis. While we have planned substantial improvements to the BioMark system, including enhancing the capabilities of our IFCs, we may not be able to successfully implement these improvements. Even if we successfully implement some or all of these planned improvements, we could incur substantial development costs in doing so. We may not have adequate resources available to develop new technologies or be

able to successfully introduce new applications of, or enhancements to, our systems. We cannot guarantee that we will be able to maintain technological advantages over emerging technologies in the future. If we fail to keep pace with emerging technologies, demand for our systems will not grow and may decline, and our business, revenue, financial condition and operating results could suffer materially.

We have limited resources for marketing, selling and distributing our products and we may not be able to develop a direct sales and marketing force or distribution capabilities that can meet our customers' needs.

We have limited marketing, sales and distribution resources and capabilities. We sell our products primarily through our own sales force and through distributors in certain territories. Our first product line, the Topaz system for protein crystallization, was introduced for commercial sale in 2002. Our BioMark system was introduced for commercial sale in 2006.

Our future sales will depend in large part on our ability to develop and expand our direct sales force and to increase the scope of our marketing efforts. Our products are technically complex and used for highly specialized applications. As a result, we believe it is necessary to develop a direct sales force that includes people with specific scientific backgrounds and expertise and a marketing group with technical sophistication. Competition for such employees is intense. We may not be able to attract and retain personnel or be able to build an efficient and effective sales and marketing force, which could negatively impact sales of our products, and reduce our revenues and profitability.

In addition, we may seek to enlist one or more additional parties to assist with sales, distribution and customer support globally or in certain regions of the world. If we do seek to enter into such arrangements, we may not be successful in attracting desirable sales and distribution partners, or we may not be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales and distribution partners, are not successful, our technologies and products may not gain market acceptance, which would materially impact our business operations.

The life science industry is highly competitive and subject to rapid technological change, and we may not be able to successfully compete.

The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition, new product introductions and strong price competition. We compete with both established and development stage life science companies that design, manufacture and market instruments for gene expression analysis, genotyping, other nucleic acid detection and additional applications using well established laboratory techniques, as well as newer technologies such as bead encoded arrays, microfluidics, nanotechnology, high-throughput DNA sequencing and inkjet and photolithographic arrays. Most of our current competitors have significantly greater name recognition, greater financial and human resources, broader product lines and product packages, larger sales forces, large existing installed bases, substantial intellectual property portfolios and greater experience in research and development, manufacturing and marketing than we do. For example, companies such as Affymetrix, Applied Biosystems, BioTrove, Illumina, Roche Diagnostics and Sequenom have products that compete in certain segments of the market in which we sell our BioMark system.

Competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. In light of these advantages, even if our technology is more effective than the product or service offerings of our competitors, current or potential customers might accept competitive products and services in lieu of purchasing our technology. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and as new companies enter the market with new technologies. We may not be able to compete effectively against these organizations. Increased competition is likely to result in pricing pressures, which could harm our sales, profitability or market share. Our failure to compete effectively could materially and adversely affect our business, financial condition and results of operations.

We receive a substantial portion of our revenue from a limited number of customers and other entities, and the loss of, or a significant reduction in, orders or grants from one or more of our major customers or grantors would adversely affect our operations and financial condition.

We receive a substantial portion of our revenue from a limited number of customers and grantors. We received an aggregate of approximately 37%, 44%, 38% and 27% of our total revenue from our top three customers in 2005, 2006, 2007 and the six months ended June 28, 2008. Grant revenue from the Singapore Economic Development Board, or EDB, represented 0%, 14%, 24% and 15% of our total revenue in 2005, 2006 and 2007 and the six months ended June 28, 2008. We anticipate that we will continue to be dependent on a limited number of customers and grantors for a significant portion of our revenue in the near future and in some cases the portion of our revenue attributable to certain customers or grantors may increase in the future. However, we may not be able to maintain or increase sales to our top customers or grants from our top grantors for a variety of reasons, including the following:

- our agreements with our customers and grantors do not require them to purchase a minimum quantity of our products or make a minimum amount of grants in any year;
- our customers can stop using our products with limited notice to us and suffer little or no payment penalty;
- our grants are subject to the achievement of milestones that we may not meet; and
- many of our customers have pre-existing or concurrent relationships with our current or potential competitors that may affect the customers' decisions to purchase our products.

In the past, we have relied in significant part on our strategic relationships with customers that are technology leaders in our target markets. We intend to pursue the expansion of such relationships and the formation of new strategic relationships, but we cannot assure you that we will be able to do so. These relationships often require us to develop new products that may involve significant technological challenges. Our customers frequently place considerable pressure on us to meet their tight development schedules. Our grantors frequently condition their present and future grants on our compliance with certain development, hiring and local investment milestones. Accordingly, we may have to devote a substantial amount of our resources to our strategic relationships, which could detract from or delay our completion of other important development projects. Delays in development could impair our relationships with our strategic customers and grantors and negatively impact sales of the products under development or future grant activity. The loss of a key customer or grantor, a reduction in sales to any key customer, a reduction in grants from a key grantor, or our inability to attract new significant customers could seriously impact our revenue and materially and adversely affect our results of operations.

Our business depends on research and development spending levels of pharmaceutical and biotechnology companies and academic, clinical and governmental research institutions and any reduction in such spending could limit our ability to sell our products.

We expect that our revenue in the foreseeable future will be derived primarily from sales of instruments and IFCs to academic institutions, biotechnology and pharmaceutical companies and life science laboratories worldwide. Our success will depend upon their demand for and use of our products. Accordingly, the spending policies of these customers could have a significant effect on the demand for our technology. These policies may be based on a wide variety of factors, including the resources available to make purchases, the spending priorities among various types of equipment, policies regarding spending during recessionary periods and changes in the political climate. In addition, academic, governmental and other research institutions that fund research and development activities may be subject to stringent budgetary constraints that could result in spending reductions, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers to purchase our system. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. For example, reductions in capital expenditures by these customers may result in lower than expected system sales and, similarly, reductions in operating expenditures by these customers could result in lower than expected sales of IFCs. These reductions and delays may result from factors that are not within our control, such as:

- changes in economic conditions;
- changes in government programs that provide funding to research institutions and companies;

- changes in the regulatory environment affecting life science companies and life science research;
- market-driven pressures on companies to consolidate operations and reduce costs;
- mergers and acquisitions in the life science industry; and
- other factors affecting research and development spending.

Any decrease in our customers' budgets or expenditures or in the size, scope or frequency of capital or operating expenditures as a result of the foregoing or other factors could materially adversely affect our operations or financial condition.

If we cannot provide quality technical support, we could lose customers and our operating results could suffer.

The placement of our products at new customer sites, the introduction of our technology into our customers' existing systems and ongoing customer support can be complex. Accordingly, we need highly trained technical support personnel. Hiring technical support personnel is very competitive in our industry due to the limited number of people available with the necessary biochemistry background and ability to understand our systems at a technical level. We are currently expanding our technical support staff and will need to increase it further to support expected new customers as well as the expanding needs of existing customers. If we are unable to attract, train or retain the number of highly qualified technical services personnel that our business needs, our business and prospects will suffer.

To use our products and our BioMark system in particular, customers typically need to purchase specialized reagents. Any interruption in the availability of these reagents for use in our products could limit our ability to market our products.

Our products and our BioMark system in particular, must be used in conjunction with one or more reagents designed to produce or facilitate the particular biological or chemical reaction desired by the user. Many of these reagents are highly specialized and available to the user only from a single supplier or a limited number of suppliers. Our customers typically purchase these reagents directly from the suppliers and we have no control over the supply of those materials. In addition, our products are designed to work with these reagents as they are currently formulated. We have no control of the formulation of these reagents and the performance of our products might be adversely affected if the formulation of these reagents was changed. If one or more of these reagents were to become unavailable or were reformulated, our ability to market and sell our products could be materially and adversely affected.

In addition, the use of a reagent for a particular process may be covered by one or more patents relating to the reagent itself, the use of the reagent for the particular process, the performance of that process or the equipment required to perform the process. Typically, reagent suppliers, who are either the patent holders or their authorized licensees, sell the reagents along with a license or covenant not to sue with respect to such patents. The license accompanying the sale of a reagent often purports to restrict the purposes for which the reagent may be used. If a patent holder or authorized licensee were to assert against us or our customers that the license or covenant relating to a reagent precluded its use with our systems, our ability to sell and market our products could be materially and adversely affected. For example, the current applications of our BioMark system, which represented 43% of our product revenue in 2007, involve real-time polymerase chain reaction, or PCR. The primary producers of reagents for PCR reactions are Applied Biosystems and Roche Diagnostics, who are our direct competitors, and their licensees. These PCR reagents are typically sold pursuant to limited licenses or covenants not to sue with respect to patents held by these companies. We do not have any contractual relationship with Roche Diagnostics or Applied Biosystems regarding these PCR reagents, and we cannot assure you that these reagents will continue to be available to our customers for use with our systems, or that these patent holders will not seek to enforce their patents against us, our customers, or suppliers.

We are dependent on single source suppliers for some of the components and materials used in our systems, and the loss of any of these suppliers could harm our business.

We rely on single source suppliers for certain components and materials used in our systems. Of these single source suppliers, the loss of any of the following would require significant time and effort to locate and qualify an alternative source of supply:

- An essential component of our BioMark system is a specialized thermal cycler that is available from a limited number of suppliers. We purchase this thermal cycler from one supplier, Eppendorf AG, which customizes it to our specifications pursuant to a supply agreement.
- Our IFCs are fabricated using a specialized polymer that is available from a limited number of sources. In the past we have encountered quality issues that have reduced our manufacturing yield or required the use of additional manufacturing processes. We do not have a long term contract with our current sole supplier.
- The plastic carriers that hold the core components of our IFCs need to be produced to specifications and tolerances that few manufacturers are able to meet. We have experienced quality issues in the past and, as a result, have recently switched suppliers. We do not have a long term contract with either of our current sole suppliers for particular carriers.
- The reader for our BioMark system requires specialized high resolution camera lenses that are available from a limited number of sources. We do not have a long term contract with our current sole supplier.

Our reliance on these suppliers also subjects us to other risks that could harm our business, including the following:

- we may be subject to increased component costs;
- we are not a major customer of many of our suppliers, and these suppliers may therefore give other customers' needs higher priority than ours;
- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- our suppliers may make errors in manufacturing components that could negatively affect the efficacy of our systems or cause delays in shipment of our systems; and
- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

We have in the past experienced supply problems with some of our suppliers, such as manufacturing errors, and may again experience problems in the future. We may not be able to quickly establish additional or replacement suppliers, particularly for our single source components. Any interruption or delay in the supply of components or materials, or our inability to obtain components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers and cause them to cancel orders or switch to competitive products.

We have limited experience in producing our products, and we may experience development or manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We have limited experience manufacturing and assembling our products in commercial quantities and we may encounter unforeseen situations that would result in delays or shortfalls. In addition, our production processes and assembly methods may have to change to accommodate any significant future expansion of our manufacturing capacity. If we are unable to keep up with demand for our products, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products. Our inability to successfully manufacture our products would have a material adverse effect on our operating results.

We first produced the IFCs used in our current Topaz system in June 2002 at our facility in South San Francisco. We have since moved our commercial production of IFCs to our facility in Singapore, which first produced commercial IFCs for our Topaz systems in October 2006 and first produced commercial IFCs for our BioMark

system in December 2007. Production of the elastomeric block that is at the core of our IFCs is a complex process requiring advanced clean rooms, sophisticated equipment and strict adherence to procedures. Any contamination of the clean room, equipment malfunction or failure to strictly follow procedures can significantly reduce our yield in one or more batches. Such a drop in yield can greatly increase our cost to manufacture our IFCs or, in more severe cases, require us to halt the manufacture of IFCs until the problem is resolved. Identifying and resolving the cause of a drop in yield can require substantial time and resources. We have had significant yield problems in the past and cannot assure you that these types of yield issues will not occur again. Sustained yield problems would have a material adverse affect on our business, financial condition and results of operations.

In addition, developing an IFC for a new application typically requires developing a specific production process for that type of IFC. While all of our IFCs are produced using the same basic processes, significant variations are required to ensure adequate yield of any particular type of IFC. Developing such a process can be very time consuming, and any unexpected difficulty in doing so can delay the introduction of a product. For example, in the second quarter of 2006, our ability to conduct demonstrations for potential customers for our BioMark system was impaired because we were unable to produce sufficient quantities of that IFC. Though these production problems were resolved, the delay in conducting customer demonstrations resulted in the loss and delay of orders from potential customers. We cannot assure you that we will not face similar difficulties in developing new processes in the future.

If we are unable to recruit and retain key executives and scientists, we may be unable to achieve our goals.

Our performance is substantially dependent on the performance of our senior management and key scientific and technical personnel, particularly Gajus V. Worthington, our President and Chief Executive Officer. We do not maintain fixed term employment contracts with any of our employees. The loss of the services of any member of our senior management or our scientific or technical staff might significantly delay or prevent the development of our products or achievement of other business objectives by diverting management's attention to transition matters and identification of suitable replacements, if any, and could have a material adverse effect on our business. We do not maintain significant key man life insurance on any of our employees.

In addition, our research and product development efforts could be delayed or curtailed if we are unable to attract, train and retain highly skilled employees, particularly, senior scientists and engineers. To expand our research and product development efforts, we need additional people skilled in areas such as molecular and cellular biology, assay development and manufacturing. Competition for these people is intense. Because of the complex and technical nature of our system and the dynamic market in which we compete, any failure to attract and retain a sufficient number of qualified employees could materially harm our ability to develop and commercialize our technology.

We may be unable to manage our anticipated growth effectively.

The rapid growth of our business has placed a significant strain on our managerial, operational and financial resources and systems. We have increased the number of our employees from 78 at December 31, 2005 to 143 at June 28, 2008. In addition, since October 2006 we have commenced manufacturing operations in Singapore and opened sales offices in Europe and Japan. To execute our anticipated growth successfully, we must continue to attract and retain qualified personnel and manage and train them effectively. We must also upgrade our internal business processes and capabilities to create the scalability that a growing business demands.

We believe our primary commercial manufacturing facility located in Singapore is sufficient to meet our short-term manufacturing needs. The current lease for our manufacturing facility in Singapore expires in October 2011. In order to meet the long-term demand for our IFC systems, we believe that we will need to add to our existing manufacturing space in Singapore or move all of our manufacturing facilities to a new location in Singapore. Such a move will involve significant expense in connection with the establishment of new clean rooms, the movement and installation of key manufacturing equipment and modifications to our manufacturing process and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities.

Further, our anticipated growth will place additional strain on our suppliers and manufacturing facilities, resulting in an increased need for us to carefully monitor quality assurance. Any failure by us to manage our growth effectively could have an adverse effect on our ability to achieve our development and commercialization goals.

Our research and product development efforts may not result in commercially viable products within the timeline anticipated, if at all.

Our business is dependent on the improvement of our existing products, our development of new products to serve existing markets and our development of new products to create new markets and applications that were previously not practical with existing systems. We intend to devote significant personnel and financial resources to research and development activities designed to advance the capabilities of our IFC technology. Our IFC technology is new and complex and the behavior of fluids and surrounding compounds in a nanoscale environment is difficult to predict in advance. Though we have developed design rules for the implementation of our IFC technology, these are frequently revised to reflect new insights we have gained about the technology. In addition, we have discovered that biological or chemical reactions sometimes behave differently when implemented on IFCs rather than in a standard laboratory environment. As a result, significant research and development efforts may be required to transfer even well-understood reactions to our technology. In the past, product development projects have been significantly delayed when we encountered unanticipated difficulties in implementing a process on our IFCs. We may have similar delays in the future, and we may not obtain any benefits from our research and development activities. Any delay or failure by us to develop new products or enhance existing products would have a substantial adverse effect on our business and results of operations.

Our products, although not currently regulated, could in the future be subject to regulation by the U.S. Food and Drug Administration or other regulatory agencies.

Our products are currently labeled and sold for research purposes only and are not subject to U.S. Food and Drug Administration, or FDA, clearance or approval. However, in the future, certain of our products or related applications could be subject to the FDA's regulation, the FDA's regulatory jurisdiction could be expanded to include our products, or both. For example, if we wished to label and market our products for use in performing clinical diagnostics, FDA clearance or approval would be required. Even where a product is exempted from FDA clearance or approval, the FDA may impose restrictions on how and to whom we can market and sell our products. Obtaining FDA approval can be expensive and uncertain, generally takes several years to obtain and requires detailed and comprehensive scientific and clinical data. Notwithstanding the expense, these efforts may never result in FDA approval or clearance. Even if we were to obtain regulatory approval or clearance, it may not be for the uses we believe are important or commercially attractive. As a result, these regulations and restrictions could materially and adversely affect our business, financial condition and results of operations. Similar laws and regulations are also in effect in many foreign countries that could affect our ability to market certain products. The number and scope of these requirements are increasing. We may not be able to obtain regulatory approvals in such countries or may incur significant costs in obtaining or maintaining our foreign regulatory approvals.

Our future capital needs are uncertain and we may need to raise additional funds in the future.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents, available for sale securities balances and cash receipts generated from sales of our products, will be sufficient to meet our anticipated cash requirements for at least the next 18 months. However, we may need to raise substantial additional capital to:

- expand the commercialization of our products;
- fund our operations;
- continue our research and development;
- defend, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights;
- commercialize new products; and
- acquire companies and in-license products or intellectual property.

Our future funding requirements will depend on many factors, including:

- market acceptance of our products;
- the cost of our research and development activities;
- the cost of filing and prosecuting patent applications;
- the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights;
- the cost and timing of regulatory clearances or approvals, if any;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost and timing of establishing additional technical support capabilities;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

If we require additional funds in the future, such funds may not be available on acceptable terms, or at all.

We may require additional funds in the future and we may not be able to obtain such funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs.

If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our operating results.

Our products could have unknown defects or errors, which may give rise to claims against us and adversely affect market adoption of our systems.

Our IFC systems utilize novel and complex technology applied on a nanoliter scale and such systems may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects or errors will not arise, and as we increase the density and integration of our IFCs, these risks may increase. While we do not provide express warranties that our IFCs will meet performance expectations or be free from defects, we have done so in the past, and expect to in the future in response to customer concerns in order to preserve customer relationships and help foster continued adoption and use of our systems. We typically do provide warranties relating to other parts of our IFC systems. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, we depend upon third parties for the supply of various components. Many of these components require a significant degree of technical expertise to produce. If our suppliers fail to produce components to specification, or if the suppliers, or we, use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If our products contain defects, we may experience:

- a failure to achieve market acceptance or expansion of our product sales;
- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;

- increased cost of our warranty program due to product repair or replacement;
- product recalls or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments into our service department; and
- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

The occurrence of any one or more of the foregoing could negatively affect our business, financial condition and results of operations.

We generate a substantial portion of our revenues internationally and are subject to various risks relating to such international activities which could adversely affect our international sales and operating performance.

During 2005, 2006, 2007 and the six months ended June 28, 2008, approximately 28%, 40%, 52% and 54% of our total revenue was generated outside of North America. We believe that a significant percentage of our future revenue will come from international sources as we expand our overseas operations and develop opportunities in additional international areas. Our international business may be adversely affected by changing economic, political and regulatory conditions in foreign countries. Because the majority of our product sales are currently denominated in U.S. dollars, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets, which could affect our financial performance. In addition, if the value of the U.S. dollar decreases relative to the Singapore dollar, it would become more costly in U.S. dollars for us to manufacture our products in Singapore. Furthermore, fluctuations in exchange rates could reduce our revenue, particularly with respect to grant revenue under agreements in Singapore, and affect demand for our products. Engaging in international business inherently involves a number of other difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws;
- export or import restrictions;
- laws and business practices favoring local companies;
- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- political and economic instability;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;
- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting or procuring intellectual property rights.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy, and if we are unsuccessful in finding a solution, our financial results will suffer.

We use hazardous chemicals and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development and manufacturing processes involve the controlled use of hazardous materials, including flammables, toxics, corrosives and biologics. Our operations produce hazardous biological and chemical waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. In addition, our IFC systems involve the use of pressurized systems and may involve the use of hazardous materials, which could result in injury. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials. We do not currently maintain separate environmental liability coverage and any such contamination or discharge could result in significant cost to us in penalties, damages and suspension of our operations.

If our facilities become inoperable, we will be unable to continue manufacturing our products and as a result, our business will be harmed until we are able to secure a new facility.

We manufacture and assemble our IFCs for commercial sale at our facility in Singapore and assemble our instrument platforms at our facilities in Singapore and South San Francisco, California. No other manufacturing or assembly facilities are currently available to us. Our facilities and the equipment we use to manufacture our products would be costly to replace and could require substantial lead time to repair or replace. The facilities may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, flooding and power outages, which may render it difficult or impossible for us to perform our research, development and manufacturing for some period of time. The inability to perform our research, development and manufacturing activities, combined with our limited inventory of reserve raw materials and manufactured supplies, may result in the loss of customers or harm our reputation, and we may be unable to reestablish relationships with those customers in the future. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected.

In connection with the audit of our consolidated financial statements for the years ended December 31, 2005 and 2006 we, together with our independent registered public accounting firm identified material weaknesses in our internal control over financial reporting.

The material weaknesses related to our financial statement close process, revenue recognition and accrual processes and inventory costing, cost of sales, purchases cut-off and stock-based compensation. These material weaknesses resulted in the recording of numerous audit adjustments over the two year period ending December 31, 2006. Since the date of our independent registered public accounting firm's reports on our consolidated financial statements for the years ended December 31, 2005 and 2006 and through the date of this prospectus, we have taken steps intended to remediate these material weaknesses, primarily through the hiring of additional accounting and finance personnel with technical accounting and financial reporting experience. In addition, we have implemented procedures and controls in the financial statement close process designed to improve the accuracy and timeliness in financial accounting and reporting.

In April and May 2008, we reviewed our internal control over financial reporting and concluded that we had certain significant deficiencies. A significant deficiency is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of a company's financial reporting. The significant deficiencies identified by us related to: our controls for the consolidation and elimination entries relating to intercompany transfer pricing and elimination of intercompany profits embedded in deferred costs of our Japanese subsidiary; our controls for applying SFAS 123R to option grants with non-standard vesting terms and validation of stock compensation expenses calculated by our option tracking software; and our controls and procedures for the valuation of inventory.

We do not know the specific time frame that we will require to remediate the significant deficiencies identified. In addition, we expect to incur some incremental costs associated with this remediation. If we fail to enhance our internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act, we may be unable to report our financial results accurately and prevent fraud. While we expect to remediate the significant deficiencies, we cannot assure you that we will be able to do so in a timely manner, which could impair our ability to accurately and timely report our financial position, results of operations or cash flows.

No material weaknesses in internal control over financial reporting were identified in our April and May 2008 review. However, our management and independent registered public accounting firm did not perform an evaluation of our internal control over financial reporting as of any date in accordance with the provisions of Section 404 of the Sarbanes-Oxley Act. Had we and our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of Section 404 of the Sarbanes-Oxley Act, additional control deficiencies may have been identified by management or our independent registered public accounting firm.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

We have never operated as a public company. As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as new rules subsequently implemented by the Securities and Exchange Commission and the NASDAQ Global Market, have imposed various new requirements on public companies, including requiring changes in corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these new compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these new rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage.

In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, commencing in 2009, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues. We currently do not have an internal audit group and we will evaluate the need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the NASDAQ Global Market, the Securities and Exchange Commission or other regulatory authorities, which would require additional financial and management resources.

Some of our programs are partially supported by government grants, which may be reduced, withdrawn, delayed or reclaimed.

We have received and may continue to receive funds under research and economic development programs funded by the governments of Singapore and the United States. Funding by these governments may be significantly reduced or eliminated in the future for a number of reasons. For example, some U.S. programs are subject to a yearly appropriations process in Congress. Similarly, our grants from the Singapore government are part of an official policy to develop a life science industry in Singapore; that policy could change or the role of grants in it could be reduced or eliminated at any time. In addition, we may not receive funds under existing or future grants because of budgeting constraints of the agency administering the program. A restriction on the government funding available to us would reduce the resources that we would be able to devote to existing and future research and development efforts. Such a reduction could delay the introduction of new products and hurt our competitive position.

Our agreements with the Singapore Economic Development Board, or EDB, provide that our continued eligibility for incentive grant payments from EDB is subject to our satisfaction of agreed upon targets for increasing levels of research, development and manufacturing activity in Singapore, including the use of local service providers, the hiring of personnel in Singapore, the incurrence of eligible expenses in Singapore, our receipt of new equity investment and our achievement of certain milestones relating to new product development or completion of specific manufacturing process objectives. These agreements further provide EDB with the right to demand repayment of a portion of past grants in the event that we did not meet our obligations under the applicable agreements. Based on correspondence with EDB, we believe that we have satisfied the conditions applicable to our EDB grant revenue through June 28, 2008.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses or NOLs to offset future

taxable income. Our existing NOLs may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change in connection with or after this offering, our ability to utilize NOLs could be further limited by Section 382 of the Internal Revenue Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Internal Revenue Code. We may not be able to utilize a material portion of the NOLs reflected on our balance sheet and for this reason, we have fully reserved against the value of our NOLs on our balance sheet.

Risks Related to Intellectual Property

Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain.

Our commercial success may depend in part on our ability to protect our intellectual property and proprietary technologies. We rely on patent protection, where appropriate and available, as well as a combination of copyright, trade secret and trademark laws, and nondisclosure, confidentiality and other contractual restrictions to protect our proprietary technology. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. Our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be advantageous to us. Any patents we have obtained or do obtain may be subject to re-examination, reissue, opposition or other administrative proceeding, or may be challenged in litigation, and such challenges could result in a determination that the patent is invalid or unenforceable. In addition, competitors may be able to design alternative methods or devices that avoid infringement of our patents. To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, we are exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Furthermore, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States.

The patent positions of life science companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- We might not have been the first to make the inventions covered by each of our pending patent applications.
- We might not have been the first to file patent applications for these inventions.
- Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies.
- It is possible that none of our pending patent applications will result in issued patents, and even if they issue as patents, they may not provide a basis for commercially viable products, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties.
- We may not develop additional proprietary products and technologies that are patentable.
- The patents of others may have an adverse effect on our business.
- We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, we may fail to apply for patents on important products and technologies in a timely fashion or at all.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from selling our products.

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including our core integrated fluidic circuit and multi-layer soft lithography technologies. We do not own the patents that underlie these licenses. Our rights to use these technologies and employ the inventions claimed in the licensed patents are subject to the negotiation of, continuation of and compliance with the terms of those licenses. In some cases, we do not control the prosecution, maintenance, or filing of the patents to which we hold licenses, or the enforcement of these patents against third parties. Some of our patents and patent applications were either acquired from another company who acquired those patents and patent applications from yet another company, or are licensed from a third party. Thus, these patents and patent applications are not written by us or our attorneys, and we did not have control over the drafting and prosecution. The former patent owners and our licensors might not have given the same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting and/or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights. Enforcement of our licensed patents or defense or any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors. Certain of our licenses contain provisions that allow the licensor to terminate the license upon specific conditions. Our rights under the licenses are subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Termination of these licenses could prevent us from marketing some or all of our products. Because of the complexity of our products and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from producing and selling some or all of our products.

We are subject to certain U.S. government regulations because we have licensed technologies that were developed with U.S. government grants. In accordance with these regulations, these licenses provide that products embodying the technologies will be manufactured substantially in the United States. If this domestic manufacturing requirement is not met, the government agency that funded the relevant grant is entitled to exercise specified rights, referred to as march-in rights, which if exercised would allow the government agency to require the licensors or us to grant a non-exclusive, partially exclusive or exclusive license in any field of use to a third party designated by such agency. As of June 28, 2008, most of the instrumentation components of our IFC systems were manufactured in the United States and all commercial IFC components were manufactured in Singapore, though this division of manufacturing activities could change in the future. All of our IFC system revenue is dependent upon the availability of IFCs, which incorporate technology developed with U.S. government grants. As there is limited judicial or administrative guidance with respect to the interpretation or application of the U.S. manufacturing requirement, we are uncertain as to whether the current division of manufacturing for our IFC systems is in compliance with the requirement. The federal regulations allow the funding government agency to grant, at the request of the licensors of such technology, a waiver of the domestic manufacturing requirement. Waivers may be requested prior to any government notification. We are assisting the licensors of these technologies with the analysis of the domestic manufacturing requirement, and we believe that at least one of our licensors will be requesting a

waiver with our assistance. If it were to be determined that we are in violation of the domestic manufacturing requirement and a waiver of such requirement was either not requested or not granted, then the U.S. government could exercise its march-in rights. In addition, these licenses contain provisions relating to compliance with this domestic manufacturing requirement. If it were to be determined that we are not in compliance with these provisions and such non-compliance constituted a material breach of the licenses, the licenses could be terminated. Either the exercise of march-in rights or the termination of one or more of our licenses could materially adversely affect our business, operations and financial condition.

We may be involved in lawsuits to protect or enforce our patents and proprietary rights and to determine the scope, coverage and validity of others' proprietary rights.

Litigation may be necessary to enforce our patent and proprietary rights and/or to determine the scope, coverage and validity of others' proprietary rights. Litigation on these matters has been prevalent in our industry and we expect that this will continue. To determine the priority of inventions, we may have to initiate and participate in interference and re-examination proceedings declared by the U.S. Patent and Trademark Office that could result in substantial legal fees and could substantially affect the scope of our patent protection. Also, our intellectual property may be subject to significant administrative and litigation proceedings such as invalidity, unenforceability and opposition proceedings against our patents. The outcome of any litigation or interference proceeding might not be favorable to us, and we might not be able to obtain licenses to technology that we require. Even if such licenses are obtainable, they may not be available at a reasonable cost. In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, scope and coverage of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results or financial condition.

For example, on June 4, 2008 we received a letter from Applied Biosystems, Inc., one of our competitors, asserting that our BioMark System for gene expression analysis infringes upon U.S. Patent No. 6,814,934, or the '934 patent, and its foreign counterparts in Europe and Canada, owned by Applied Biosystems' parent company, Applera Corporation. In response to this letter, we filed suit against Applied Biosystems and Applera in federal district court in the Southern District of New York seeking declaratory judgments of non-infringement and invalidity of the '934 patent. In response to our action, Applied Biosystems and Applera may file suit against us in this and other jurisdictions asserting that our products infringe the '934 patent or other proprietary rights held by them, or they may seek to dismiss or move our suit. Applied Biosystems has recently announced that it expects to be acquired by Invitrogen Corporation. This may make it more difficult for us to predict the direction of discussions and litigation among the parties.

We have entered into an agreement with Applied Biosystems that provides for a stay of our proceedings against Applied Biosystems and Applera and provides further that neither party may initiate or expressly threaten to initiate any further patent litigation proceedings against the other during the term of the agreement. Either party may terminate the agreement and request that the stay be lifted anytime after September 20, 2008 by providing seven business days prior written notice to the other. The deadline for Applied Biosystems and Applera to respond to our complaint is extended to 14 calendar days after the lifting of the stay. If the agreement is not terminated sooner by one or both of the parties, the agreement will terminate on December 15, 2008.

Litigation, other proceedings or third party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products or services or impact our stock price.

Our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. Applied Biosystems, one of our competitors, has asserted that our BioMark System for gene expression analysis infringes upon Applera's '934 patent, and we have filed suit against Applied Biosystems and Applera seeking declaratory judgments of non-infringement and invalidity of the Applera patent. Other third parties have asserted and may assert in the future that we are employing their proprietary technology without authorization. Competitors may assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. For example, numerous significant intellectual property issues have been litigated between existing and new participants in the PCR market, including litigation initiated by Applied Biosystems, Inc. In addition, our competitors and others may have patents or may in the future obtain patents and claim that use of our products

infringes these patents. As we move into new markets and applications for our products, incumbent participants in such markets may assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us.

Patent infringement suits can be expensive, lengthy and disruptive to business operations. We could incur substantial costs and divert the attention of our management and technical personnel in prosecuting or defending against any claims. There can be no assurance that we will prevail in our suit against Applied Biosystems and Applera in our defense of any claims brought against us by Applied Biosystems or Applera or in any other suit initiated against us by third parties. If we do not prevail in our suit against Applied Biosystems and Applera and we are unable to secure any required licenses from such parties, we could be precluded from selling our BioMark products, which comprised 43% of our total product revenue in 2007 and 61% of our total product revenue for the six months ended June 28, 2008. Parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us, including treble damages and attorneys' fees and costs in the event that we are found to be a willful infringer of third party patents. In addition, our agreements with some of our suppliers, distributors, customers and other entities with whom we do business may require us to defend or indemnify these parties to the extent they become involved in infringement claims against us, including the claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition. In the event of a successful claim of infringement against us, we may be required to obtain one or more licenses from third parties, which we may not be able to obtain at a reasonable cost, if at all. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any required licenses on favorable terms could prevent us from commercializing our products, and the risk of a prohibition on the sale of any of our products could adversely affect our ability to grow and gain market acceptance for our products.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our employees' former employers.

Many of our employees were previously employed at universities or other life science companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent our ability to commercialize certain potential products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks Related to Our Common Stock and this Offering

We expect that our stock price will fluctuate significantly, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our common stock. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market on the NASDAQ Global Market or otherwise or how liquid that market might become. If an active trading market does not develop, you may have difficulty selling any of our shares of common stock that you buy. We and the underwriters will determine the initial public offering price of our common stock through negotiation. This price will not necessarily

reflect the price at which investors in the market will be willing to buy and sell our shares following this offering. In addition, the trading price of our common stock following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- actual or anticipated quarterly variation in our results of operations or the results of our competitors;
- announcements by us or our competitors of new commercial products, significant contracts, commercial relationships or capital commitments;
- issuance of new or changed securities analysts' reports or recommendations for our stock;
- developments or disputes concerning our intellectual property or other proprietary rights;
- commencement of, or our involvement in, litigation;
- market conditions in the life science sector;
- any major change in our Board or management; and
- general economic conditions and slow or negative growth of our markets.

The trading market for our common stock will rely in part on the research and reports that equity research analysts publish about us and our business. We do not control these analysts or the content and opinions included in their reports. Securities analysts may elect not to provide research coverage of our common stock after the completion of this offering, and such lack of research coverage may adversely affect the market price of our common stock. The price of our stock could decline if one or more equity research analysts downgrade our stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business. If one or more equity research analysts ceases coverage of our company, we could lose visibility in the market, which in turn could cause our stock price to decline.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock immediately after this offering. Therefore, if you purchase our common stock in this offering, you will incur an immediate dilution of $11.18 in net tangible book value per share as of June 28, 2008 from the price you paid, based on an assumed initial public offering price of $15.00 per share, the mid-point of the range set forth on the cover page of this prospectus. In addition, new investors who purchase shares in this offering will contribute approximately 32% of the total amount of equity capital raised by us through the date of this offering, but will only own approximately 21% of the outstanding share capital and approximately 21% of the voting rights. The exercise of outstanding options and warrants will result in further dilution. For a further description of the dilution that you will experience immediately after this offering, see "Dilution."

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline. Based on shares outstanding as of June 28, 2008, upon completion of this offering, we will have outstanding a total of 24,790,535 shares of common stock, assuming no exercise of the underwriters' over-allotment option. Of these shares, only the 5,300,000 shares of common stock sold in this offering by us will be freely tradable, without restriction, in the public market immediately after the offering. Each of our directors and officers, and certain of our stockholders, have entered into lock-up agreements with the underwriters that restrict their ability to sell or transfer their shares. The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus, although they may be extended for up to an additional 34 days under certain circumstances. Our underwriters, however, may, in their sole discretion, permit our officers, directors and other current stockholders who are subject to the contractual lock-up to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, based on shares outstanding as of June 28, 2008, up to an additional 19,490,535 shares of common stock will be eligible for sale in the public market, 5,849,026 of which are held by directors and executive officers and will be subject to volume limitations under Rule 144 under the Securities Act and various vesting agreements. In addition, 2,373,978 shares of common stock

that are subject to outstanding options as of June 28, 2008 will become eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements, the lock-up agreements and Rules 144 and 701 under the Securities Act. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Our directors and executive officers will continue to have substantial control over us after this offering and could limit your ability to influence the outcome of key transactions, including changes of control.

Our executive officers, directors and their affiliates will beneficially own or control approximately 22.79% of the outstanding shares of our common stock, following the completion of this offering. Accordingly, these executive officers, directors and their affiliates, acting as a group, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws, as amended and restated upon the closing of this offering, may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws to become effective upon completion of this offering include provisions that:

- authorize our Board of Directors to issue, without further action by the stockholders, up to 20,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;
- establish that our Board of Directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;
- provide that our directors may be removed only for cause;
- provide that vacancies on our Board of Directors may be filled only by a majority of directors then in office, even though less than a quorum;
- specify that no stockholder is permitted to cumulate votes at any election of directors; and
- require a super-majority of votes to amend certain of the above-mentioned provisions.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, have contractual restrictions against paying cash dividends and currently intend to retain our future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, "believe," "expect," "anticipate," "estimate," "intend," "plan," "targets," "likely," "will," "would," "could," and similar expressions or phrases, or the negative of those expressions or phrases identify forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other factors that may cause our actual results, level of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. The sections in this prospectus entitled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," as well as other sections in this prospectus, discuss some of the factors that could contribute to these differences.

Other unknown or unpredictable factors also could harm our results. Consequently, actual results or developments anticipated by us may not be realized or, even if substantially realized, may not have the expected consequences to, or effects on, us. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements. Except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this prospectus.

This prospectus contains market data that we obtained from industry sources. These sources do not guarantee the accuracy or completeness of the information. Although we believe that the industry sources are reliable, we have not independently verified the information. The market data include projections that are based on a number of other projections. While we believe these assumptions to be reasonable and sound as of the date of this prospectus, actual results may differ from the projections.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of 5,300,000 shares of our common stock that we are selling in this offering will be $70.8 million, based on an assumed initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. A $1.00 increase (decrease) in the assumed initial public offering price would increase (decrease) the net proceeds to us by $4.9 million, after deducting estimated underwriting discounts and commissions and estimated offering expenses, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase of 1.0 million shares in the number of shares offered by us would increase the net proceeds to us by $14.0 million. Similarly, a decrease of 1.0 million shares in the number of shares offered by us would decrease the net proceeds to us by $14.0 million. If the underwriters' over-allotment option is exercised in full, we estimate that we will receive net proceeds of $81.9 million.

Of the net proceeds that we will receive from this offering, we expect to use approximately:

- $26.0 million for sales and marketing initiatives, including significantly expanding our sales force, to support the ongoing commercialization of our products;
- $16.0 million for research and product development activities;
- $2.0 million to expand our facilities and manufacturing operations; and
- the balance for working capital and other general corporate purposes.

We may also use a portion of our net proceeds to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction and are not involved in negotiations to do so. Pending these uses, we intend to invest our net proceeds from this offering primarily in investment-grade, interest-bearing instruments.

As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. The amount and timing of our expenditures will depend on several factors, including cash flows from our operations and the anticipated growth of our business. Accordingly, our management will have broad discretion in the application of the net proceeds and investors will be relying on the judgment of our management regarding the application of the proceeds from this offering. We reserve the right to change the use of these proceeds as a result of certain contingencies such as the results of our commercialization efforts, competitive developments, opportunities to acquire products, technologies or businesses and other factors.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all future earnings for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying cash dividends in the foreseeable future. In addition, we are subject to several covenants under our debt arrangements that place restrictions on our ability to pay dividends. The payment of dividends will be at the discretion of our Board of Directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our current and future debt agreements, and other factors that our Board of Directors may deem relevant.

CAPITALIZATION

The following table sets forth our capitalization as of June 28, 2008:

- on an actual basis;
- on a pro forma basis to give effect to (1) the conversion of all outstanding shares of convertible preferred stock into common stock pursuant to an action by written consent to such conversion we have obtained from the holders of our preferred stock and (2) the reclassification of the convertible preferred stock warrant liabilities to additional paid-in capital, each effective upon the closing of this offering; and
- on a pro forma as adjusted basis to also give effect to the pro forma conversions and reclassifications described above and the sale of 5,300,000 shares of our common stock in this offering and the application of the net proceeds at the assumed initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

	As of June 28, 2008		
	Actual	Pro Forma (unaudited)	Pro Forma as Adjusted(1)
	(in thousands, except per share amounts)		
Long-term debt, net of current portion	$ 10,477	$ 10,477	$ 10,477
Convertible preferred stock warrant liabilities	1,269	—	—
Convertible preferred stock issuable in series: $0.0035 par value, 17,176 shares authorized, 16,626 shares issued and outstanding (actual); no shares authorized, issued or outstanding (pro forma and pro forma as adjusted)	167,538	—	—
Stockholders' equity (deficit):			
Common stock: $0.0035 par value, 24,967 shares authorized, 2,858 shares issued and outstanding (actual); $0.0035 par value, 24,967 shares authorized, 19,484 shares issued and outstanding (pro forma); $0.001 par value, 300,000 shares authorized, 24,784 shares issued and outstanding (pro forma as adjusted)	10	68	25
Preferred stock: $0.0035 par value, no shares authorized, issued or outstanding (actual and pro forma); $0.001 par value, 20,000 shares authorized, no shares issued or outstanding (pro forma as adjusted)	—	—	—
Additional paid-in capital(1)	4,383	173,132	244,010
Accumulated other comprehensive loss	(241)	(241)	(241)
Accumulated deficit	(149,060)	(149,060)	(149,060)
Total stockholders' equity (deficit)(1)	(144,908)	23,899	94,734
Total capitalization(1)	$ 34,376	$ 34,376	$ 105,211

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) each of additional paid-in capital, total stockholders' equity and total capitalization by $4.9 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase of 1.0 million shares in the number of shares offered by us, together with a $1.00 increase in the assumed offering price of $15.00 per share, would increase additional paid-in capital, total stockholders' equity and total capitalization by approximately $19.8 million. Similarly, each decrease of

1.0 million shares in the number of shares offered by us, together with a $1.00 decrease in the assumed offering price of $15.00 per share, would decrease additional paid-in capital, total stockholders' equity and total capitalization by approximately $17.9 million. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and terms of this offering determined at pricing.

The table above excludes the following shares:

- 2,373,978 shares of common stock issuable upon exercise of options outstanding as of June 28, 2008 at a weighted average exercise price of $5.44 per share;
- 216,409 shares of common stock issuable upon the exercise of warrants outstanding as of June 28, 2008 at a weighted average exercise price of $11.41 per share, after conversion of our convertible preferred stock;
- 2,601,584 shares of common stock reserved for future issuance under our stock-based compensation plans, including 2,000,000 shares of common stock reserved for issuance under our 2008 Equity Incentive Plan, and any future increase in shares reserved for issuance under such plan, each of which will become effective on the date of this prospectus; and
- 6,785 shares of common stock that were legally issued and outstanding but were not included in stockholders' deficit as of June 28, 2008 pursuant to accounting principles generally accepted in the United States, as these shares were subject to a right of repurchase by us.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the amount per share paid by purchasers of shares of common stock in this initial public offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering.

Our pro forma net tangible book value as of June 28, 2008 in the amount of $23.9 million, or $1.23 per share, was based on the total number of shares of our common stock outstanding as of June 28, 2008, after giving effect to (1) the conversion of all outstanding shares of our convertible preferred stock into common stock and (2) the reclassification of the convertible preferred stock warrant liabilities to additional paid-in capital, each effective upon the closing of this offering.

After giving effect to our sale of 5,300,000 shares of common stock in this offering at an assumed initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses, our pro forma as adjusted net tangible book value as of June 28, 2008 would have been $94.7 million, or $3.82 per share. This represents an immediate increase in net tangible book value of $2.59 per share to existing stockholders and an immediate dilution in net tangible book value of $11.18 per share to purchasers of common stock in this offering, as illustrated in the following table:

Assumed initial public offering price per share		$ 15.00
Pro forma net tangible book value per share as of June 28, 2008	$ 1.23	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors	2.59	
Pro forma as adjusted net tangible book value per share after this offering		3.82
Pro forma dilution per share to new investors in this offering		$ 11.18

Each $1.00 increase (decrease) in the assumed public offering price of $15.00 per share, the midpoint of the range set forth on the cover of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value by approximately $4.9 million, or approximately $0.20 per share, and the pro forma dilution per share to investors in this offering by approximately $0.80 per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase of 1.0 million shares in the number of shares offered by us, together with a $1.00 increase in the assumed offering price of $15.00 per share, would result in a pro forma as adjusted net tangible book value of approximately $114.5 million, or $4.44 per share, and the pro forma dilution per share to investors in this offering would be $11.56 per share. Similarly, a decrease of 1.0 million shares in the number of shares offered by us, together with a $1.00 decrease in the assumed public offering price of $15.00 per share, would result in an pro forma as adjusted net tangible book value of approximately $76.8 million, or $3.23 per share, and the pro forma dilution per share to investors in this offering would be $10.77 per share. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

If the underwriters' over-allotment option is exercised in full, the pro forma as adjusted net tangible book value per share after this offering would be $4.14 per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be $2.91 per share and the dilution to new investors purchasing shares in this offering would be $10.86 per share.

The following table presents on a pro forma as adjusted basis as of June 28, 2008, after giving effect to the automatic conversion of all outstanding shares of convertible preferred stock into common stock, the differences between the existing stockholders and the purchasers of shares in this offering with respect to the number of shares purchased from us, the total consideration paid, which includes net proceeds received from the issuance of common and convertible preferred stock, cash received from the exercise of stock options, the value of any stock issued for services and the proceeds from the issuance of convertible promissory notes which were subsequently converted to shares of convertible preferred stock, and the average price paid per share (in thousands, except per share amounts and percentages):

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	19,484	78.6%	$ 170,570	68.2%	$ 8.75
New investors	5,300	21.4	79,500	31.8	$ 15.00
Totals	24,784	100.0%	$ 250,070	100.0%	

(1) Each $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share, the midpoint of the range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $5.3 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase of 1.0 million shares in the number of shares offered by us would increase the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $15.0 million. Similarly, a decrease of 1.0 million shares in the number of shares offered by us would decrease the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $15.0 million.

If the underwriters exercise their over-allotment option in full, our existing stockholders would own 76.2% and our new investors would own 23.8% of the total number of shares of our common stock outstanding after this offering.

The table above excludes the following shares:

- 2,373,978 shares of common stock issuable upon exercise of options outstanding as of June 28, 2008 at a weighted average exercise price of $5.44 per share;
- 216,409 shares of common stock issuable upon the exercise of warrants outstanding as of June 28, 2008 at a weighted average exercise price of $11.41 per share, after conversion of our convertible preferred stock;
- 2,601,584 shares of common stock reserved for future issuance under our stock-based compensation plans, including 2,000,000 shares of common stock reserved for issuance under our 2008 Equity Incentive Plan, and any future increase in shares reserved for issuance under such plan, each of which will become effective on the date of this prospectus; and
- 6,785 shares of common stock that were legally issued and outstanding but were not included in stockholders' deficit as of June 28, 2008 pursuant to accounting principles generally accepted in the United States, as these shares were subject to a right of repurchase by us.

To the extent that any of these options or warrants are exercised, new options are issued under our stock-based compensation plans or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

SELECTED CONSOLIDATED FINANCIAL DATA

We have derived the selected consolidated statement of operations data for the years ended December 31, 2005, December 31, 2006 and December 29, 2007 and the selected consolidated balance sheet data as of December 31, 2006 and December 29, 2007 from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the summary consolidated statement of operations data for the six months ended June 30, 2007 and June 28, 2008 and the consolidated balance sheet data as of June 28, 2008 from our unaudited consolidated financial statements included elsewhere in this prospectus. We have derived the selected consolidated statement of operations data for the years ended December 31, 2003 and 2004 and the selected consolidated balance sheet data as of December 31, 2003, 2004 and 2005 from our audited consolidated financial statements not included in this prospectus. Our historical results are not necessarily indicative of the results to be expected for any future period. The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

	Year Ended					Six Months Ended	
	December 31, 2003	December 31, 2004	December 31, 2005	December 31, 2006	December 29, 2007	June 30, 2007	June 28, 2008
						(Unaudited)	
	(in thousands, except per share amounts)						
Consolidated Statement of Operations Data:							
Revenue:							
Product revenue	$ 3,133	$ 4,603	$ 6,076	$ 3,959	$ 4,451	$ 1,489	$ 4,382
Collaboration revenue	—	366	1,568	1,376	460	310	70
Grant revenue	—	70	30	1,063	2,364	1,198	1,068
Total revenue	3,133	5,039	7,674	6,398	7,275	2,997	5,520
Costs and expenses:							
Cost of product revenue	1,918	3,362	4,764	2,773	3,514	1,490	2,988
Research and development	11,218	9,608	11,449	15,589	14,389	7,053	7,151
Selling, general and administrative	7,263	8,690	7,955	9,699	12,898	6,183	9,843
Total costs and expenses	20,399	21,660	24,168	28,061	30,801	14,726	19,982
Loss from operations	(17,266)	(16,621)	(16,494)	(21,663)	(23,526)	(11,729)	(14,462)
Interest expense	(305)	(508)	(898)	(2,261)	(2,790)	(1,790)	(1,100)
Interest income	267	291	340	565	1,140	565	557
Other income (expense), net	—	—	30	(194)	(170)	37	(214)
Loss before provision for income taxes and cumulative of change in accounting principle	(17,304)	(16,838)	(17,022)	(23,553)	(25,346)	(12,917)	(15,219)
Provision for income taxes	—	—	—	—	(105)	(52)	(43)
Loss before cumulative effect of change in accounting principle	(17,304)	(16,838)	(17,022)	(23,553)	(25,451)	(12,969)	(15,262)
Cumulative effect of change in accounting principle	—	—	637	—	—	—	—
Net loss	$ (17,304)	$ (16,838)	$ (16,385)	$ (23,553)	$ (25,451)	$ (12,969)	$ (15,262)
Net loss per share of common stock, basic and diluted(1)	$ (7.77)	$ (6.93)	$ (6.35)	$ (8.82)	$ (9.21)	$ (4.74)	$ (5.39)
Shares used in computing net loss per share of common stock, basic and diluted(1)	2,227	2,430	2,580	2,671	2,765	2,736	2,832

(1) Please see Note 2 to our consolidated financial statements for an explanation of the method used to calculate basic and diluted net loss per share of common stock.

	As of					
	December 31, 2003	December 31, 2004	December 31, 2005	December 31, 2006	December 29, 2007	June 28, 2008 (unaudited)
	(in thousands)					
Consolidated Balance Sheet Data:						
Cash and cash equivalents and available-for-sale securities	$ 28,874	$ 12,520	$ 19,659	$ 25,518	$ 40,363	$ 32,469
Working capital	23,689	9,710	14,764	23,939	38,754	28,644
Total assets	34,908	20,150	27,750	36,493	54,776	49,678
Long-term debt	5,261	6,111	16,800	12,838	9,362	16,558
Convertible promissory notes	—	—	—	13,072	4,997	—
Convertible preferred stock warrant liabilities	—	—	814	223	468	1,269
Convertible preferred stock	75,072	76,596	88,966	112,295	162,082	167,538
Total stockholder's deficit	(49,812)	(65,471)	(83,154)	(106,172)	(130,331)	(144,908)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of the financial condition and results of our operations should be read in conjunction with the consolidated financial statements and related notes included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" included elsewhere in this prospectus.

Overview

We develop, manufacture and market proprietary Integrated Fluidic Circuit systems that significantly improve productivity in the life science industry. Our Integrated Fluidic Circuits, or IFCs, enable the simultaneous performance of thousands of biochemical measurements in extremely minute volumes. We created this "integrated circuit for biology" by miniaturizing, integrating and automating sophisticated liquid handling processes on a single microfabricated device. Particularly in large-scale experimentation, our IFC systems, consisting of instrumentation, software and single-use IFCs, increase throughput, decrease costs and enhance sensitivity compared to conventional laboratory systems. We have sold our IFCs to over 100 customers, including many leading biotechnology and pharmaceutical companies, academic institutions, and life science laboratories worldwide.

We have commercialized IFC systems for a wide range of life science applications, including our BioMark system for gene expression analysis, genotyping and digital PCR, and our Topaz system for protein crystallization. Researchers and clinicians have successfully employed our products to help achieve breakthroughs in the fields of genetic variation, cellular function and structural biology. We believe that the broad applicability of our IFC technology will lead to the development of IFC systems for a wide variety of additional markets and applications, including high-throughput DNA sequencing and molecular diagnostics.

We were founded in 1999. In the first quarter of 2003, we introduced our first product line, the Topaz system for protein crystallization based on our first generation Topaz IFC. In subsequent years, we enhanced the capability of the Topaz system by introducing IFCs with increased throughput. Prior to 2007, Topaz system products accounted for substantially all of our product revenue. In the fourth quarter of 2006, we announced the commercial availability of our BioMark system. We currently sell two types of single-use IFCs for use with the BioMark system, the Dynamic Array for gene expression and genotyping and the Digital Array for digital PCR.

We have incurred significant losses since our inception, including net losses of $16.4 million, $23.6 million, $25.5 million and $15.3 million in 2005, 2006, 2007 and the six months ended June 28, 2008. As of June 28, 2008, we had an accumulated deficit of $149.1 million. We sell our IFC systems around the world. For 2007 and the six months ended June 28, 2008, customers in North America accounted for approximately 48% and 46% of our total revenue, European customers accounted for 10% and 17% and Asia-Pacific customers accounted for 42% and 37%. We distribute our systems through our direct field sales and support organizations located in North America, Europe and Asia-Pacific and through distributors or sales agents in several European and Asia-Pacific countries. Our manufacturing operations are located in Singapore and South San Francisco. Our facility in Singapore fabricates all of our IFCs for commercial sale and some IFCs for our own research and development purposes and assembles certain elements of our BioMark and Topaz instrumentation. Our South San Francisco facility also assembles certain elements of our BioMark and Topaz instrumentation and fabricates IFCs for our own research and development purposes.

Since 2002, we have received significant revenue from government grants. Our most significant grant relationship has been with the Singapore Economic Development Board, or EDB. The EDB, an agency of the Government of Singapore, promotes research, development and manufacturing activities in Singapore and associated employment of Singapore nationals by providing incentive grants to companies willing to conduct operations in Singapore and satisfy the requirements of EDB's government programs. Under our agreements with EDB, we are eligible to receive incentive grant payments from EDB, provided we satisfy agreed upon targets for increasing levels of research, development and manufacturing activity in Singapore, including the use of local service providers, the hiring of personnel in Singapore, local spending in Singapore, our receipt of new equity investment, and our achievement of agreed upon targets relating to new product development or completion of

specific manufacturing process objectives. If we satisfy the grant conditions, we receive incentive grant payments equal to a portion of the qualifying expenses we incur in Singapore, relating to salaries, overhead, outsourcing and subcontracting expenses, operating expenses and royalties paid. Expenses not qualifying for the incentive grant program include raw materials purchases. We submit requests to EDB for incentive grant payments on a quarterly basis, and these requests are subject to EDB's review and our satisfaction of the grant conditions. Together these agreements provide for incentive funding eligibility through 2011, subject to our compliance with the requirements of these agreements.

In addition, we have entered into collaboration and license agreements with other parties that generally provide us with up-front and periodic milestone fees or fees based on agreed upon rates for time incurred by our research staff.

Fiscal Year Presentation

During the year ended December 29, 2007, we adopted a 52 or 53 week year convention for our fiscal years and, therefore, our 2007 fiscal year ended on December 29, 2007 and the first six month periods of 2007 and 2008 ended on June 30, 2007 and June 28, 2008. Future fiscal years will end on the last Saturday in December of each year. Prior to the adoption of this method, we reported our fiscal years on a calendar basis. The fiscal years discussed in this management's discussion and analysis of financial condition and results of operations ended on December 31, 2005, December 31, 2006 and December 29, 2007.

Critical Accounting Policies, Significant Judgments and Estimates

Our consolidated financial statements and the related notes included elsewhere in this prospectus are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition

We generate revenue from sales of our products and services, collaboration agreements and government grants. Our products consist of single-use IFCs, various instruments and software related to our BioMark and Topaz systems. Our services include system installation, training and customer support services. We also have entered into a number of research and development contracts and have received government grants to conduct research and development activities.

We record revenue in accordance with the guidelines established by the Securities and Exchange Commission, or SEC, Staff Accounting Bulletin No. 104, *Revenue Recognition*, or SAB 104. In addition, we have concluded that software included with certain of our instruments is essential to their functionality. In these instances, we apply AICPA Statement of Position 97-2, *Software Revenue Recognition*, or SOP 97-2. If the arrangement includes IFCs, we use the separation criteria in EITF Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, to separate revenues related to IFCs, which are non-software related deliverables, from software related deliverables. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services rendered, the price to the buyer is fixed or determinable and collectibility is reasonably assured. The evaluation of these revenue recognition criteria requires significant management judgment. For instance, we use judgment to assess collectibility based on factors such as the customer's creditworthiness and past collection history, if applicable. If we determine that collection of a payment is not reasonably assured, revenue

recognition is deferred until the time collection becomes reasonably assured, which is generally upon receipt of payment. We also use judgment to assess whether a price is fixed or determinable by reviewing contractual terms and conditions related to payment terms.

In 2007, and thereafter, no right of return existed for our products. In prior years, if an agreement included a right of return, the related revenue was deferred until the right had lapsed. Historically, we have not experienced any significant returns of our products. Also, accruals are provided for estimated warranty expenses at the time that the associated revenue is recognized. We use judgment to estimate these accruals and, if we were to experience an increase in warranty claims or if costs of servicing our products under warranty were greater than our estimates, our gross margins could be adversely affected in future periods.

Some of our sales contracts which include items such as our BioMark instrument systems or our Topaz readers involve the delivery or performance of multiple products and services within contractually binding arrangements. Significant contract interpretation is sometimes required to determine the appropriate accounting, including whether the deliverables specified in a multiple element arrangement should be treated as separate units of accounting for revenue recognition purposes, and, if so, how the price should be allocated among the elements, when to recognize revenue for each element, and the period over which revenue should be recognized. We use judgment to evaluate whether a delivered item has value on a stand-alone basis prior to delivery of the remaining items by determining whether we have made separate sales of such items or whether the undelivered items are essential to the functionality of the delivered items. Further, we use judgment to evaluate whether there is vendor-specific objective evidence, or VSOE, of fair value of the undelivered items, determined by reference to stand-alone sales of such items. We recognize revenue for delivered elements only when we determine that the fair values of undelivered elements are known. For a multiple element arrangement that includes both IFCs and instruments we separate these elements into separate units of accounting as we consider these elements to have standalone value to the customer. We recognize revenue for the IFCs under SAB 104 and the instruments under SAB 104 or SOP 97-2, as applicable. If the fair value of any undelivered item related to instruments and software included in a multiple element arrangement cannot be objectively determined, revenue will be deferred until all items are delivered, or until fair value can objectively be determined for any remaining undelivered items. However, if the only such undelivered element is post-contract customer support services, such as maintenance agreements for which VSOE has not been established, the entire revenue is recognized ratably over the service period. Recognition of revenue from these arrangements generally begins upon installation of the instruments as installation is deemed essential to the functionality of the instruments. The corresponding costs of products sold related to multiple element arrangements are also deferred and amortized over the same period.

Our deferred revenue balance increased by $1.6 million during 2007 and decreased by $0.3 million during the six months ended June 28, 2008. The increase during 2007 was primarily due to the increase in sales of our BioMark instrument systems, all of which included maintenance agreements. We expect to establish VSOE for post-contract customer support during the second half of 2008 as we enter into renewal agreements for maintenance with our customers upon the expiration of the initial agreements. If we are able to establish VSOE for post-contract customer support, our deferred revenue balance will decrease in future periods.

Changes in judgments and estimates regarding application of these revenue recognition guidelines as well as changes in facts and circumstances including the establishment of VSOE of fair value could result in a change in the timing or amount of revenue recognized in future periods.

Revenue from the sales of our products that are not part of a multiple element arrangement is recognized when no significant obligations remain undelivered and collection of the receivables is reasonably assured, which is generally upon shipment of the product and transfer of title to the customer.

We have entered into collaboration research and development arrangements that generally provide us with up-front and periodic milestone fees or fees based on agreed upon rates for time incurred by our research staff. Revenue is recognized either ratably over the term of the agreement or as time is incurred on the project. Revenue from government grants is for the achievement of agreed upon milestones and expenditures and is recognized in the period in which the related costs are incurred, provided that the conditions under which the government grants are awarded have been substantially met and only perfunctory obligations remain outstanding.

Stock-Based Compensation

Prior to January 1, 2006, we accounted for our stock options granted to employees using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*, or APB 25, and related interpretations as permitted by Statement of Financial Accounting Standards, or SFAS No. 123, *Accounting for Stock-Based Compensation*, or SFAS 123, and SFAS No. 148, *Accounting for Stock-Based Compensation — Transaction and Disclosure*, or SFAS 148. Accordingly, any compensation cost relating to stock options was recorded on the date of the grant in stockholders' equity as deferred compensation and was thereafter amortized to expense over the vesting period of the grant, which was generally four years. We amortized deferred stock-based compensation using the multiple option method as prescribed by FASB Interpretation No. 28, *Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans*, or FIN 28, over the option vesting period using an accelerated amortization schedule.

Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS No. 123 (revised 2004), *Share-Based Payment*, or SFAS 123(R), which requires companies to measure the cost of employee services received in exchange for an award of equity instruments, including stock options, based on the grant date fair value of the award. The fair value is estimated using the Black-Scholes option-pricing model. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the award, usually the vesting period.

We adopted SFAS 123(R) using the prospective-transition method as all prior grants were measured using the minimum value method for the pro forma disclosures previously required by SFAS 123. The prospective-transition method requires us to continue to apply APB 25 in future periods to equity awards outstanding at the date of our adoption of SFAS 123(R) on January 1, 2006. Under the prospective-transition method, any compensation costs that will be recognized from January 1, 2006 will include only: (a) compensation cost for all stock-based awards granted prior to, but not yet vested as of, December 31, 2005, based on the intrinsic value method in accordance with the provisions of ABP 25; and (b) compensation cost for all stock-based awards granted or modified subsequent to December 31, 2005, net of estimated forfeitures, based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R). We amortize the fair value of stock-based compensation under SFAS 123(R) on a straight-line basis. In accordance with the prospective-transition method as prescribed under SFAS 123(R), results for prior periods are not restated.

We account for stock options issued to nonemployees in accordance with the provisions of SFAS 123(R) and EITF Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, or EITF 96-18. In accordance with SFAS 123(R) and EITF 96-18, stock options issued to nonemployees are accounted for at their estimated fair value determined using the Black-Scholes option-pricing model. The fair value of the options granted to nonemployees is remeasured as they vest, and the resulting increase in value, if any, is recognized as expense during the period the related services are rendered.

We use the Black-Scholes option-pricing model to calculate the fair value of our options on the grant date. This model requires inputs such as expected term, expected volatility and risk-free interest rate. Further, the forfeiture rate also affects the amount of aggregate compensation. These inputs are subjective and generally require significant judgment.

Our expected volatility is derived from the historical volatilities of several unrelated public companies within the life science industry because we have little information on the volatility of the price of our common stock since we have no trading history. When making the selections of our industry peer companies to be used in the volatility calculation, we also considered the stage of development, size and financial leverage of potential comparable companies. Our historical volatility is weighted based on certain qualitative factors and combined to produce a single volatility factor. The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to each grant's expected life. Given our limited history to accurately estimate the expected lives for the various employee groups, we used the 'simplified' method as provided by Staff Accounting Bulletin No. 107, *Share Based Payment*. The 'simplified' method is calculated as the average of the time-to-vesting and the contractual life of the options.

Beginning on January 1, 2006 upon the adoption of SFAS 123(R), the fair value of each new employee option awarded was estimated on the grant date for the periods below using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	2006	2007	Six Months Ended June 28, 2008
Expected volatility	72.8%	63.0%	53.8%
Expected life	6.1 years	6.0 years	6.0 years
Risk-free interest rate	4.8%	4.4%	3.2%
Dividend yield	0%	0%	0%

If in the future we determine that another method is more reasonable, or if another method for calculating these input assumptions is prescribed by authoritative guidance, and, therefore, should be used to estimate expected volatility or expected life, the fair value calculated for our stock options could change significantly. Higher volatility and longer expected lives result in an increase to stock-based compensation expense determined at the date of grant. Stock-based compensation expense affects our cost of revenue, research and development expense, and selling, general and administrative expense.

We estimate our forfeiture rate based on an analysis of our actual forfeitures and will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior and other factors. Quarterly changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the cumulative effect of adjusting the rate for all expense amortization is recognized in the period the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in the consolidated financial statements. If a revised forfeiture rate is lower than the previously estimated forfeiture rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in the consolidated financial statements. The effect of forfeiture adjustments during 2006, 2007 and the six months ended June 28, 2008 was insignificant. We will continue to use judgment in evaluating the expected term, volatility and forfeiture rate related to our own stock-based compensation on a prospective basis and incorporating these factors into the Black-Scholes option-pricing model.

Also required for the fair value calculation of the options is the fair value of the underlying common stock. We have historically granted stock options with exercise prices no less than the fair market value of our common stock as determined at the date of grant by our Board of Directors with input from management. The following table summarizes, by grant date, the number of stock options granted since January 1, 2007 and the associated per share exercise price, which equaled the fair value of our common stock for each of these grants.

Grant Date	Number of Options Granted	Exercise Price and Fair Value Per Share of Common Stock
May 8, 2007	460,966	$ 4.76
September 20, 2007	28,766	$ 4.83
December 28, 2007	93,705	$ 8.40
February 7, 2008	206,709	$ 8.40
April 24, 2008	546,711	$ 11.16
June 26, 2008	24,426	$ 11.97

Given the absence of an active market for our common stock prior to this offering, our Board of Directors determined the fair value of our common stock for our grants of stock options. Our Board of Directors determined the estimated fair value of our common stock based in part on an analysis of relevant metrics, including the following:

- the prices of our convertible preferred stock sold to outside investors in arms-length transactions;
- the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock;

- the rights of freestanding warrants and other similar instruments related to shares that are redeemable;
- our operating and financial performance;
- the hiring of key personnel;
- the introduction of new products;
- our stage of development;
- the fact that the option grants involve illiquid securities in a private company;
- the risks inherent in the development and expansion of our products and services; and
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company given prevailing market conditions.

From January 2007 through June 2008, our Board of Directors performed contemporaneous valuations of our common stock for each grant of stock options during this period.

The valuations were prepared using the market approach and the income approach to estimate our aggregate enterprise value at each valuation date. The market approach measures the value of a company through the analysis of recent sales of comparable companies. Consideration is given to the financial condition and operating performance of the company being valued relative to those of publicly traded companies operating in the same or similar lines of business. When choosing the comparable companies to be used for the market approach, we focused on companies in the life science industry. Some of the specific criteria used to select comparable companies within this industry include the business description, business size, projected growth, financial condition and historical earnings. The income approach measures the value of a company as the present value of its future economic benefits by applying an appropriate risk-adjusted discount rate to expected cash flows, based on forecasted revenue and costs. We prepared a financial forecast for each valuation report to be used in the computation of the enterprise value for both the market approach and the income approach. The financial forecasts took into account our past experience and future expectations. The risks associated with achieving these forecasts were assessed in selecting the appropriate discount rate. There is inherent uncertainty in these estimates.

In assessing the fair value of our common stock, our Board of Directors applied an equal weighting to the value indications presented by the income approach and market approach. In order to arrive at the estimated fair value of our common stock, the indicated enterprise value of our company calculated at each valuation date was allocated to the shares of convertible preferred stock and the warrants to purchase these shares, and shares of common stock and the options to purchase these shares using an option-pricing methodology. The option-pricing method treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the liquidation preference at the time of a liquidity event, such as a strategic sale, merger or initial public offering, assuming the enterprise has funds available to make a liquidation preference meaningful and collectable by the holders of preferred stock. The common stock is modeled as a call option on the underlying equity value at a predetermined exercise price. In the model, the exercise price is based on a comparison with the total equity value rather than, as in the case of a regular call option, a comparison with a per share stock price. Thus, common stock is considered to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the preferred stock is liquidated. The option-pricing method uses the Black-Scholes option-pricing model to price the call options. This model defines the securities' fair values as functions of the current fair value of a company and uses assumptions such as the anticipated timing of a potential liquidity event and the estimated volatility of the equity securities. The anticipated timing of a liquidity event utilized in these valuations was based on then-current plans and estimates of our Board of Directors and management regarding a liquidity event. Estimates of the volatility of our stock were based on available information on the volatility of capital stock of comparable publicly traded companies. This approach is consistent with the methods outlined in the AICPA Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Also, we considered the fact that our stockholders cannot freely trade our common stock in the public markets. Therefore, the estimated fair value of our common stock at each grant date reflected a non-marketability discount.

There is inherent uncertainty in these estimates and if we had made different assumptions than those described above, the amount of our stock-based compensation expense, net loss and net loss per share amounts could have been significantly different.

Our Board of Directors performed a contemporaneous valuation in order to determine the fair value of our common stock for the grant of options on May 8, 2007 which indicated a fair value of $4.76 per share for our common stock. Our Board of Directors performed a second contemporaneous valuation in order to update the determination of the fair value of our common stock for the grant of options on September 20, 2007 which indicated a fair value of $4.83 per share for our common stock. The increase in the fair value between the contemporaneous valuation performed for the grant of options on May 8, 2007 and the date of this contemporaneous valuation was minimal, however, it relates mostly to a slight decrease in the non-marketability discount rate and the time to a liquidity event. Our Board of Directors performed another contemporaneous valuation in order to update the determination of the fair value of our common stock for the grant of options on December 28, 2007 which indicated a fair value of $8.40 per share for our common stock. The increase in the fair value between the contemporaneous valuation performed for the grant of options on September 20, 2007 and December 28, 2007 valuation relates mostly to the decrease in the non-marketability discount rate, the risk-adjusted discount and the time to a liquidity event. Our Board of Directors performed contemporaneous valuations in order to update the determination of the fair value of our common stock for the grant of options on April 24, 2008, which indicated a fair value of $11.16 per share for our common stock, and for the grant of options on June 26, 2008, which indicated a fair value of $11.97 per share for our common stock. The increase in fair value between the contemporaneous valuation performed for the grant of options on December 28, 2007 and April 24, 2008 relates primarily to the increase in our enterprise value as we moved closer to achieving our projected financial goals, achieved significant milestones in new product developments and expanded into new market applications. In addition, in April 2008, our Board of Directors approved the filing of a registration statement for the initial public offering of our common stock. The increase in fair value between the contemporaneous valuation performed for the grant of options on April 24, 2008 and June 26, 2008 relates to the increase in our enterprise value reflecting continued progression toward achieving our projected financial goals, significant new product launches and geographical expansion of our sales capabilities.

We recorded stock-based compensation of $5,000, $0.1 million, $0.7 million and $1.0 million during 2005, 2006, 2007 and the six months ended June 28, 2008. Included in these amounts was employee stock-based compensation of $0, $0.1 million, $0.5 million and $0.9 million, and nonemployee stock-based compensation of $5,000, $59,000, $0.2 million and $0.1 million during 2005, 2006, 2007 and the six months ended June 28, 2008. In future periods, stock-based compensation expense is expected to increase as a result of our existing unrecognized stock-based compensation and as we issue additional stock-based awards to continue to attract and retain employees and nonemployee directors. Certain of our stock options are granted to officers with vesting acceleration features based upon the achievement of certain performance milestones. The timing of the attainment of these milestones may affect the timing of expense recognition under SFAS No. 123(R). Additionally, SFAS 123(R) requires that we recognize compensation expense only for the portion of stock options that are expected to vest. If the actual rate of forfeitures differs from that estimated by management, we may be required to record adjustments to stock-based compensation expense in future periods. As of December 29, 2007 and June 28, 2008, we had $1.7 million and $5.1 million of unrecognized stock-based compensation costs related to stock options granted under our 1999 Stock Option Plan, which is expected to be recognized over an average period of 2.9 years for both periods.

Accounting for Income Taxes

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We have recorded a full valuation allowance on our net deferred tax assets as of December 31, 2006, December 29, 2007 and June 28, 2008 due to uncertainties related to our ability to utilize our deferred tax assets in the foreseeable future. These deferred tax assets primarily consist of certain net operating loss carryforwards and research and development tax credits.

We adopted FASB Interpretation No. 48, *Accounting for Uncertainties in Income Taxes — an interpretation of FASB Statement No. 109*, or FIN 48, effective January 1, 2007. FIN 48 requires us to recognize the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will

be sustained upon examination. Upon adoption, the Company recorded a charge of $75,000 as a cumulative effect of a change in accounting principle in the accumulated deficit during 2007.

Inventory Valuation

We record adjustments to inventory for potentially excess, obsolete or impaired goods in order to state inventory at net realizable value. The business environment in which we operate is subject to rapid changes in technology and customer demand. We regularly review inventory for excess and obsolete products and components, taking into account product life cycle and development plans, product expiration and quality issues, historical experience and our current inventory levels. If actual market conditions are less favorable than anticipated, additional inventory adjustments could be required.

Warrants to Purchase Convertible Preferred Stock

We account for freestanding warrants related to shares that are redeemable in accordance with FASB Staff Position No. 150-5, *Issuer's Accounting Under FASB Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares That Are Redeemable*, or FSP 150-5, an interpretation of SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*. Under FSP 150-5, freestanding warrants to purchase shares of our convertible preferred stock are classified as liabilities on the consolidated balance sheets at fair value because the warrants may conditionally obligate us to transfer assets at some point in the future. The warrants are subject to remeasurement at each balance sheet date, and any change in fair value will be recognized as a component of other income (expense), net in the consolidated statements of operations. We estimated the fair value of these warrants at the respective balance sheet dates using the Black-Scholes option-pricing model. A number of our assumptions used in the Black-Scholes option-pricing model, especially the market value and the expected volatility, are highly judgmental and could differ materially in the future.

We will continue to record adjustments to the fair value of the warrants until they are exercised, expire or, upon the closing of this offering, become warrants to purchase shares of our common stock, wherein the warrants will no longer be subject to FSP 150-5. At that time, the then-current aggregate fair value of these warrants will be reclassified from current liabilities to additional paid-in capital, a component of stockholders' equity, and we will cease to record any related periodic fair value adjustments. Upon the closing of this offering, the preferred stock warrants will be converted into common stock warrants with the same exercise prices and expiration dates.

Results of Operations

Revenue

The following table presents our revenue by source for each period presented (in thousands).

	2005	2006	2007	Six Months Ended June 30, 2007	June 28, 2008
Revenue:					
Product revenue	$ 6,076	$ 3,959	$ 4,451	$ 1,489	$ 4,382
Collaboration revenue	1,568	1,376	460	310	70
Grant revenue	30	1,063	2,364	1,198	1,068
Total revenue	$ 7,674	$ 6,398	$ 7,275	$ 2,997	$ 5,520

We generate revenue from sales of our products, collaboration agreements and government grants. Our products consist of single-use IFCs, various instruments, software and service related to our BioMark and Topaz systems. We also have entered into a number of research and development contracts and have received government grants to conduct research and development activities.

Total Revenue

Our total revenue increased $2.5 million, or 84%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. Total revenue increased $0.9 million, or 14%, for 2007 as compared to 2006, and decreased by $1.3 million, or 17%, for 2006 as compared to 2005. Total revenue from our five largest customers comprised 48%, 56%, 47% and 37% of revenue in 2005, 2006, 2007 and the six months ended June 28, 2008.

As we expand our business through Europe and Asia, we expect our sales from outside of North America to increase as a percentage of our revenue. The following table presents our revenue by geography based on the billing address of our customers for each period presented (in thousands).

							Six Months Ended			
	2005		2006		2007		June 30, 2007		June 28, 2008	
United States	$ 5,557	72%	$ 3,807	60%	$ 3,492	48%	$ 1,231	41%	$ 2,530	46%
Singapore	—	0%	879	14%	1,972	27%	889	30%	1,027	19%
Japan	1,274	17%	1,492	23%	732	10%	162	5%	543	10%
Europe	545	7%	189	3%	735	10%	631	21%	953	17%
Other	298	4%	31	0%	344	5%	84	3%	467	8%
Total	$ 7,674	100%	$ 6,398	100%	$ 7,275	100%	$ 2,997	100%	$ 5,520	100%

Product Revenue

We derive product revenue from sales to biotechnology and pharmaceutical companies, academic institutions and life science laboratories worldwide. These sales are generally made through direct sales personnel to customers in North America, Asia Pacific and most of Europe and through distributors in parts of Europe and the Asia-Pacific region.

Product revenue increased by $2.9 million, or 194%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. Revenue from our BioMark instrument systems and related IFCs increased by $2.4 million, and revenue from our Topaz instrument systems and related IFCs increased by $0.5 million. We sold 10 BioMark instrument systems and 5 Topaz instrument systems in the six months ended June 28, 2008 compared to 6 BioMark instrument systems and 6 Topaz instrument systems in the six months ended June 30, 2007. Our deferred product revenue balance decreased from $2.7 million as of December 29, 2007 to $2.6 million as of June 28, 2008 and increased from $0.6 million as of December 31, 2006 to $2.0 million as of June 30, 2007. We recognized $1.8 million of the deferred product revenue balance as of December 29, 2007 during the six months ended June 28, 2008 and $0.3 million of the deferred product revenue balance as of December 31, 2006 during the six months ended June 30, 2007.

Product revenue for 2007 increased by $0.5 million, or 12%, compared to 2006. Revenues from our BioMark instrument systems and related IFCs which were introduced in late 2006 increased by $1.3 million, as we sold 14 BioMark instrument systems during 2007 compared to three BioMark instrument systems during 2006. This increase, however, was mostly offset by a decrease of $1.2 million related to a decrease in the sales of our Topaz IFCs. The unit sales of our Topaz instrument systems remained constant as we sold 10 Topaz instrument systems during both 2006 and 2007. In addition, our deferred product revenue balance increased from $0.6 million at December 31, 2006 to $2.7 million at December 29, 2007 as we sold more BioMark instrument systems as part of multiple element arrangements for which we did not have VSOE on post-contract support. We recognized $0.4 million of the deferred product revenue balance at December 31, 2006 during 2007. We expect the current portion of our deferred product revenue balance as of December 29, 2007 in the amount of $2.3 million will be recognized as product revenue during 2008. Product revenue for 2006 decreased by $2.1 million, or 35%, when compared to 2005. The decrease was primarily due to a decrease in the sales of our Topaz instrument systems as we sold 10 Topaz instrument systems during 2006 compared to 16 Topaz instrument systems during 2005; however, sales of our Topaz IFCs remained relatively consistent with 2005.

The increase in sales of our BioMark instrument systems in 2007 and the concurrent decrease in sales of our Topaz systems reflect the refocusing of our product development and sales and marketing efforts, beginning in

2005, to focus on the larger markets served by our BioMark instrument systems. Since then, we have reduced new Topaz product introductions. We will continue to manufacture and sell our Topaz instrument systems and IFCs and we expect unit sales of Topaz instrument systems and IFCs in 2008 and future periods to be consistent with or slightly lower than the 2006 and 2007 levels. We expect unit sales of our BioMark instrument systems and IFCs to increase in 2008.

Collaboration Revenue

We receive payments from third parties under research and development contracts. Fixed-fee research and development contracts generally provide us with up-front and periodic milestone-based fees. Variable-fee research and development contracts generally provide us with fees based on an agreed-upon rate for time incurred by our research staff.

Collaboration revenue decreased $0.2 million, or 77%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. The decrease relates to the completion of one of our development agreements in the first quarter of 2007. Collaboration revenue for 2007 decreased by $0.9 million, or 67%, compared to 2006. This decrease was primarily due to the completion of one of our collaboration agreements during 2006 that accounted for $1.0 million of our 2006 collaboration revenue. Collaboration revenue for 2006 decreased by $0.2 million, or 12%, compared to 2005. The decrease was primarily due to the termination of one of our collaboration agreements in December 2005. We expect collaboration revenue to continue to decrease due to the completion of our current collaboration agreements during 2008.

Grant Revenue

We receive payments in the form of grants from certain government entities. Government grants are agreements that generally provide incentive grant payments for specified research and development activities over a contractually defined period.

Grant revenue decreased $0.1 million, or 11%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. The decrease relates to the reduction in activity for the National Institutes of Health, or NIH, grant agreement that terminated in June 2008. Grant revenue for 2007 increased by $1.3 million, or 122%, when compared to 2006, and our grant revenue for 2006 increased by $1.0 million when compared to 2005. These increases were primarily due to the addition of a grant from the NIH, which was entered into in June 2006, and grants from EDB, which were entered into in October 2005 and February 2007. We recognized revenue from the 2005 EDB grant in the amount of $0.9 million during 2006, $1.1 million during 2007 and $0.6 million for the six months ended June 28, 2008. In addition, we recognized revenue in the amount of $0.6 million during 2007 and $0.2 million during the six months ended June 28, 2008 from the 2007 EDB grant. Under our incentive grant agreements with EDB, eligible expenses incurred by us in Singapore were $4.0 million in 2006, $4.5 million in 2007 and $1.9 million in the six months ended June 28, 2008. Also, we recognized revenue from the NIH grant in the amount of $0.2 million during 2006 and $0.6 million during 2007.

Our agreements with EDB provide that grants extended to us in the past and future grants are subject to our operation of increasing levels of research, development and manufacturing in Singapore, including the use of local service providers, the hiring of personnel in Singapore, the incurrence of research and development expenses in Singapore, our receipt of new investment in our company and our achievement of certain agreed upon milestones relating to the development of our products. Development and manufacturing milestones achieved during the three years ended December 29, 2007 included completion of feasibility studies and prototype development, establishment of manufacturing lines, implementation of quality control improvements, manufacturing process simplification and cost improvements and manufacturing yield improvements for our Topaz and BioMark IFCs and related systems. These agreements further provide EDB with the right to demand repayment of a portion of past grants in the event that we did not meet our obligations under the applicable agreements. Based on correspondence with EDB, we believe we have satisfied the conditions applicable to our EDB grant revenue through June 28, 2008.

Although the NIH grant is scheduled to terminate in June 2008, we expect grant revenue from the EDB research grants to increase in 2008 and remain at such levels through 2011. As a result, we expect our total grant revenue in 2008 through 2011 to be consistent with 2007 levels.

Cost of Product Revenue and Gross Margin

The following table presents our cost of revenue and gross margin for each period presented (in thousands).

				Six Months Ended	
	2005	2006	2007	June 30, 2007	June 28, 2008
Cost of product revenue	$ 4,764	$ 2,773	$ 3,514	$ 1,490	$ 2,988
Gross margin	22%	30%	21%	0%	32%

Cost of product revenue includes manufacturing costs incurred in the production process, including component materials, assembly labor and overhead, testing, installation, warranty, packaging and delivery costs. In addition, cost of product revenue includes royalty expenses for licensed technologies included in our products, provisions for warranties and stock-based compensation expense. Costs related to collaboration and government grant revenue are included in research and development expense.

Cost of product revenue increased $1.5 million, or 100%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. The increase related to the increase in product revenue from both higher instrument and IFC sales. Cost of product revenue in the first six months of 2007 was adversely affected by start-up costs for our new Singapore manufacturing facility and underutilized capacity as we transitioned manufacturing from the United States to Singapore. Cost of product revenue for 2007 increased $0.7 million, or 27%, compared to 2006, primarily driven by higher instrument sales, start-up costs for our new Singapore manufacturing facility and underutilized capacity as we transitioned manufacturing from the United States to Singapore. Cost of product revenue for 2006 decreased by $2.0 million, or 42%, when compared to 2005, primarily driven by a decrease in sales of our Topaz instruments during 2006. We expect our unit costs to decline in future periods as a result of our ongoing efforts to automate our manufacturing processes and expected increases in production volumes and yields. However, improvement in unit costs may be offset by increasing price competition, which could cause our gross margins to fluctuate from year-to-year and quarter-to-quarter.

Operating Expenses

The following table presents our operating expenses for each period presented (in thousands):

				Six Months Ended	
	2005	2006	2007	June 30, 2007	June 28, 2008
Operating expenses:					
Research and development	$ 11,449	$ 15,589	$ 14,389	$ 7,053	$ 7,151
Selling, general and administrative	7,955	9,699	12,898	6,183	9,843
Total operating expenses	$ 19,404	$ 25,288	$ 27,287	$ 13,236	$ 16,994

Research and Development

Research and development expense consists primarily of personnel costs, independent contractor costs, prototype expenses and other allocated facilities and information technology expenses. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to optimize our technologies and to support commercialization of the products and services derived from these technologies.

Research and development expense decreased $0.1 million, or 1%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. The decrease relates to a decrease of $0.2 million in supply costs and $0.3 million in license costs partially offset by a $0.7 million increase in compensation costs due to increased research and development headcount. Research and development expense decreased in 2007 by $1.2 million, or 8%, compared to 2006, primarily due to decreased contractor costs of $0.6 million and decreased research and development license costs of $0.3 million. Research and development expense for 2006 increased by $4.1 million,

or 36%, compared to 2005, primarily due to increased compensation costs of $2.1 million due mostly to a significant increase in research and development headcount and $0.1 million related to the adoption of SFAS 123(R) during 2006, $0.6 million attributable to increased contractor expenses and $0.6 million in increased license costs and royalties. We believe that our continued investment in research and development is essential to a long-term competitive position and expect these expenses, including stock-based compensation, to increase in future periods.

Selling, General and Administrative

Selling, general and administrative expense consists primarily of personnel costs for our sales and marketing, business development, finance, legal, human resources and general management, as well as professional services, such as legal and accounting services.

Selling, general and administrative expense increased $3.7 million, or 59%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. The increase relates to a $0.6 million increase for accounting and consulting services, a $1.7 million increase in compensation costs due to increased head count, a $0.6 million increase in patent filings, a $0.3 million increase in advertising and promotions, and a $0.2 million increase in supplies. Selling, general and administrative expense for 2007 increased by $3.2 million, or 33%, compared to 2006, primarily due to increased compensation costs of $1.4 million due mostly to an increase in headcount and a $0.3 million increase in stock-based compensation over 2006, an increase of $1.8 million in spending primarily for accounting and legal services, $0.3 million resulting from increased advertising and promotions, and $0.2 million attributable to increased supplies for customer demonstrations. However, this increase was partially offset by a decrease of $0.6 million due to fewer patent filings. Selling, general administrative expense for 2006 increased by $1.7 million, or 22%, compared to 2005, primarily due to increased compensation costs of $0.7 million due to an increase in headcount, an increase of $0.6 million in spending primarily for accounting and legal services, and $0.4 million due to the filing of additional patents. We expect selling, general and administrative expense, including stock-based compensation, to significantly increase in 2008 and future periods as we continue to grow our sales, technical support, marketing and administrative headcount, support increased product sales, broaden our customer base and incur additional costs to support the growth in our business.

Interest Income and Expense

We receive interest income from our cash and cash equivalents and our available-for-sale security balances held with certain financial institutions. Conversely, we incur interest expense from our long-term debt and convertible promissory notes and the amortization of our debt discounts related to these items. The following table presents our interest income and expense for each period presented (in thousands).

				Six Months Ended	
	2005	2006	2007	June 30, 2007	June 28, 2008
Interest income	$ 340	$ 565	$ 1,140	$ 565	$ 557
Interest expense	(898)	(2,261)	(2,790)	(1,790)	(1,100)

Interest income decreased by $8,000, or 1%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007. Interest income for 2007 increased by $0.6 million compared to 2006. The increase in interest income was due to higher cash and available-for-sale securities balances during 2007 as compared to 2006. Interest income for 2006 increased by $0.2 million compared to 2005. The increase in interest income was also primarily due to higher cash and available-for-sale securities balances during 2006 as compared to 2005. We expect interest income to increase as we invest a portion of the net proceeds from this offering in available-for-sale securities.

Interest expense decreased $0.7 million, or 39%, for the six months ended June 28, 2008 compared to the six months ended June 30, 2007 due to lower average debt balance due to conversion of the $10.0 million promissory notes in March 2007. Interest expense for 2007 increased by $0.5 million compared to 2006. The increase was primarily due to higher debt balances during 2007 as compared to 2006 primarily due to the $5.0 million convertible promissory note issued in April 2007. Interest expense for 2006 increased by $1.4 million compared to 2005. The increase was primarily due to higher debt balances from the $13.0 million loan and security agreement that was

fully drawn by December 2005. In February 2008, this loan and security agreement was amended to provide us with an additional credit line in the amount of $10.0 million. We borrowed the full $10.0 million under this additional credit line in June 2008 and, as a result, we expect our interest expense to increase in future periods.

Cumulative Effect of Change in Accounting Principle

Upon adoption of FSP 150-5 on July 1, 2005, we reclassified the fair value of warrants to purchase shares of our convertible preferred stock from stockholders' equity to liabilities and recorded a cumulative effect of a change in accounting principle in the amount of $0.6 million during 2005 in the statement of operations.

Liquidity and Capital Resources

Sources of Liquidity

As of June 28, 2008, we had $29.0 million of cash and cash equivalents and $3.5 million of available-for-sale securities. As of June 28, 2008, our working capital was $28.6 million, and we had an accumulated deficit of $149.1 million. Since our inception, we have principally funded our operations through issuances of convertible preferred stock, which has provided us with aggregate net proceeds of $167.5 million, of which $20.0 million was provided by entities affiliated with EDB in the form of convertible promissory notes that converted into convertible preferred stock. We have also received significant funding in the form of loans that have provided us with aggregate net proceeds of $26.6 million.

We have received funding in the form of grants from government entities, the most significant of which have been associated with two grant agreements with EDB that have helped support the establishment and operation of our Singapore manufacturing, research and development facilities in October 2005.

The maximum amount of grant revenue available to us under our first grant agreement with EDB from June 28, 2008 through July 31, 2010 is SG$5.2 million (approximately US$3.8 using a June 28, 2008 exchange rate), and the maximum amount of grant revenue available to us under our second grant agreement with EDB from June 28, 2008 through May 31, 2011 is SG$2.5 million (approximately US$1.8 million). To maintain eligibility for incentive grant payments under these agreements, we are required to achieve development and manufacturing milestones as agreed to by the parties. In addition, to maintain eligibility for incentive grant payments under our first grant agreement, we are required to incur annual spending in Singapore of at least SG$6.5 million (approximately US$4.8 million) in 2008 and 2009 and at least SG$8.0 million (approximately US$5.9 million) in 2010. To maintain eligibility for grant payments under our second grant agreement, we are required to incur annual spending in Singapore of at least SG$6.5 million (approximately US$4.8 million) for the 12 months ending May 31, 2009 and 2010 and at least SG$9.0 million (approximately US$6.6 million) for the 12 months ending May 31, 2011. For this purpose, spending in Singapore includes overhead, salaries, outsourcing and subcontracting expenses, operating expenses and royalties paid, with limited exceptions such as raw materials purchases. Expenditures that are used to satisfy the requirements of one grant agreement are not eligible for satisfaction of the other grant agreement. To qualify for payment under the second grant agreement, expenditures must relate to the development of instrumentation for our IFC systems and not our IFCs themselves. Our first grant agreement also requires that we employ at least 24 research scientists and engineers in Singapore by December 31, 2009, and our second grant agreement requires that we employ at least 10 new research scientists and engineers in Singapore by May 31, 2009, that we employ at least 12 new research scientists and engineers in Singapore by May 31, 2011 and that we maintain at least 12 research scientists and engineers in total until May 31, 2013. The requirements of the second grant agreement may only be satisfied by personnel employed in the research and development of IFC instrumentation. As of June 28, 2008, we employed 16 research scientists and engineers involved in the research and development of our IFCs and 10 research scientists and engineers involved in the research and development of related instrumentation in Singapore. We cannot assure you that we will take all actions required to remain eligible for grants under our agreements with EDB and, in the event that we do not comply with such requirements, whether intentionally or unintentionally, we may not receive further grants under such agreements. In the event that we do not receive grant funding from EDB in the future, we do not believe that our liquidity would be materially affected.

We have entered into multiple convertible note purchase agreements with Biomedical Sciences Investment Fund Pte. Ltd., or BMSIF, pursuant to which we issued convertible notes and received proceeds in the amount of

$20.0 million through June 28, 2008. BMSIF is wholly-owned by EDB Investments Pte. Ltd., whose parent entity is EDB. Ultimately, each of these entities is controlled by the government of Singapore. As of June 28, 2008, there were no outstanding principal and accrued interest balances for our convertible note purchase agreements with BMSIF as the final remaining note was converted into shares of our Series E preferred stock in April 2008.

In November 2002, we entered into a master security agreement with a lender under which we borrowed $3.6 million to be used for purchases of capital equipment, software and tenant improvements. The outstanding principal and accrued interest balance for this loan was paid in February 2008. Upon full payment of the debt in February 2008, restricted cash in the amount of $0.5 million was released by the lender.

In March 2005, we entered into a loan and security agreement with a lender under which we borrowed $13.0 million to be used for general corporate purposes. We are currently making equal monthly payments of $0.3 million towards the loan which is to be paid off in February 2010. The loan is subject to prepayment penalties if paid off prior to 2010. In February 2008, this loan and security agreement was amended to provide us with an additional credit line in the amount of $10.0 million that we could draw upon until July 1, 2008 for general corporate purposes. In June 2008, the Company drew down the $10,000,000. The loan will bear interest at 11.5% per annum. Interest only payments will be made monthly through the remainder of 2008 with monthly payments of principal and interest in the amount of $369,000, beginning in January 2009, to be made through June 2011. The agreement also requires a final payment in the amount of $650,000 in June 2011. As of June 28, 2008, the outstanding principal and accrued interest balance for this loan and security agreement was $16.6 million, net of unamoritized debt discounts of $0.4 million.

The loan and security agreement contains customary covenants that, among other things, require us to deliver both annual audited and periodic unaudited financial statements by specified dates and maintain collateral on company premises and restrict our ability, without the consent of the lender, to incur additional debt, pay dividends or make certain other distributions, or payments in respect of our capital stock, engage in transactions with affiliates or engage in the sale, lease or license of our assets outside of the ordinary course of business. As of June 28, 2008, we were in compliance with the above covenants with the exception of the timely delivery of our audited financial statements for 2007. In this instance, we obtained a waiver from the lender and subsequently complied with the covenant. We are currently unaware of any circumstances that would prevent us from complying with these covenants in the future.

Net Cash Used in Operating Activities

We derive cash flows from operations primarily from cash collected from the sale of our products and related services, collaboration agreements and grants from certain government entities. Our cash flows from operating activities are also significantly influenced by our use of cash for operating expenses to support the growth of our business. We have historically experienced negative cash flows from operating activities as we have expanded our business and built our infrastructure domestically and internationally and we expect this trend to continue for the foreseeable future as our business grows and we continue to expand into new markets.

Net cash used by operating activities was $16.0 million for the six months ended June 28, 2008. Net cash used by operating activities primarily consisted of a net loss of $15.3 million, changes in our operating assets and liabilities in the amount of $3.2 million and foreign exchange gain in the amount of $0.1 million, which were partially offset by non-cash expense items such as depreciation and amortization of our property and equipment in the amount of $0.8 million, adjustments to the fair value of convertible preferred stock warrants in the amount of $0.4 million, amortization of debt discounts and issuance cost of $0.4 million, and stock-based compensation in the amount of $1.0 million.

Net cash used by operating activities was $21.8 million during 2007. Net cash used by operating activities primarily consisted of a net loss of $25.5 million, which was partially offset by non-cash expense items such as depreciation and amortization of our property and equipment in the amount of $1.6 million, amortization of debt discounts in the amount of $0.5 million, stock-based compensation in the amount of $0.7 million, and changes in our operating assets and liabilities in the amount of $0.4 million.

Net cash used by operating activities was $22.3 million during 2006. Net cash used by operating activities primarily consisted of a net loss of $23.6 million and changes in our operating assets and liabilities in the amount of $1.2 million. The cash used by operating activities for these items was partially offset by non-cash expense items such as depreciation and amortization of our property and equipment in the amount of $1.4 million, amortization of our debt discounts in the amount of $0.1 million, stock-based compensation in the amount of $0.1 million, and the issuance of convertible preferred stock under a license agreement in the amount of $0.6 million.

Net cash used by operating activities was $14.3 million during 2005. Net cash used by operating activities primarily consisted of a net loss of $16.4 million. The cash used by operating activities was partially offset by non-cash expense items such as depreciation and amortization of our property and equipment in the amount of $1.3 million and increases in our operating assets and liabilities in the amount of $1.4 million.

Net Cash Used in Investing Activities

Historically, our primary investing activities have consisted of capital expenditures for laboratory, manufacturing and computer equipment and software to support our expanding infrastructure and work force; restricted cash related to leased space and lending agreements; and purchases, sales and maturities of our available-for-sale securities. We expect to continue to expand our manufacturing capability, primarily in Singapore, and expect to incur additional costs for capital expenditures related to these efforts in 2008.

We generated $3.2 million of cash in investing activities for the six months ended June 28, 2008 primarily from maturities of available-for-sale securities in the amount of $4.3 million, sales of available-for-sale securities in the amount of $3.0 million and a reduction of restricted cash of $0.6 million, partially offset by purchases of available-for-sale securities in the amount of $4.5 million and purchases of capital equipment of $0.2 million.

We used $6.7 million of cash in investing activities during 2007, primarily for purchases of available-for-sale securities in the amount of $6.3 million and $1.0 million for capital expenditures related to purchases of equipment, including $0.6 million for our Singapore manufacturing facility, partially offset by maturities of available-for-sale securities in the amount of $0.5 million.

We used $2.9 million of cash in investing activities during 2006, primarily for capital expenditures in the amount of $2.9 million related to purchases of equipment, including $1.9 million for our Singapore manufacturing facility.

During 2005, investing activities provided cash of $6.8 million. This cash was generated primarily from sales and maturities of available-for-sale securities in the amount of $8.9 million, partially offset by purchases of available-for-sale securities in the amount of $0.5 million and capital expenditures in the amount of $1.7 million. Our capital expenditures during 2005 included $0.8 million related to purchases of manufacturing equipment for our Singapore facility, which began operations during the year.

Net Cash Provided by Financing Activities

Historically, we have principally funded our operations through issuances of convertible preferred stock.

During the six months ended June 28, 2008, we generated $7.6 million of cash from financing activities primarily due to proceeds from our amended loan and security agreement in the amount of $10.0 million, partially offset by repayment of long-term debt. During 2007, we generated $37.6 million of cash from financing activities primarily due to $35.9 million of net proceeds from sales of our Series E preferred stock and $5.0 million of proceeds from the issuance of convertible promissory notes, partially offset by repayments of our long-term debt in the amount of $3.5 million. During 2006, we generated approximately $31.1 million of cash from financing activities primarily due to $22.0 million of net proceeds from sales of our Series E preferred stock and $13.0 million of proceeds from the issuance of convertible promissory notes, partially offset by repayments of our long-term debt in the amount of $4.0 million. During 2005, we generated approximately $23.0 million of cash from financing activities, primarily due to $10.0 million of net proceeds from sales of our Series D preferred stock and $14.7 million of net proceeds from the issuance of long-term debt, partially offset by repayments of our long-term debt in the amount of $1.7 million.

Capital Resources

We believe our existing cash and cash equivalents, available-for-sale securities, amounts available under current credit lines and the net proceeds from this offering, will be sufficient to meet our working capital and capital expenditure needs for at least the next 18 months. However, we may need to raise substantial additional capital to expand the commercialization of our products, fund our operations, continue our research and development, defend, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights, commercialize new products and acquire companies and in-license products or intellectual property. Our future funding requirements will depend on many factors, including market acceptance of our products, the cost of our research and development activities, the cost of filing and prosecuting patent applications, the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights, the cost and timing of regulatory clearances or approvals, if any, the cost and timing of establishing additional sales, marketing and distribution capabilities, the cost and timing of establishing additional technical support capabilities, the effect of competing technological and market developments, and the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions. We currently expect to use the proceeds from this offering to expand our sales force, to support the ongoing commercialization of our products, for research and product development activities, to expand our facilities and manufacturing operations, and for working capital and other general corporate purposes. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the proceeds from this offering or the amounts that we will actually spend on the uses set forth above.

We may require additional funds in the future and we may not be able to obtain such funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs. If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our operating results.

Off-Balance Sheet Arrangements

Since our inception, we have not had any off-balance sheet arrangements as defined in Item 303(a)(4) of the Securities and Exchange Commission's Regulation S-K.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of December 29, 2007 (in thousands):

	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	Thereafter
Operating lease obligations	$ 4,459	$ 1,436	$ 2,782	$ 241	$ —
Long-term debt	10,908	4,478	6,430	—	—
Convertible promissory notes	5,278	—	5,278	—	—
Purchase obligations	1,015	435	580	—	—
Total	$ 21,660	$ 6,349	$ 15,070	$ 241	$ —

Our operating lease obligations relate to leases for our current headquarters and leases for office space for our foreign subsidiaries. Principal and interest on our convertible promissory notes are convertible into shares of our Series E preferred stock at the lender's election, at any time, or upon our election upon the achievement of certain

milestones or automatically upon the completion of this offering. Purchase obligations consist of contractual and legally binding commitments to purchase goods. We have entered into several patent license agreements in which we are obligated to pay annual license maintenance fees, non-refundable license issuance fees and royalties as a percentage of sales for the sale or sublicense of products using the licensed technology.

We have entered into several license and patent agreements. Under these agreements, we pay annual license maintenance fees, nonrefundable license issuance fees, and royalties as a percentage of net sales for the sale or sublicense of products using the licensed technology. If we elect to maintain these license agreements, we will pay aggregate annual fees of $315,000 in 2008 and $270,000 per year until 2027. Future payments related to these license agreements have not been included in the contractual obligations table above as the period of time over which the future license payments will be required to be made, and the amount of such payments are indeterminable.

On March 7, 2003 we entered into a Master Closing Agreement with Oculus Pharmaceuticals, Inc. and the UAB Research Foundation, or UAB, related to certain intellectual property and technology rights licensed by us from UAB. Pursuant to the agreement, we are obligated to issue UAB shares of our common stock with a value equal to $1.5 million upon the achievement of a certain milestone and based upon the fair market value of our common stock at the time the milestone is achieved. We currently do not anticipate achieving this milestone in the foreseeable future and do not anticipate issuing these shares.

Our manufacturing operations in Singapore, which commenced in October 2005, have generated incentive grant payments from EDB for our research, development and manufacturing activity in Singapore. To remain eligible for future incentive grant payments, we are required to maintain a significant and increasing manufacturing and research and development presence in Singapore. Under our current grant agreements with EDB, we expect our spending related to these grant agreements to increase in order to maintain our manufacturing facility in Singapore. Future expenditures related to these grant agreements have not been included in the contractual obligations table above as the amounts of future expenditures, if any, and the timing of when they will be incurred are still indeterminable.

Subsequent to our year ended December 29, 2007, the remaining outstanding principal and accrued interest balance for a master security agreement in the amount of $1.1 million was paid in February 2008. The loan was originally scheduled to be repaid in monthly installments though July 2009 and, accordingly, was reflected in the table above as such. Also, the convertible promissory notes noted in the table above were converted into shares of our Series E preferred stock during April 2008 in accordance with the convertible note purchase agreements with BMSIF. In June 2008, we drew an additional $10.0 million from our amended loan and security agreement.

Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurement*, or SFAS 157, which defines and establishes a framework for measuring the fair value of assets and liabilities when required or permitted by other standards within generally accepted accounting principles in the United States but does not require any new fair value measurements. SFAS 157 also expands disclosures about fair value measurements. SFAS 157 is effective for all financial statements issued for fiscal years beginning after November 15, 2007. However, in February 2008 the FASB issued FSP No. 157-2, or FSP 157-2 which delays the effective date of SFAS 157 in accordance with the provisions in FSP 157-2 as of January 1, 2008. The adoption of SFAS 157 did not have a significant impact on our consolidated financial statements and the resulting fair values calculated in accordance with SFAS 157 were not significantly different than the fair values that would have been calculated in accordance with the previous guidance.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS 159, including an amendment of SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, which allows an entity to choose to measure certain financial instruments and liabilities at fair value. Subsequent measurements for the financial instruments and liabilities an entity elects to measure at fair value will be recognized in earnings. SFAS 159 also establishes additional disclosure requirements. SFAS 159 is effective for fiscal years beginning after November 15, 2007. The adoption of SFAS 159 did not have a significant impact on our consolidated financial statements.

In December 2007, the FASB ratified EITF Issue No. 07-1, *Accounting for Collaborative Agreements*, or EITF 07-1, which addresses the accounting for participants in collaborative agreements, defined as contractual arrangements that involve a joint operating activity, that are conducted without the creation of a separate legal entity. EITF 07-1 requires participants in a collaborative agreement to make separate disclosures for each period a statement of operations is presented regarding the nature and purpose of the agreement, the rights and obligations under the agreement, the accounting policy for the agreement, and the classification of and amounts arising from the agreement between participants. These arrangements involve two or more parties who are both active participants in the activity and that are exposed to significant risks and rewards dependent on the commercial success of the activity. EITF 07-1 provides that a company should report the effects of adoption as a change in accounting principle through retrospective application to all periods and requires specific additional disclosures. EITF 07-1 is effective for interim and annual reporting periods beginning after December 15, 2008. We are currently assessing the impact the adoption of EITF 07-1 will have on our consolidated financial statements.

In June 2007, the FASB ratified EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities*, or EITF 07-3. EITF 07-3 provides clarification surrounding the accounting for nonrefundable research and development advance payments, whereby such payments should be recorded as an asset when the advance payment is made and recognized as an expense when the research and development activities are performed. EITF 07-3 is effective for interim and annual reporting periods beginning after December 15, 2007. We adopted EITF 07-3 as of December 30, 2007. The adoption of EITF 07-3 did not have a significant impact on our consolidated financial statements.

Quantitative and Qualitative Disclosures about Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates. We do not hold or issue financial instruments for trading purposes.

Foreign Currency Exchange Risk

As we expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Our revenue is generally denominated in the local currency of the contracting party. Historically, the substantial majority of our revenue has been denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States, with a portion of expenses incurred in Singapore where our other manufacturing facility is located. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. Fluctuations in currency exchange rates could harm our business in the future. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables as of June 28, 2008 would have been approximately $0.4 million foreign exchange loss recognized as a component of other expense within our consolidated statement of operations. To date, we have not entered into any foreign currency hedging contracts although we may do so in the future.

Interest Rate Sensitivity

We had cash and cash equivalents of $25.0 million, $34.1 million and $29.0 million and available-for-sale securities of $0.5 million, $6.3 million and $3.5 million as of December 31, 2006, December 29, 2007 and June 28, 2008. These amounts were held primarily in cash on deposit with banks, money market funds, commercial paper, corporate notes or notes from government-sponsored agencies, which are short-term. Cash and cash equivalents and available-for-sale securities are held for working capital purposes and restricted cash amounts are held as letters of credit for collateral for a security agreement with a lender and for our facility lease agreements. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, will reduce future investment income. If overall interest rates had decreased by 10% during 2007 or the six months ended June 28, 2008, our interest income would not have been materially affected.

As of December 31, 2006, December 29, 2007 and June 28, 2008, the principal amount of our long-term debt outstanding was $12.8 million, $9.4 million and $16.6 million and the principal and accrued interest amount of our convertible promissory notes outstanding was $13.1 million, $5.0 million and $0. The interest rates on a small portion of our long-term debt and convertible promissory notes are fixed, however, a portion of our long-term debt outstanding has interest rates that are variable and adjust periodically until December 31, 2008 based on the prime rate however, thereafter the interest rates are fixed. If overall interest rates had increased by 10% during 2007 or the six months ended June 28, 2008, our interest expense would not have been materially affected.

Fair Value of Financial Instruments

We do not have material exposure to market risk with respect to investments as our investments consist primarily of highly liquid securities that approximate their fair values due to their short period of time to maturity. We do not use derivative financial instruments for speculative or trading purposes, however, we may adopt specific hedging strategies in the future.

Controls and Procedures

In January 2008, in connection with the audit of our consolidated financial statements for 2005 and 2006, we determined that we had material weaknesses relating to our financial statement close and accrual process, revenue recognition, inventory costing, cost of sales, purchases cut-off and stock-based compensation. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis by the company's internal controls. These material weaknesses were as follows:

- we did not have a sufficient number of personnel in the accounting and finance department with sufficient proficiency and technical accounting expertise;
- we did not have effective controls in place or designed to evaluate the accounting implications of our business transactions during 2005 and 2006 and to determine if such matters had been properly accounted for in a timely manner; and
- we had not designed or maintained effective operating controls over the financial statement close and reporting process in order to ensure the accurate and timely preparation of our financial statements in accordance with generally accepted accounting principles.

These material weaknesses resulted in the recording of numerous audit adjustments for 2005 and 2006. We have taken steps intended to remediate these material weaknesses through:

- the hiring of additional accounting and finance personnel with technical accounting and financial reporting experience, including Vikram Jog, our new Chief Financial Officer, who joined us in February 2008;
- the engagement of a consulting firm to provide further accounting expertise to complement the skills of our existing team;
- the engagement of an accounting firm to advise us on local and international tax planning and compliance;
- the hiring of an experienced finance manager for Fluidigm Singapore Pte. Ltd., who joined us in May 2008;
- increased scheduled communication and coordination among our finance teams in the United States and our foreign subsidiaries;
- enhanced coordination among, and training of, accounting, sales, technical support and legal personnel on transactional issues;
- enhancements to our financial statement close process and financial close calendar to help enable processes and procedures to be completed on a timely basis; and
- installation of common accounting software and systems in our U.S. and Singapore offices.

In April and May 2008, following the audit of our consolidated financial statements for 2007 and the review of our financial statements for the three months ended March 29, 2008, we reviewed our internal control over financial reporting and concluded that we had certain significant deficiencies, none of which were determined to be material weaknesses. A significant deficiency is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of a company's financial reporting. These significant deficiencies were as follows:

- we did not have sufficient controls in place to review consolidation and elimination entries relating to intercompany transfer pricing to detect and eliminate intercompany profits embedded in deferred costs of our Japanese subsidiary;
- we did not have effective controls in place designed to apply SFAS 123R to option grants with a variety of vesting terms and to validate stock compensation expenses calculated by our option tracking software; and
- we did not have sufficient controls in place to review the valuation of our inventory.

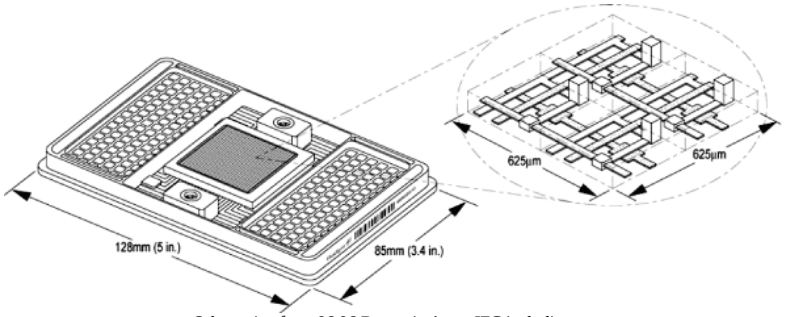
We do not know the specific time frame needed to remediate the significant deficiencies identified. In addition, we expect to incur some incremental costs associated with this remediation. If we fail to enhance our internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results accurately. The actions we plan to take are subject to continued management review supported by confirmation and testing, as well as audit committee oversight. While we expect to remediate these significant deficiencies, we cannot assure you that we will be able to do so in a timely manner, which could impair our ability to report our financial position, results of operations or cash flows accurately and timely.

BUSINESS

Overview

We develop, manufacture and market proprietary Integrated Fluidic Circuit systems that significantly improve productivity in the life science industry. Our Integrated Fluidic Circuits, or IFCs, integrate a diverse set of critical liquid handling functions on a nanoliter scale. Our IFCs can meter, combine, diffuse, fold, mix, separate or pump nanoliter volumes of fluids, with precise control and reproducibility, many thousands of times — all in parallel on a single chip. This technology enables our customers to perform thousands of sophisticated biochemical measurements on samples smaller than the content of a single cell, with minute volumes of reagents, in half the area of a credit card. We achieved this "integrated circuit for biology" by miniaturizing and integrating liquid handling components on a single microfabricated device. Through innovations in material science and manufacturing, our IFC architectures are highly flexible, and can be designed to support a wide range of applications and assay types. For large-scale experimentation, our IFC systems, consisting of instrumentation, software and single-use IFCs, increase throughput, decrease costs and enhance sensitivity compared to conventional laboratory systems. We have sold our IFCs to over 100 customers, including many leading biotechnology and pharmaceutical companies, academic institutions and life science laboratories worldwide.

We have commercialized IFC systems for a wide range of life science applications, including our BioMark system for gene expression analysis, genotyping and digital PCR, and our Topaz system for protein crystallization. Researchers and clinicians have successfully employed our products in achieving breakthroughs across diverse scientific disciplines such as genetic variation, cellular function and structural biology. These advances include using our systems to help detect life-threatening mutations in patients' cancer cells, discover indicators of susceptibility to cancer, manage some of the world's most valuable fisheries, analyze the genetic composition of individual stem cells, identify fetal chromosomal abnormalities from maternal blood samples, analyze the aggressiveness of the avian flu virus and assess the quality of agricultural seed products. We believe that the flexible architecture of our IFC technology will lead to the development of IFC systems for a wide variety of additional markets and applications, including high-throughput DNA sequencing and molecular diagnostics.



Schematic of our 96.96 Dynamic Array IFC including an enlarged section showing four of the IFC's 9,216 test chambers.

The life science industry is currently facing challenges similar to those faced by the information technology industry when computational power was constrained by the inherent limitations of the vacuum tube. Life science research efforts, ranging from large-scale initiatives, such as the Human Genome Project, to more traditional academic and commercial research projects, are continuing to reveal the complex biological and chemical processes that are fundamental to living organisms. Automated, high-precision and large-scale experimentation is increasingly necessary to develop and apply this knowledge. However, the most common forms of life science automation rely on cumbersome robotic systems that are slow, expensive and labor-intensive and, we believe,

fundamentally constrain the pace and productivity of life science research. In much the same way that integrated circuits overcame the limitations of early computers by placing an increasing number of transistors on a single silicon chip, our IFCs overcome many of the limitations of conventional laboratory systems by integrating an increasing number of fluidic components on a single microfabricated IFC.

We believe that much of analytical biology and chemistry can be performed more efficiently and more economically in nanoliter, or one billionth of a liter, volumes than in conventional microliter volume platforms. Moreover, we believe that these advantages can be further enhanced through high levels of integration. Our IFC systems overcome many of the limitations of conventional methods by integrating on a single device the ability to perform thousands of experiments at one time and in nanoliter volumes. Our IFCs consist of an elastomeric, or rubber-like, core bonded to a specialized hard plastic input frame. The input frame is compatible with standard laboratory workflow equipment and facilitates loading the IFC with samples and reagents. Each IFC contains an extensive network of microfluidic components, such as valves, channels, pumps, mixers and other components that deliver samples and reagents to thousands of nanoliter chambers across the IFC where individual tests can be performed. This high level of nanofluidic integration significantly reduces the time and complexity of large-scale experimentation and the volume of costly reagents and scarce patient samples required. In addition, our IFC systems enable users to address problems that would be difficult or impractical to solve using conventional life science tools. We believe that our ongoing research efforts to increase the density and degree of miniaturization of our IFCs will result in further such benefits to our customers.

Our Target Markets

Biotechnology and pharmaceutical companies, academic institutions and life science laboratories collectively spent approximately $35 billion in 2007 for analytical and life science instruments, according to Strategic Directions International, or SDI. Growth in the life science equipment and supplies industry has been driven in part by increased demand for tools that allow researchers to discover how fundamental functional elements of biology, such as nucleic acids, proteins, carbohydrates and cells, interact within living organisms. This research often entails analyzing or identifying numerous such elements across large sample populations. Conducting and commercializing this research requires equipment that reliably performs experimentation with precision, on a large scale and at an affordable cost. The need for equipment with these capabilities is particularly evident in the areas of genomics, proteomics and molecular diagnostics, which comprise our initial target markets.

Genomics

Genomics is the analysis of nucleic acids, including DNA and RNA, the fundamental building blocks of life. The entire DNA content of an organism is known as its genome. The genome is composed of a long series of nucleotide bases that are organized into functional units known as genes, as well as regulatory regions. Analysis of variations in genomic sequences, genes and gene activity in and between organisms can provide important insights into routine genetic functionality, as well as an organism's morbidity and mortality. The worldwide demand for genomic analysis instruments and supplies was approximately $4.9 billion in 2005, according to SDI. Of this total, SDI estimated that 56%, or about $2.7 billion, was spent on gene expression analysis, and 20%, or about $1.0 billion, was spent on genotyping. In a 2006 report, SDI projected that the markets for gene expression analysis and genotyping would grow approximately 8% per year from 2005 to 2010. In a separate 2006 report, Frost and Sullivan indicated that the high-throughput DNA sequencing market was in a very early stage with revenues of approximately $11 million in 2005, but estimated it would grow at an annual rate of 63.8% between 2005 and 2012, reaching approximately $339 million in 2012. In the same report, Frost and Sullivan projected that the total DNA sequencing market is expected to grow at an annual rate of 10.1% from approximately $400 million in 2005 to approximately $800 million in 2012.

Gene expression and genotyping today are studied through a combination of various technology platforms that characterize gene function and genetic variation. Gene expression and genotyping are commonly performed using a technique known as polymerase chain reaction, or PCR, and often with a chemistry branded as TaqMan, which is proprietary to Roche Molecular Systems, Inc. and is widely used in the life-sciences industry. The PCR method is used to replicate a strand of DNA or RNA into millions of copies to facilitate detection in a sample. Real-time quantitative PCR, or real-time qPCR, is a more advanced form of PCR that makes it possible to identify the number

of copies of DNA present in a sample at a certain time. According to Frost and Sullivan, the U.S. market for real-time qPCR was approximately $741 million in 2007, growing at approximately 11% per year from 2005 to 2012. Based on our estimates, we believe the global market for real-time qPCR was approximately $1.7 billion in 2007. Gene expression, genotyping, digital PCR and high-throughput DNA sequencing are four powerful forms of genomic analysis.

- *Gene Expression Analysis.* One of the ways genes control cellular activity is through a process known as gene expression, when a cell transcribes a section of a gene's DNA to create another nucleic acid sequence, known as messenger RNA. This messenger RNA may then be translated by the cell into a protein. Messenger RNA can be detected and quantified by performing real-time qPCR tests, or assays. Gene expression analysis typically entails determining which genes are active by measuring messenger RNA levels in a blood or tissue sample. These results can be correlated with disease activity and clinical outcomes. As multiple genes are involved in most biological processes, gene expression analysis usually requires assaying the expression levels of many genes simultaneously across many samples. We estimate that approximately 80% of the market for real-time qPCR involves gene expression analysis.
- *Genotyping.* Genotyping involves the analysis of variations across individual genomes. These variations often take the form of single nucleotide changes, known as single nucleotide polymorphisms, or SNPs, that can determine the characteristics or health of the individual. In SNP genotyping studies, the DNA sequences of a group of individuals are analyzed to determine patterns of SNPs. Statistical analysis is then performed to determine whether a SNP or group of SNPs can be associated with a particular characteristic, such as propensity for a disease. We estimate that approximately 20% of the market for real-time qPCR involves genotyping analysis. We believe this percentage share of the real-time qPCR market is growing based on technological innovations allowing increasing amounts of genetic content to be analyzed more quickly and cost effectively.
- *Digital PCR.* Digital PCR is a technique that allows researchers to detect nucleic acid sequences that are present in a patient sample in concentrations that are too low to be detected by conventional methods. Digital PCR typically relies on standard PCR techniques, but increases their sensitivity by dividing a sample into hundreds or thousands of smaller samples and performing a PCR assay on each such sample. The ability to actually count the presence or absence of amplification in this assay format provides quantitative measurement capabilities known as absolute quantification. Digital PCR has the potential to enable early detection of diseases and other conditions, thereby improving prospects for effective treatment. In addition, this technique enhances the precision of single molecule assays and copy number variation. While the digital PCR market is currently nascent, we believe it has the potential to grow significantly as researchers learn how to apply this technique to a broader range of research applications and associated diseases.
- *High-Throughput DNA Sequencing.* DNA sequencing involves determining the sequence of nucleotide bases in a segment of DNA and is widely used in life science research as a tool to understand the genetic basis of susceptibility to disease, disease progression and response to drug therapy. Sequencing technology has rapidly advanced over the last two decades and current high-throughput DNA sequencing machines are many orders of magnitude faster and less expensive than the DNA sequencing technology available at the initiation of the Human Genome Project in 1990. However, to most effectively use these high-throughput DNA sequencers, researchers must carefully prepare the sample to be analyzed both to minimize contamination and to precisely quantify the amount of sequenceable template DNA in the sample. This process can be difficult, time-consuming and expensive.

Proteomics

Proteomics is the large-scale study of the function and structure of proteins. Proteins are produced by all living organisms and directly affect cellular function, the overall health of an organism and, in the case of pathogens, how the organism interacts with its host. Developing drugs to treat a disease often involves identifying molecules that are able to interfere with the activity of a particular protein in the pathway for that disease. One approach to finding such molecules is to first determine the structure of the protein and then look for molecules that bind to the structure and interfere with the activity of the protein. A technique known as protein crystallization is typically used to determine

protein structures. Crystallizing a protein can be a time-consuming and labor-intensive process because different proteins will crystallize in the presence of different reagents and under different conditions. As samples of particular proteins are often scarce and expensive, researchers usually conduct only a limited number of experiments, none of which might provide a crystallized protein.

Molecular Diagnostics

Molecular diagnostic tests are used in clinical practice to diagnose, classify or monitor a disease; determine a patient's susceptibility to a disease; or monitor a patient's response to therapy by detecting one or more biomarkers, such as nucleic acids or proteins, in a blood, tissue or other type of patient sample. The advancement of molecular diagnostics is being driven by researchers performing large-scale experiments analyzing the prevalence of SNPs, variations in gene expression levels and patterns of protein production. SNPs, gene expression levels and proteins often directly cause or control diseases. Molecular diagnostic tests based on measuring these biomarkers have the potential to be much more accurate, discriminating and robust than conventional diagnostics. According to Frost and Sullivan, the U.S. market for molecular diagnostics was estimated at $2.0 billion in 2007, growing at a compound annual growth rate of 17% from 2005 to 2012.

The Limitations of Existing Laboratory Systems

Scientists increasingly seek to identify and measure a large number of characteristics across large populations. The most common existing methods of large-scale experimentation require a workflow that is complex, labor-intensive and expensive. In this workflow, biological samples and chemical compounds, usually in solution, are generally dispensed or pipetted into standard microwell plates, which usually consist of 96 or 384 wells each in a standardized format. The plates may then be moved to another station where reagents can be applied to the sample or compound to create a single assay in each microwell. The microwell plates may be moved again to attain ideal reaction temperatures or other conditions. The plates are then generally moved into a reader to detect the results of the experiment in each well. This process of dispensing materials and conveying the plates may include robotically performed steps but generally also requires a significant manual labor component. To accomplish these steps on a large scale typically requires the use of large laboratories equipped with many types of equipment, robotics, conveyor systems and personnel.

Conventional microwell plate workflows have a number of characteristics that inherently limit their effectiveness as tools for large scale experimentation:

- *Complex Workflow.* Pipetting stations may have to perform hundreds of thousands of pipetting steps using hundreds of microwell plates in order to conduct a single set of experiments. These microwell plates must typically be moved among several work stations to complete and measure the results of each assay. Maintaining and overseeing complex workflows involving large numbers of microwell plates requires ongoing attention from trained technicians.
- *Limited Throughput.* Due to the large number of pipetting steps, microwell plates and process steps involved in a conventional microwell workflow, these systems are often unable to perform large-scale experiments in a timely and cost-effective manner.
- *Limited Low Volume Capabilities.* Conventional systems are typically unable to dispense samples and reagents in quantities small enough to conduct certain high sensitivity, low volume techniques, such as digital PCR.
- *Large Sample Requirements and Significant Running Costs.* Biological samples are often available in only very small quantities. As a result, the sample amount that needs to be placed in each well often limits the number of experiments that can be performed. In addition, reagents can be expensive to purchase or produce, and consuming them in microliter or larger quantities results in significant and sometimes prohibitive costs.
- *High Capital Cost.* Because of the limited throughput of conventional systems, multiple pipetting stations, plate handlers and readers may be required to meet the demands of large-scale experimentation, resulting in high capital equipment costs.

Other methods of large-scale experimentation, including microarrays, pre-formatted arrays, bead arrays and mass spectrometer analysis, have been developed to address some of the limitations of conventional microwell plate systems. However, each of these high-throughput methods has one or more limitations that reduce its utility for large-scale experimentation.

Microarrays, pre-formatted arrays and bead arrays all lack flexibility because researchers must specify the assays they wish to perform at the time the products are ordered. This in turn limits researchers' ability to refine their assay panel during the course of a study. In addition, if researchers wish to use assay panels other than a manufacturer's standard panels, it may take weeks for a customized product to be produced, and the cost may be significant. Furthermore, it is often difficult or impossible to convert existing validated assays for use with these technologies or with mass spectrometry analysis.

The quality of the data produced by microarrays, pre-formatted arrays and mass spectrometer analysis is insufficient for certain research activities. For genotyping studies, data quality is typically measured by a call rate, which is the percentage of time that a method provides a reading with respect to a particular SNP. Both pre-formatted arrays and mass spectrometer analysis generally have call rates lower than conventional microwell plate systems. For gene expression studies, it is often important to measure expression levels over a broad dynamic range to capture all or most of the variation typically found among subjects. None of microarrays, pre-formatted arrays, bead arrays or mass spectrometer analysis routinely measure gene expression levels over as broad a dynamic range as conventional microwell plates.

The workflow for bead arrays and mass spectrometer analysis is complex, time consuming and expensive. For example, standard protocols often require multiple complex operations to be performed over several days by skilled technicians.

These methods can also be very expensive for certain types of large-scale experimentation. For example, a single microarray or bead array is capable of analyzing thousands of genes from a single sample and these devices have been successfully used for surveying the genome to discover basic patterns of gene expression and genotyping. These surveys or "association studies" are commonly performed on tens or hundreds of samples and are intended to identify a subset of genes for further study. However, for validation studies, which typically require the analysis of thousands or tens of thousands of samples, the high per sample cost of microarrays and bead arrays often make them uneconomical. Similarly, the high initial setup costs for mass spectrometry analysis generally make it economical only for very large-scale studies.

A number of companies have attempted to develop more universal "lab-on-a-chip" solutions which could perform large numbers of complex biochemical operations on a single device. These chips typically incorporate a variety of micron-level features, such as channels and wells, but lack robust methods of fluid control such as valves. As a result, the products have been unable to support the complex fluidic manipulation required by large-scale experimentation.

The limitations of existing technologies become even more acute when clinicians attempt to translate scientific research into molecular diagnostics. Given the commercial nature of their operations, clinical laboratories need systems that can test large numbers of patient samples at low cost and with minimal labor requirements. Moreover, many of the most promising research studies rely on measuring each sample across tens or even hundreds of SNPs, gene expression levels or protein concentrations to diagnose or classify a disease. We believe that using standard microwell plate technology to make multiple measurements on a large number of samples is often too complex and expensive for most clinical laboratories. As a result, the molecular diagnostic tests adopted by clinical laboratories have generally been relatively simple or have required specialized machines to perform. Diagnostic approaches that require measuring large numbers of SNPs, gene expression levels or protein concentrations are generally not available or are available only from a diagnostic laboratory that specializes in the particular test.

To achieve and exploit breakthroughs in genomics, proteomics and molecular diagnostics, research and clinical laboratories need robust systems that deliver increased throughput and simpler workflows with decreased costs.

The Fluidigm Solution

Our IFC systems are designed to overcome many of the limitations of conventional methods by empowering researchers and clinicians to rapidly perform a large number of experiments at one time and in nanoliter volumes,

significantly increasing throughput, reducing costs associated with reagents and patient samples and reducing the time and number of steps involved. Our IFCs deliver these advantages through integration of sophisticated nanoliter fluid handling in an easy-to-use format. We believe the advantages of our IFC systems can be applied to a wide variety of applications across many fields using standard chemistries.

For each application, we provide a complete IFC system consisting of specially designed single-use IFCs, instrumentation, software and support services. Our IFC systems are designed to be easily incorporated into our customers' laboratory environments and analysis workflow. For example, our IFCs are the same size and shape as standard 384 microwell plates, which facilitate the loading and handling of our IFCs by standard laboratory equipment. Each IFC includes an elastomeric, or rubber-like, core that contains an extensive network of microfluidic components, such as valves, channels, pumps, mixers and other components that deliver samples and reagents to thousands of nanoliter volume chambers where individual assays can be performed. In much the same way that semiconductor technology has enabled tremendous computational power to be placed onto a single silicon chip, the integration of large numbers of miniaturized components on our IFCs enables sophisticated fluid handling at high throughput and low cost.

Our BioMark 48.48 Dynamic Array IFC allows users to individually assay 48 samples against 48 primer-probe sets, generating 2,304 separate real-time qPCR reactions on a single device. In May 2008, we launched our 96.96 Dynamic Array IFC, which is configured to run 96 samples against 96 primer-probe sets, generating 9,216 separate reactions.

The following table compares the performance of one conventional 384 microwell plate to that of one of our 48.48 Dynamic Array IFCs and one of our 96.96 Dynamic Array IFCs for a genotyping study involving 1,000 samples and 96 SNPs:

	384 Microwell Plate (5 µl/well)	Fluidigm 48.48 Dynamic Array IFC	Fluidigm 96.96 Dynamic Array IFC
Runs for Study	250	42	11
Total reaction volume	480 ml	20 ml	10 ml
Pipetting Steps	192,000	4,032	2,112

The advantages of our IFC systems over existing microwell-based systems include:

- *Reduced Complexity.* Loading our IFC requires orders of magnitude fewer pipetting steps than 384 microwell plates for the same experiment, which reduces the time, cost and potential for error.
- *Improved Throughput.* A single IFC based on our 96.96 format can conduct 9,216 real-time qPCR or other assays, or 24 times more assays than a single 384 microwell plate. The improved throughput reduces the time and cost associated with complex experiments and expands the number and range of experiments that may be conducted.
- *Nanoliter Precision.* Our IFC systems allow users to dispense samples and reagents in microliter volumes which are automatically combined and mixed in nanoliter and sub-nanoliter volumes. In addition to cost and workflow benefits, this capability makes it practical for users to conduct certain high sensitivity, low volume techniques, such as digital PCR and single cell analysis.
- *Reduced Sample and Reagent Requirements.* Obtaining patient samples for assays can also be costly, and in many cases the amount of those samples is finite. Our systems typically require between 0.5% and 1.0% of the amount of sample and reagent per reaction as conventional systems, allowing scarce samples and costly reagents to be conserved or tested more extensively.
- *Decreased Capital Cost.* A single BioMark system has the same throughput as the combined throughput of multiple conventional systems. As a result, for high volume users, the cost of purchasing one BioMark system can be much lower than the cost of purchasing the number of competing systems and associated robotic equipment required to provide the same throughput, even though our BioMark system may cost more on a per unit basis.

- *Compatibility with Existing Infrastructure.* Our IFCs incorporate plastic input frames that are the same size as standard microwell plates and are designed to work with the most commonly used laboratory systems, including existing robotic pipetting systems, bar code readers, plate handling systems and other equipment. Our IFCs are also designed to work with standard real-time qPCR techniques and TaqMan chemistries. As a result, we believe users are able to quickly introduce our systems into their laboratories and achieve results equal to or better than they were obtaining with conventional systems.

Our IFC systems also have significant advantages over other high-throughput approaches. For example, our BioMark system can detect gene expression levels over a much broader dynamic range than microarrays, pre-formatted arrays, bead arrays or mass spectrometry analysis. For genotyping, our BioMark system has a call rate equal to or better than conventional microwell-based systems. Also, our IFC systems provide researchers with needed flexibility in assay selection and study design. Unlike microarrays, bead arrays and pre-formatted arrays, our IFCs are not limited to detecting certain predetermined genetic markers. Instead, users can perform experiments with our IFCs using assays from their existing libraries, purchased from a wide variety of commercial sources or developed in their own laboratories. Finally, the efficient workflow of our IFC systems enables users to complete an IFC run in less than three hours.

Other high-throughput approaches have advantages over conventional microwell plate systems that are similar to the advantages of our IFC systems. For example, microarrays, pre-formatted arrays, bead arrays and mass spectrometry analysis all reduce complexity and increase throughput as compared to conventional approaches when used for large scale experimentation, and, in many instances, are more cost-effective than conventional approaches. In addition, pre-formatted arrays significantly reduce sample and reagent consumption as compared to microwell plates. Also, microarrays and bead arrays have call rates for genotyping that are comparable to those obtained with our systems or with microwell plate systems. Because these systems are designed to detect thousands of genetic markers, they are often chosen by researchers to perform very large-scale association or survey studies over conventional microwell plate systems or our systems.

Our IFC systems address the needs of researchers and clinicians who perform large-scale experimentation in the areas of genomics, proteomics and molecular diagnostics. In particular, for validation studies or projects of a similar scale, our IFC systems substantially reduce cost, simplify workflow and increase throughput as compared to conventional microwell plate systems. Nevertheless, researchers and clinicians may be slow to adopt our IFC systems as they are based on technology that, compared to conventional technology, is new and not yet well-established in the industry. Moreover, many of the existing laboratories have already made substantial capital investments in their existing systems and may be hesitant to abandon that investment. While we believe our systems provide significant cost-savings, the initial price of our systems and the price of our IFCs is higher than conventional systems and standard 384 microwell plates. Our IFC systems are less well suited for smaller scale research initiatives where complexity and workflow issues may be less pressing and conventional systems may be more economical. As life science research continues to evolve and is commercialized, we believe that there will be increasing demand for life science automation solutions that enable experimentation on the scale supported by our IFC systems.

Applications

Our IFC technology has the potential to be applied to a vast range of research and commercial applications. We have commercialized IFC systems for life science research applications such as gene expression analysis, genotyping, digital PCR and protein crystallization. We believe that these applications are relevant to markets beyond life science research, such as the development of molecular diagnostics, and that IFC systems can be developed for numerous other life science applications. We and our academic and corporate collaborators have developed non-commercial IFCs for a wide variety of applications in the areas of genomics, proteomics, cellular biology and synthetic chemistry. As illustrated by the examples below, researchers have been able to utilize the advantages of our IFC systems in their laboratories to achieve significant research successes.

Current Commercial Applications

Gene Expression Analysis. Researchers may conduct gene expression studies to measure the activity of tens or hundreds of genes across hundreds or thousands of individuals. For these validation studies, it is often important

to know the expression level of a gene, not merely whether the gene is “on” or “off,” as often either high or low activity level is associated with a particular characteristic or disease state. Our IFC systems have been used to deliver high-throughput and precise measurements in gene expression analysis applications. For example, researchers at Myriad Genetics have identified panels of genes that could be used to predict cancer progression or select treatment options. However, the cost and complexity of high-throughput real-time qPCR using conventional microwell plates significantly limited researchers’ ability to perform the appropriate assays. In response, Myriad Genetics adopted our BioMark system which, together with our Dynamic Array IFCs, has allowed them to significantly reduce their pipetting workload, and therefore pursue research projects that may have been prohibitively cumbersome without our system.

Genotyping. Researchers performing genotyping studies may begin by surveying the genomes of relatively few individuals looking for tens of thousands or even hundreds of thousands of SNPs. Analysis of these studies will often reveal that a relatively small number of SNPs appear to be correlated with the characteristic of interest. To validate this analysis, researchers may conduct additional studies involving hundreds or even thousands of individuals focused on tens or hundreds of SNPs. For example, the National Cancer Institute’s Core Genotyping Facility, or the CGF, collaborates with researchers at other government research centers and academic institutions with the goal of developing screens to identify individuals susceptible to particular forms of cancer and guiding the development of targeted therapeutics. One of the CGF’s primary responsibilities in these collaborations is conducting the large-scale experiments necessary to accurately interrogate hundreds of SNPs on many patient samples. In a typical association study, the CGF runs 30 to 300 assays on 1,000 to 10,000 patient samples. Such large-scale studies are difficult and expensive to perform with conventional microwell plate technology. Using our BioMark system, the CGF continues to perform the same assays previously developed in its existing library of over 5,000 assays.

Genotyping analysis is also used in situations where research has already identified particular genetic profiles of interest and there is a need to test a group of subjects to determine which profile they fit. For example, the Alaska Department of Fish and Game uses our BioMark system to perform genotyping analysis to determine the region of origin of salmon caught in commercial or sport fisheries. By analyzing a large number of salmon, the department can gain an understanding of the effects that fisheries have on populations of salmon and thereby manage the resource more effectively. The department has developed panels for three species which range from 40 to 60 SNPs, and its throughput approaches 100,000 samples per year. The departments of fish and game in the states of Oregon and Washington are also using our BioMark system for similar applications.

Digital PCR. The widespread use of genetic testing in high-risk pregnancies has created strong interest in rapid and accurate molecular diagnostics for certain common chromosomal abnormalities. However, conventional methods have limitations related to speed, precision and the risks associated with sampling a significant amount of material from the fetus during an invasive procedure, such as amniocentesis or chorionic villi sampling. Digital PCR has been identified as a technique for highly sensitive and precise nucleic acid measurement, but performing it with conventional laboratory equipment is so cumbersome that it has not been widely adopted. In an article published by Analytical Chemistry in August 2007, researchers at the laboratory of Professor Stephen Quake, our co-founder, at Stanford University demonstrated that digital PCR can be used for accurate measurement of trisomy 21, or Down syndrome. Using our Digital Array IFC and DNA from human cell lines, Dr. Quake’s laboratory was able to precisely measure the number of copies of a DNA sequence from this chromosome and at the same time measure the number of copies of a DNA sequence from another chromosome whose copy number does not vary. For trisomy 21, the ratio of these markers is significantly higher than normal. Similar work in pre-natal genetic testing is being pursued using our IFCs by other customers at leading academic institutions. We believe that with further clinical validation and development, such research could be developed into a diagnostic test that would require significantly less material from the fetus and provide results much more rapidly than current methods. We also believe that digital PCR will enable such diagnostics to ultimately be used in a non-invasive fashion, thus further reducing risk to the fetus.

Cancer researchers have identified a particular mutation in chronic myeloid leukemia cells that render those cells resistant to the drug Gleevec. Gleevec is typically used as the initial treatment for this type of leukemia and is often able to put the disease into remission for months or years. However, a significant proportion of these leukemia patients eventually develop mutated leukemia cells that are resistant to Gleevec. These mutated cells are initially

very scarce and undetectable using conventional systems, but they eventually multiply and cause the patient to become symptomatic again. Researchers at the Fred Hutchinson Cancer Research Center have used our Digital Array IFC in their laboratory to test patient samples and have been able to detect these mutated cells earlier than with conventional techniques. With additional validation and demonstration of clinical relevance, we believe a test based on digital PCR could be a useful tool for monitoring patients who are diagnosed with chronic myeloid leukemia.

Protein Crystallization. In order to determine how a particular protein interacts with other components of a disease pathway, researchers often attempt to determine its structure using protein crystallization. Because most proteins will crystallize only under very precise conditions that are specific to the particular protein, protein crystallization involves performing numerous assays to determine the conditions under which the protein crystallizes. As described in the April 2006 issue of the journal *Science* and supporting online material, researchers at the Wilson lab of Scripps Research Institute in La Jolla, California used our Topaz system to understand how the H5N1 avian flu virus can infect humans. Researchers at the Wilson lab had prepared a small sample of the protein that the virus uses to attach itself to cells in the respiratory tract. With the Topaz system, they were able to quickly screen a few microliters of the sample across a wide variety of different conditions and determine the optimum conditions for protein crystallization. Using this information, they were able to grow larger crystals using standard crystallization techniques. Subsequent analysis of the structure of the crystallized protein revealed why the current form of the avian H5N1 virus has not yet acquired the ability to readily infect humans compared to other flu viruses.

Potential Future Applications

High-Throughput DNA Sequencing. For many years, researchers have wanted to conduct large scale studies of genomic variations to better understand gene regulation and gene function. However, it was only with the recent introduction of ultra high-throughput DNA sequencers, sometimes referred as next generation sequencing, that conducting such studies became feasible. Accurately performing DNA sequencing with these high-throughput machines requires careful preparation of the sample to be analyzed, including precisely determining the amount of template DNA present in the sample. Quantifying or titrating the DNA in the sample using typical methods is often a painstaking and lengthy process that can consume a large quantity of the sample itself. Stanford University researchers working in the laboratory of Dr. Stephen Quake, who is a co-founder of Fluidigm and chair of our Scientific Advisory Board, have demonstrated that our Digital Array IFC can be used to quantify the amount of DNA in a sample in four hours or less with the precision typically needed by high-throughput DNA sequencers. This technique is significantly quicker and less expensive than conventional methods and allows for more efficient use of the high-throughput DNA sequencers by eliminating one of the two runs that are generally required to sequence a sample. In addition, because the technique consumes one one-thousandth of the amount of sample that typical methods consume, it can be used in situations where only scarce sample is available. Though researchers have just begun to adopt high-throughput DNA sequencers, we believe there are over 1,000 genomic research sites worldwide that are potential users of the machines within the next few years. Two of our customers have begun using our Digital Array IFC to perform this technique on a trial basis, and we expect to make the application more widely available beginning in the fourth quarter of this year.

Molecular Diagnostics. Life science research is revealing an increasing number of diseases and conditions that can be diagnosed, evaluated and monitored by measuring panels of gene expression levels, SNPs, proteins or other biomarkers. Validating these research findings and translating them into clinically available tests often requires life science automation systems that are able to efficiently measure multiple biomarkers in a large number of patient samples. Our existing IFC systems are able to measure certain nucleic acid biomarkers that are commonly used in these tests, and we expect that we will be able to develop IFC systems to measure other relevant biomarkers. As described above, researchers have used our IFC systems to detect clinically relevant biomarkers, such as drug resistant leukemia cells and fetal chromosomal abnormalities. We believe that the high throughput, flexibility and simplified workflow of our IFC systems could make them an attractive solution for validating and commercializing a wide range of molecular diagnostic tests being developed by researchers. In addition, we believe that our IFC systems' ability to measure gene expression levels across a broad range and to detect nucleic acid sequences present in very low concentrations will support the development and commercialization of molecular diagnostic tests that would not be practical with conventional systems. Our IFC systems have not been cleared or approved by the

U.S. Food and Drug Administration, or FDA, for use in any molecular diagnostic tests and we cannot currently market them for the purpose of performing molecular diagnostic tests. We do not have any current plans to develop products that are regulated by the FDA.

Other Applications. We believe that the inherent design flexibility of our core technology allows us to build IFC systems that can provide significant benefits in a wide range of fields and industries. For example, the architecture of our Dynamic Array is flexible and supports the development of IFCs that create matrixed combinations of a variable number of samples versus a variable number of reagents. In addition, our IFC technology utilizes a variety of microfluidic components, such as pumps, mixers and separation columns, that allow the implementation of sophisticated biochemical processes on our IFCs. While we have not commenced commercial development of IFC systems for these fields, we have developed IFCs for internal research purposes in such diverse fields as:

- immunoassays, which can measure levels of protein expression and other molecules in a highly-parallel, multiplexed format;
- high-throughput drug screening, including the analysis of molecules that inhibit protein-protein and protein-nucleic acid interactions;
- chemical synthesis, including production of radio-labeled sugars which in combination with advanced medical imaging can help diagnose and monitor cancer;
- pharmacogenomics, an emerging field that analyzes how variations in human genomes affect the performance and toxicity of therapeutic agents;
- systems biology, an effort to understand the collective behavior of genes as they collaborate in networks;
- synthetic biology, an emerging field aimed at engineering biological systems to build novel biological functions, systems and perhaps organisms; and
- cellular assays, including stem cells and regenerative medicine, where our IFCs have been used to isolate, cultivate and analyze single cells.

Strategy

We intend to become a global leader in providing automated bio-analytical research and molecular diagnostic systems. Our business strategy consists of the following elements:

Establish our IFC Technology as the Leading Solution for a Broad Range of Life Science Applications. Our initial sales and marketing efforts have been focused on establishing our IFC systems as leading solutions for high-throughput life science research applications. We intend to leverage the market awareness and acceptance created by our initial product offerings to market new products and applications to life science researchers and to sell new and existing applications to customers in other markets, such as molecular diagnostics and applied genomics.

Continue to Increase the Throughput and Efficiency of Our IFCs. A primary focus of our research and development efforts is the development of IFCs with increased component density and, therefore, the ability to conduct an increased number of experiments on a single IFC. Increasing density provides value to our customers by increasing throughput, enhancing efficiency, reducing labor costs and reducing reagent and sample volumes. We expect that these increased capacity IFCs will allow us to deliver additional capabilities and cost savings, and further improve our competitive position.

Expand Recurring IFC Revenue Stream Through Product Innovation and System Sales. We intend to drive revenue growth by increasing the number of installed IFC systems, improving the cost per test of our IFCs and developing IFCs and systems for additional applications.

Provide Superior Customer Service. We have a global sales force and support organization that offers technical solutions and customer support through direct relationships with our current and potential customers. Through the direct connection with our customers, we are able to better understand their needs and apprise

them of new product offerings and technological advances in our current IFC systems, related instrumentation and software, while maintaining a consistent marketing message and high level of customer service.

Enhance IFC Manufacturing Efficiency. We intend to enhance our manufacturing efficiency through improvements in our existing processes, development of new IFC designs and implementation of new manufacturing methods in order to improve our manufacturing yields and reduce our manufacturing costs. We believe that these improvements will enable us to deliver additional value to our customers and to maintain or enhance our advantages over competing systems.

Continue to Develop our Technology and Intellectual Property Position. Our products are based on a set of related proprietary technologies that we have either developed internally or licensed from third parties. We intend to continue making significant investments in research and development to further expand and deepen our technological base. At the same time, we intend to maintain and strengthen our intellectual property position through the continued filing and prosecution of patents in the United States and internationally and through the in-licensing of third party intellectual property as appropriate.

Products

We currently market two IFC systems, the BioMark system for real-time qPCR and the Topaz system for protein crystallization. Each system consists of single-use IFCs, loaders that control the IFCs, readers that detect reactions on the IFCs and software for analyzing, annotating and archiving the data produced by the readers.

The BioMark System for Real-Time qPCR

The BioMark system allows users to perform gene expression analysis, genotyping and digital PCR using standard TaqMan chemistry.

BioMark Dynamic Array IFCs

Our BioMark 48.48 Dynamic Array IFC is based on matrix architecture that allows users to individually assay 48 samples against 48 primer-probe sets, generating 2,304 real-time qPCR reactions on a single device. One version of this IFC is optimized to perform gene expression analysis and another is optimized for genotyping, each assay in volumes of 10 nanoliters or less.

We commercially introduced our Dynamic Arrays in the fourth quarter of 2006 and, as of June 28, 2008, 16 customers have purchased Dynamic Array IFCs for use in applications, such as SNP association follow-up studies and single stem-cell gene expression profiling. In May 2008, we launched our 96.96 Dynamic Array IFC, which is configured to run 96 samples against 96 primer-probe sets, generating 9,216 reactions.

BioMark Digital Array IFCs

The BioMark 12.765 Digital Array IFC is based on partitioning architecture that allows users to divide 12 separate samples into 765 smaller samples and perform a real-time qPCR assay against each sample in less than 10 nanoliter volumes. This IFC can be used for digital PCR and to precisely quantify the amount of a particular nucleic acid sequence present in a sample. We have been selling Digital Array IFCs since March 2007 and, as of June 28, 2008, 16 customers have purchased Digital Array IFCs for use in applications, such as characterizing unculturable bacteria, cancer detection and high-throughput DNA sequencing.

BioMark Instrumentation and Software

Our NanoFlex IFC Controller for the BioMark system fully automates the setup of IFCs for real-time qPCR-based experiments and includes software for implementing and tracking experiments. The instrumentation for our BioMark system controls the real-time qPCR process and detects the fluorescent signals generated using a white light source, emission and excitation filters, precision lenses, a licensed thermal cycler and a digital camera. We also offer various software packages that provide data analysis following data collection. Our analysis software shows data as color-coded maps of every position on the IFC, as amplification curves and as numeric tabular data.

The Topaz System for Protein Crystallization

The Topaz system allows users to screen protein samples against a set of reagents in order to determine the optimum conditions for crystallizing a protein. The Topaz system includes IFCs similar to our Dynamic Array architecture that have been optimized for highly efficient protein crystallization screening.

Topaz Screening IFCs and Reagents

Our 1.96, 4.96 and 8.96 Screening IFCs for our Topaz system allow users to test 96 different reagents or reagent concentrations against one, four or eight different protein samples. We estimate that our screening IFCs require only 1% the amount of sample used in standard microwell plate technologies, which is important because protein samples are often extremely scarce or difficult to prepare. The 4.96 and 8.96 IFCs provide greater fluid handling efficiency by enabling the parallel processing of different samples containing a particular protein or different constructs of the same protein on a single IFC. This parallel processing saves pipetting steps and allows the user to determine the best sample or construct to use when scaling up production of a protein to generate diffraction-quality crystals.

We also re-sell third party reagents that we have tested with our Topaz system. Though our customers may purchase or make their own reagents for use with our system, we recommend that they use reagents that we have validated.

We commercially introduced our Topaz systems in the first quarter of 2003 and, as of June 28, 2008, 75 customers have purchased Topaz IFCs for use in applications such as functional studies and structure-based drug design.

Topaz Instrumentation and Software

The NanoFlex IFC controller for the Topaz system fully automates the setup of diffusion-based protein crystallization experiments and includes software for tracking experiments.

The Topaz AutoInspeX II workstation automates the scanning of Topaz IFCs and the identification of reaction chambers where crystallization has occurred. The AutoInspeX II incorporates high-end optical performance and a full suite of software for analyzing and archiving crystallization results. The sophisticated instrumentation and software included in our Topaz system enables users to automatically image and accurately score crystals as small as 10 microns by 20 microns.

Sales and Marketing

We distribute our systems through our direct field sales and support organizations located in North America, Europe and Asia and through distributors or sales agents in parts of Europe and Asia-Pacific. Our global sales force is able to apprise our current and potential customers of new product offerings and technological advances in our current IFC systems, related instrumentation and software to help drive revenue growth. As our primary point of contact in the marketplace, our sales force ensures a consistent marketing message and high level of customer service, while enhancing our understanding of customer needs. As of December 29, 2007, we had 24 people employed in sales, sales support and marketing, including 9 sales representatives.

Our sales and marketing efforts are targeted at laboratory directors and principal investigators at leading companies and institutions who need reliable, high-throughput life science automation solutions to conduct large-scale experimentation. We seek to increase awareness of our products among our target customers through participation in tradeshows and academic conferences including sponsoring scientific lectures by prominent users of our systems. Because our systems are relatively new and require a capital investment, the sales process typically involves numerous interactions and demonstrations with multiple people within an organization. In addition, potential customers will often wish to conduct in-depth evaluations of the system including running identical sets of samples and reagents on both our system and competing systems. As a result of these factors and the budget cycles of our customers, our sales cycle, the time from initial contact with a customer to our receipt of a purchase order, can often be 12 months or longer.

Customers

We have sold our BioMark and Topaz systems to a wide variety of biotechnology and pharmaceutical companies and to academic, governmental and clinical research institutions. As of June 28, 2008, 79 of our Topaz systems have been installed at customer sites and 24 of our BioMark systems have been installed at customer sites. The following is a list of our representative customers in each of the listed markets.

Customer	Market	Application
MedImmune	Gene Expression	Pharmaceutical drug development — real-time qPCR for gene expression profiling in research and clinical trials
Myriad Genetics	Gene Expression	Cancer and diagnostics research — real-time qPCR for differential gene expression in cancer studies
Merck & Co.	Gene Expression	Gene expression profiling for pharmaceutical drug development
Alaska Department of Fish and Game	Genotyping	Government wild-life resource management — SNP genotyping for identification of salmon species
National Cancer Institute	Genotyping	Academic basic research; clinical diagnostics research — genotyping for cancer research
Chinese University of Hong Kong	Digital PCR	Academic basic research; clinical diagnostics research — digital PCR for early cancer detection
Vertex Pharmaceuticals	Protein crystallization	Pharmaceutical drug discovery

Revenue Concentration. We receive a substantial portion of our revenue from a limited number of customers and grantors. For the year ended December 29, 2007, the Singapore Economic Development Board, or EDB, accounted for 24% of our total revenue. For the year ended December 31, 2006, CTI Molecular Imaging accounted for 16% of our total revenue, Kikotech Co., Ltd. accounted for 14% of our total revenue and EDB accounted for 14% of our total revenue. For the year ended December 31, 2005, Kikotech accounted for 16% of our total revenue and a collaboration agreement accounted for 14% of our total revenue. We anticipate that we will continue to be dependent on a limited number of customers and grantors for a significant portion of our revenue in the near future. The loss of any of these customers could have a material adverse effect on our results of operations and cash flows.

Competition

We compete with both established and development stage life science companies that design, manufacture and market instruments for gene expression analysis, genotyping, other nucleic acid detection and additional applications using established laboratory techniques. For example, companies such as Affymetrix, Applied Biosystems, BioTrove, Illumina, Roche Diagnostics and Sequenom have products for gene expression and/or genotyping that compete in certain segments of the market in which we sell our BioMark system. In addition, a number of other companies and academic groups are in the process of developing novel technologies for genetic analysis, many of which have also received grants from the National Human Genome Research Institute, a branch of the National Institutes of Health.

The high-throughput life science platforms industry is highly competitive and expected to grow more competitive with the increasing knowledge gained from molecular biology experimentation. Many of our competitors are either publicly-traded or are divisions of publicly-traded companies and enjoy several competitive advantages over us, including:

- significantly greater name recognition;
- greater financial and human resources;

- broader product lines and product packages;
- larger sales forces;
- larger and more geographically dispersed customer support organization;
- substantial intellectual property portfolios;
- established customer bases and relationships; and
- greater experience in research and development, manufacturing and marketing.

We believe that the principal competitive factors in our markets include:

- cost of capital equipment and supplies;
- ease of use;
- accuracy and reproducibility of results; and
- compatibility with existing laboratory processes.

To successfully compete with existing products and future technologies, we will need to demonstrate to potential customers that the cost savings and performance of our technologies and products, as well as our customer support capabilities, are superior to those of our competitors.

Technology

Our products are based on a tiered set of related proprietary technologies that we have either developed internally or licensed from third parties.

Multi-Layer Soft Lithography

Our IFCs are manufactured using a technology known as multi-layer soft lithography, or MSL. With MSL, we are able to use standard semiconductor manufacturing techniques, along with certain proprietary processes, to create complex integrated microfluidic devices.

Using MSL technology, we are able to create valves, chambers, channels and other fluidic components on our IFCs at high density. We combine these components in complex arrangements that allow nanoliter quantities of fluids to be precisely directed to specific positions within the IFC. Unlike most prior microfluidic technologies, our IFCs do not rely on electricity, magnetism or similar approaches to control fluid movement. Rather, our IFCs control fluid flow with valves. The most important components on our IFCs are our NanoFlex valves, which are created by the intersection of two channels. When the valve is open, fluid is able to flow through the lower channel. When the upper or “control” channel is pressurized, the material separating the two channels is deflected into the lower channel, closing the valve and stopping fluid flow. If pressure is removed from the control channel, the channels return to their original form, and the valve is again open. The elastomeric properties of IFC cores allow our NanoFlex valves to form a reliable seal and cycle through millions of openings and closings.

The elastomer we currently use for our commercial products is a form of silicone rubber known as polydimethylsiloxane, or PDMS, but we have researched other materials with different properties for specific purposes. PDMS is transparent, which allows fluid movement to be easily monitored with a variety of existing optical technologies, such as bright field or phase contrast microscopy. In addition, the gas permeability of PDMS allows the reliable metering of fluids with near picoliter precision by eliminating the bubble problems encountered by most other microfluidic technologies. In essence, we are able to pump fluids into closed reaction chambers at sufficient pressure to drive any air out of the chamber directly through the chamber walls. PDMS also supports an environment that is favorable to maintaining cell cultures.

We have developed commercial manufacturing processes to fabricate valves, channels and chambers with dimensions in the 10 to 100 micron range, at high density and with high reliability. For research purposes, we have created devices with both substantially smaller and larger features. Though our manufacturing is based on standard

semiconductor manufacturing technologies and techniques, we have also developed novel processes for mold fabrication that enable mass production of high density IFCs with nanoliter volume features.

Integrated Fluidic Circuits

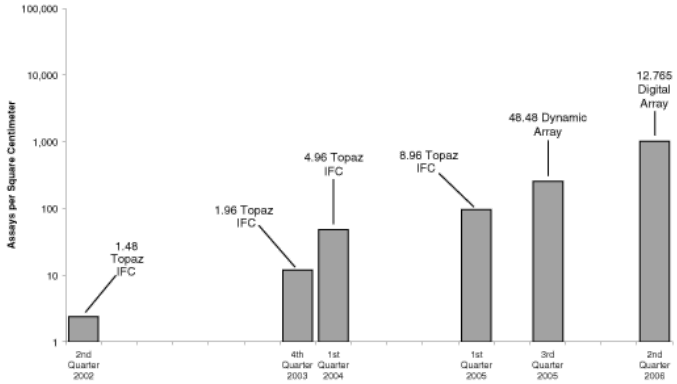
Our IFCs incorporate several different types of technology that together enable us to use MSL to rapidly design and deploy new microfluidic applications.

Microfluidic Components. The first level of our IFC technology is a library of components that perform basic microfluidic functions. We have proven designs for numerous elements, such as pumps, mixers, separation columns, control logic and reaction chambers. These are readily integrated to create circuits capable of performing a wide range of biochemical reactions. Even when it is necessary to integrate multiple elements to perform a particularly complex reaction, the area taken up on a circuit for a single reaction is small compared to a typical overall circuit size of three centimeters by three centimeters. As a result, we are routinely able to develop IFCs that perform thousands of reactions per square centimeter.

Architectures. The second level of our IFC technology comprises the architectures we have designed to exploit our ability to conduct thousands of reactions on a single IFC. The first of these is the Dynamic Array, a matrix architecture that allows multiple different samples and multiple different reagents to be loaded onto a single IFC and then combined so that there is an isolated reaction between each sample and each reagent. The primary advantage of this architecture is that each sample and reagent has to be pipetted only once per IFC rather than once per reaction, as is the case with plate-based technologies. For example, a single 48.48 Dynamic Array IFC can perform a total of 2,304 unique reactions between 48 samples and 48 reagents with only 96 pipetting steps. With conventional microwell plate-based technologies, the same experiment would require about 4,608 pipetting steps and at least six conventional microwell plates. Our Digital Array architecture provides similar benefits with respect to pipetting steps and fluid handling. The Digital Array architecture allows a sample to be split into hundreds or thousands of smaller samples. Separate reactions can then be conducted on each of the smaller samples.

Interface and Handling Frames. The third level of our IFC technology involves the interaction of our IFCs with the actual laboratory environment. The elastomeric blocks at the center of our IFCs sit in specially designed frames that are able to deliver samples and reagents to the block. These frames are the same size as standard 384 microwell plates and have sample and reagent input ports laid out in a standard 384 microwell plate format. As a result, our IFCs can be loaded with standard laboratory pipetting robots and can be used with standard plate handling equipment.

Technological Advances. In the second quarter of 2002, we sold the first prototype of our 1.48 IFC for our Topaz system, which featured 22 valves capable of 2.5 assays per square centimeter. In the second quarter of 2006, we introduced our 12.765 Digital Array IFC, with over 1,000 valves capable of more than 1,000 assays per square centimeter, a 46-fold increase in valve density and a 400-fold increase in assay capability. The chart below illustrates the timing of a number of our technological advances. We introduced our 96.96 Dynamic Array IFC in May 2008, which again increased the number of valves and assays per square centimeter relative to the 48.48 Dynamic Array. In the semiconductor industry, Moore’s Law describes the principle that the shrinking of features has allowed for a doubling of transistors on a chip approximately every 18 months. Based on manufacturing processes borrowed from those in the semiconductor industry, Fluidigm has similarly achieved significant gains in the density and productivity of our IFCs.



Software and Instrumentation

We have developed instrumentation technology to load samples and reagents on to the IFC and to control and monitor reactions within our IFCs. Our NanoFlex controller consists of commercial pneumatic components and both custom and commercial electronics. It uses precise control of multiple pressures to independently move fluid through up to four IFCs simultaneously and can be configured for use with either our BioMark or Topaz systems. Our Topaz Auto-InspeX II workstation consists of a commercial microscope, illumination source, stage and camera system in a single package. Our BioMark system consists of a customized commercial thermal cycler packaged with a sophisticated fluorescence detection system. All of these instruments are designed to be easily introduced into standard automated lab environments.

We have developed specialized software packages to manage and analyze the unusually large amounts of data produced by our systems. Our BioMark gene expression analysis software automatically identifies individual real-time qPCR reactions from fluorescent images and generates amplification threshold crossing values allowing researchers to readily perform complete normalized comparative gene expression analysis across large numbers of samples and assays. Similarly, the BioMark genotyping analysis software automatically clusters fluorescent intensities from individual genotype reactions and makes genotype calls across individual and multiple IFC runs. Our Topaz system software incorporates sophisticated image processing and analysis functionality that enables the automatic detection and classification of protein crystals. Most of our software development uses Microsoft.NET tools to facilitate interaction with typical laboratory information management systems.

Manufacturing

Our manufacturing operations are located in Singapore and South San Francisco. Our Singapore facility fabricates all of our IFCs for commercial sale. IFCs for research and development purposes are fabricated at both locations. We manufacture instrument systems at both locations, with certain instruments assembled in Singapore and others in South San Francisco.

Our Singapore facility commenced operations in October 2005 and established full process capability for its first product, the Topaz Screening IFC, in June 2006 and for its first Dynamic Array, the 48.48 Dynamic Array in October 2006. Our Singapore facility has been producing components for our Topaz system since October 2006 and components for our BioMark system since December 2007.

We established our manufacturing facility in Singapore to take advantage of the skilled workforce, supplier and partner network, lower operating costs and government support available there. Our IFC manufacturing process includes photolithography and fabrication technologies that are very similar to those used in the fabrication of semiconductor chips. As a result, we are able to hire from a pool of skilled manpower created by the existing semiconductor industry in Singapore. Similarly, the Singapore semiconductor industry has created a broad network

of potential suppliers and partners for our manufacturing operations. We are able to locally source a large proportion of the raw materials required in our processes and have been able to collaborate with local engineering companies to develop enabling technologies for IFC fabrication. We have made significant improvements in yields through process improvements at our Singapore facility and IFC production increased three-fold in 2007 compared to 2006.

Our manufacturing operations in Singapore have been supported by grants from the Singapore Economic Development Board, or EDB, which provide incentive grant payments for research, development and manufacturing activity in Singapore. Our arrangements with EDB require us to maintain a significant and increasing manufacturing and research and development presence in Singapore.

Our South San Francisco facility began producing Topaz systems in 2002. In 2005, our South San Francisco facility began assembling instrumentation for our BioMark system.

We expect that our existing manufacturing capacity for instrumentation and IFCs is sufficient to meet our needs for at least the next two years. However, we are considering developing additional capacity to ensure that all or most of our products are produced by at least two different facilities. We believe that having dual sources for our products would help mitigate the potential impact of a production disruption at any one of our facilities and that such redundancy may be required by our customers in the future. We have not determined the timing or location of any additional manufacturing capacity.

We rely on a limited number of suppliers for certain components and materials used in our systems. While we are in the process of qualifying additional sources of supply, we cannot predict how long that qualification process will last. If we were to lose one or more of our limited source suppliers, it would take significant time and effort to qualify alternative suppliers. Key components in our products that are supplied by sole or limited source suppliers include a thermal cycler customized to our specifications, a specialized polymer from which our IFC cores are fabricated, the plastic carrier that holds the IFC core in certain of our products and the specialized high resolution camera lenses used in the reader for our BioMark system. We are neither a major customer of our suppliers, nor do we have long term supply contracts with most of these suppliers. These suppliers may therefore give other customers' needs higher priority than ours, and we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms.

We have entered into a supply agreement with Eppendorf AG to provide to us a thermal cycler customized to our specifications. Pursuant to this agreement, we have agreed to purchase from Eppendorf at least a specified minimum number of units each year in exchange for volume discounts. We have also agreed, during the term of the agreement, not to manufacture or sell a product, in stand-alone form, or compete in any way directly or indirectly with the customized thermal cycler provided by Eppedorf in stand-alone form. Eppendorf has agreed to refrain from providing a similarly customized unit to any person or entity until two years after the agreement has terminated. Either party may terminate the agreement with good reason, which includes a failure to timely deliver conforming units, subject to a cure period. Eppendorf may terminate the agreement if we purchase fewer than 75% of the specified minimum units for each of two consecutive years. After April 1, 2010, either party may terminate the supply agreement upon six months prior written notice.

Research and Development

We have assembled experienced research and development teams at our South San Francisco and Singapore locations with the scientific, engineering, software and process talent that we believe is required to grow our business.

New Product and Application Development

The largest component of our current research and development effort is in the areas of new product and new application development. In particular, we are focused on extending and supporting the BioMark and Topaz product lines by developing new DNA-based applications, improving the introduction of these products into existing workflows of our customers and increasing the functionality of the products. For example, the addition of multi-color analysis allows Digital Array users to analyze as many as 36,720 real-time qPCR assays in parallel on a single Digital Array.

We are also developing new product lines that leverage our investment in our Dynamic Array and Digital Array architectures. As an example, we have demonstrated Dynamic Array formats that can implement over 1,000 immunoassays in parallel. We also invest in extending the reach of existing chip designs through new chemistries. From time to time, we collaborate with other life science companies, universities and government labs on the development of prototype IFCs for particular purposes. For example, there have been a variety of publications by independent researchers demonstrating the use of MSL for applications such as immunoassays based on surface-plasma resonance, cell culturing and complementary DNA library synthesis from single cells.

Process Development

The second component of our research and development effort is process development. We frequently develop new manufacturing processes and test methods to support new IFC designs, drive down manufacturing cost and increase manufacturing throughput. We also invest in manufacturing automation, process changes and design modifications to improve yield and lower costs on existing IFCs.

New Technology Development

We have active research and development efforts to increase the density of components on our IFCs and to lower the materials cost of our current production methods. We are evaluating new materials that can increase the functionality of existing products and that would allow our IFCs to be used for a wider variety of biological and chemical reactions. Over the longer term, we are seeking ways to transfer functionality from instrumentation to IFCs to support development of field-based and point-of-care applications.

Our research and development expenses were $11.4 million, $15.6 million, $14.4 million and $7.2 million in 2005, 2006, 2007 and the six months ended June 28, 2008. As of December 29, 2007, 68 of our employees were engaged in research and development activities.

Scientific Advisory Board

We maintain a scientific advisory board, consisting of members with experience and expertise in the field of microfluidic systems and their application, who provide us with consulting services. The scientific advisory board generally does not meet as a group but instead, at our request, the individual members advise us on matters related to their areas of expertise. We have entered into agreements with each of our advisors, other than Stephen Quake, that require them spend between 6 and 12 days each year advising us and provide for stock option grants to the advisor. Dr. Quake serves as chair of the Scientific Advisory Board pursuant to a broader consulting agreement with us. As Chairman, Dr. Quake advises us on the composition of the advisory board and is involved in discussions with us more frequently than other advisory board members. When the advisory board meets, Dr. Quake is responsible for setting the agenda for the meetings and chairing such meetings. Our scientific advisory board consists of the following members:

Stephen Quake, Ph.D. is a co-founder of Fluidigm and the chair of our scientific advisory board. He is a co-chair of the bioengineering department at Stanford University and an investigator of the Howard Hughes Medical Institute. Dr. Quake received a B.S. in Physics and a M.S. in Mathematics from Stanford University and a Ph.D. in Physics from Oxford University. Dr. Quake has been a member of our scientific advisory board since June 1999.

Frances H. Arnold, Ph.D. is the Dick and Barbara Dickinson Professor of chemical engineering and biochemistry at the California Institute of Technology. She is a member of the National Academy of Engineering and a fellow at the American Institute for Medical and Biological Engineering. Dr. Arnold received a B.S. in Mechanical and Aerospace Engineering from Princeton University and a Ph.D. in Chemical Engineering from the University of California, Berkeley. Dr. Arnold has been a member of our scientific advisory board since August 1999.

James M. Berger, Ph.D. is a Professor of Biochemistry and Molecular Biology at the University of California, Berkeley and a member of the Physical Biosciences Division, Lawrence Berkeley National Laboratory. Dr. Berger received a B.S. in Biochemistry from the University of Utah and a Ph.D. in

Biochemistry from Harvard University. Dr. Berger has been a member of our scientific advisory board since June 2002.

Carl Hansen, Ph.D. is an Assistant Professor in the Department of Physics and Astronomy at the University of British Columbia. Dr. Hansen received a Ph.D. and M.S. in Applied Physics from the California Institute of Technology and a B.S. in Engineering Physics/Electrical Engineering/Honors Math from the University of British Columbia. Dr. Hansen has been a member of our Scientific Advisory Board since May 2008.

Frank McCormick, Ph.D. is the David A. Wood Distinguished Professor of Tumor Biology and the E. Dixon Heise Distinguished Professor in Oncology at the University of California, San Francisco, or UCSF. He is also the director of UCSF's Comprehensive Cancer Center. He is a member of the Institute of Medicine and a fellow of The Royal Society. Dr. McCormick received a B.Sc. in Biochemistry from the University of Birmingham and a Ph.D. in Biochemistry from the University of Cambridge. Dr. McCormick has been a member of our scientific advisory board since November 2006.

Howard M. Shapiro, M.D. is a lecturer on Pathology at Harvard Medical School, a visiting scientist at the Rosenstiel Basic Medical Sciences Research Center at Brandeis University and a research associate in Medicine and Pathology at Beth Israel Hospital. Dr. Shapiro received a B.A. from Harvard College and an M.D. from New York University School of Medicine. Dr. Shapiro has been a member of our scientific advisory board since December 1999.

Richard N. Zare, Ph.D. is the Marguerite Blake Wilbur Professor of Natural Science and chair of the chemistry department at Stanford University. He is a member of the National Academy of Sciences, the American Academy of Arts and Sciences and the recipient of the National Medal of Science. Dr. Zare received a B.S. in Chemistry and Physics and a Ph.D. in Chemical Physics from Harvard University. Dr. Zare has been a member of our scientific advisory board since December 2000.

Intellectual Property Strategy and Position

Fluidigm's core technology originated at the California Institute of Technology, or Caltech, in the laboratory of Professor Stephen Quake, who is a co-founder of Fluidigm. Dr. Quake, his students and their collaborators pioneered the application of multilayer soft lithography in the field of microfluidics. In particular, Dr. Quake's laboratory developed technologies that enabled the production of specialized valves and pumps capable of controlling fluid flow at nanoliter volumes. In a series of transactions, we exclusively licensed from Caltech the relevant patent filings relating to these developments.

Our license agreement with Caltech provides us with an exclusive, worldwide license to certain patents and related intellectual property, as well as the right to prosecute licensed patent filings worldwide at our expense and to initiate any infringement proceedings. Caltech retains the right to use the licensed materials for noncommercial educational and research purposes, as well as any rights necessary to comply with the statutory rights of the U.S. government. We have issued shares of our common stock to Caltech and, in addition to an annual license fee, we agreed to pay to Caltech royalties based on sales revenues of licensed products on a country-by-country basis. The license agreement will terminate as to each country and licensed product upon expiration of the last-to-expire patent covering licensed products in each country. As of June 28, 2008, we licensed 38 issued U.S. patents and 42 pending U.S. patent applications, as well as corresponding international patent filings, from Caltech. The early termination of our license agreement with Caltech could preclude us from manufacturing or selling any of our IFCs and IFC systems, which would have a material adverse effect on our business.

We also have co-exclusive licenses to patents and patent applications owned by Harvard University, a non-exclusive, field-limited license to patents and patent applications controlled by Gyros AB and additional patent licenses from other academic institutions and companies.

Our license agreements with Harvard University allow sublicenses (i) provided we can demonstrate that we have added significant value to the patent rights to be sublicensed and that such sublicense also contains a substantial and essentially simultaneous license to intellectual property owned by us, or (ii) when we grant a sublicense under other Harvard University patent rights licensed to us which are dominated by the patent rights to be

sublicensed and such sublicense is necessary to practice the other Harvard University patent rights. We have issued shares of our common stock to Harvard and, in addition to an annual license fee, we agreed to pay to Harvard royalties based on sales revenues of licensed products on a country-by-country basis. Harvard is responsible for filing and maintaining all licensed patents, but we must reimburse Harvard for our share of its related patent prosecution expenses. We have the right to prosecute any infringement of our licensed patent rights. The license agreement will terminate with the last-to-expire of the licensed patents. As of June 28, 2008, we licensed five issued U.S. patents and four pending U.S. patent applications, as well as corresponding international patent filings, from Harvard. The early termination of our license agreements with Harvard could preclude us from manufacturing or selling any of our IFCs and IFC systems, which would have a material adverse effect on our business.

Our license agreement with Gyros AB grants us a non-exclusive, field-limited license to specified patents and patent applications filings in exchange for an upfront fee plus annual royalty payments based on net revenues of licensed products above an annual license fee. Gyros has the right to terminate if we assign our interest to a third party competitor of Gyros or if we come under common control of such a third party. Otherwise, the license will terminate at the expiration of the last-to-expire of the licensed patents. As of June 28, 2008, we licensed one issued U.S. patent as well as corresponding international patent filings from Gyros. The early termination of our license agreement with Gyros AB could preclude us from manufacturing or selling any of our IFCs and IFC systems, which would have a material adverse effect on our business.

Our license agreement with The UAB Research Foundation grants us an exclusive worldwide license, including the right to sublicense, under certain intellectual property rights. Such license grant is subject to prior existing license grants, plus the reservation of rights to UAB for internal research, academic and educational purposes and/or for performance of services for other institutions and to fulfill obligations to the U.S. government. We prosecute and maintain the patent rights licensed under this agreement. The license agreement will terminate at the expiration of the last-to-expire of the licensed patents. As of June 28, 2008, we licensed four issued U.S. patents and six pending U.S. patent applications, as well as corresponding international patent filings, from UAB. The early termination of our license agreement with UAB could preclude us from manufacturing or selling any of our Topaz IFCs and Topaz IFC systems, which would have a material adverse effect on our business.

Our patent strategy is to seek broad patent protection on new developments in microfluidic technology and then later file patent applications covering new implementations of the technology and new microfluidic circuit architectures utilizing the technology. As these technologies are implemented and tested, we file new patent applications covering scientific methodology enabled by our technology. Additionally, where appropriate, we file new patent applications covering instrumentation and software that are used in conjunction with our IFCs.

As of June 28, 2008, we own or have licensed 81 issued U.S. patents and 62 issued international patents. There are 240 pending patent applications, including 116 in the United States, 118 international applications and 6 applications filed under the Patent Cooperation Treaty. The U.S. issued patents we have licensed from Caltech expire between 2017 and 2024, the U.S. issued patents we have licensed from UAB expire between 2020 and 2024, the U.S. issued patents we have licensed from Harvard expire between 2019 and 2023, the U.S. issued patent we have licensed from Gyros expires in 2012 and the U.S. issued patents owned by us expire between 2018 and 2025.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our patents may not enable us to obtain or keep any competitive advantage. Our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be advantageous to us. Any patents we have obtained or do obtain may be challenged by re-examination, opposition or other administrative proceeding, or may be challenged in litigation, and such challenges could result in a determination that the patent is invalid. In addition, competitors may be able to design alternative methods or devices that avoid infringement of our patents. To the extent our intellectual property protection offers inadequate protection, or is found to be invalid, we are exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Furthermore, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States.

In addition to pursuing patents on our technology, we have taken steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate.

Our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. Third parties have asserted and may assert in the future that we are employing their proprietary technology without authorization. Competitors may assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. In addition, our competitors and others may have patents or may in the future obtain patents and claim that use of our products infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending against any of these claims. Parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. We may not be able to obtain these licenses at a reasonable cost, if at all.

Government Regulation

The Federal Food, Drug and Cosmetic Act, or FFDCA, defines medical devices to mean, among other things, “an instrument, apparatus . . . in vitro reagent, or other similar or related article . . . intended for use in the diagnosis of disease or other conditions . . ..” This broad definition includes in vitro diagnostic products, or IVDs. Our products are currently labeled and sold for research purposes only, and we sell them to pharmaceutical and biotechnology companies, academic institutions and life sciences laboratories. Because our products are not intended for use in clinical practice, they do not fit the definition of a medical device under the FFDCA and thus are not subject to regulation by the U.S. Food and Drug Administration, or FDA. However, in the future, certain of our products or related applications could be subject to the FDA’s regulation, the FDA’s regulatory jurisdiction could be expanded to include our products, or both. For example, if we wished to label and market our products for use in performing clinical diagnostics, they would be considered medical devices and FDA clearance or approval would be required.

Unless an exemption applies, each medical device we wish to commercially distribute in the United States would require either prior 510(k) clearance or prior pre-market approval from the FDA. The FDA classifies medical devices into one of three classes. Devices deemed to pose lower risk to the patient are placed in either class I or II, which, unless an exemption applies, requires the manufacturer to submit a pre-market notification requesting FDA clearance for commercial distribution pursuant to Section 510k of the FFDCA. This process, known as 510(k) clearance, requires that the manufacturer demonstrate that the device is substantially equivalent to a previously cleared 510(k) device or a “pre-amendment” class III device for which pre-market approval applications, or PMAs, have not been required by the FDA. This process typically takes from four to twelve months, although it can take longer. Most class I devices are exempted from this requirement. Devices deemed by FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, or those deemed not substantially equivalent to a legally marketed predicate device, are placed in class III. Class III devices typically require PMA approval. To obtain PMA approval, an applicant must demonstrate the safety and effectiveness of the device based, in part, on data obtained in clinical studies. PMA reviews generally last between one and two years, although they can take longer. Both the 510(k) and the PMA processes can be expensive and lengthy and may not result in clearance or approval. If we are required to submit our products for pre-market review by FDA, we may be required to cease marketing while we obtain premarket clearance or approval from FDA. There would be no assurance that we could ever obtain such clearance or approval.

Changes to a device which have received PMA approval typically require a new PMA or PMA supplement. Changes to a device that receives 510(k) clearance, that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, require a new 510(k) clearance or possibly PMA approval. The

FDA requires each manufacturer to make this determination initially, but the FDA can review any of these decisions. If the FDA disagreed with our determination not to seek a new 510(k) clearance, the FDA could require us to seek a new 510(k) clearance or pre-market approval. The FDA also could require us to cease manufacturing and/or recall the modified device until 510(k) clearance or pre-market approval was obtained. Also, in these circumstances, we could be subject to warning letters, significant regulatory fines or penalties, seizure or injunctive action, or criminal prosecution.

In addition, if our products become subject to regulation as a medical device, we would become subject to additional FDA requirements, and we could be subject to unannounced inspections by FDA and other governmental authorities, which could increase our costs of doing business. Specifically, manufacturers of medical devices must comply with various requirements of the FFDCA and its implementing regulations, including:

- the Quality System Regulations, labeling regulations,
- medical device reporting, or MDR, regulations,
- correction and removal regulations, and
- post-market surveillance regulations, which include restrictions on marketing and promotion.

We would need to continue to invest significant time and other resources to ensure ongoing compliance with FDA quality system regulations and other post-market regulatory requirements.

Our failure to comply with applicable FDA regulatory requirements, or our failure to timely and adequately respond to inspectional observations, could result in enforcement action by the FDA, which may include the following sanctions:

- fines, injunctions and civil penalties;
- recall or seizure or our products;
- operating restrictions, partial suspension or total shutdown of production;
- delays in clearance or approval, or failure to obtain approval or clearance of future product candidates or product modifications;
- restrictions on labeling and promotion;
- warning letters, fines, or injunctions;
- withdrawal of previously granted clearances or approvals; and
- criminal prosecution.

International sales of medical devices are subject to foreign government regulations, which vary substantially from country to country. The primary regulatory environment in Europe is that of the European Union (EU), which includes most of the major countries in Europe. Currently, 27 countries make up the EU. Other countries, such as Switzerland, have voluntarily adopted laws and regulations that mirror those of the EU with respect to medical devices. The EU has adopted numerous directives and standards regulating the design, manufacture, clinical trials, labeling and adverse event reporting for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout Europe.

Outside of the EU, regulatory approval needs to be sought on a country-by-country basis in order to market medical devices. Although there is a trend towards harmonization of quality system standards, regulations in each country may vary substantially which can affect timelines of introduction.

Employees

As of December 29, 2007, we had 131 employees, of which 68 work in research and development, 18 work in general and administrative, 21 work in manufacturing and 24 work in sales and marketing. None of our employees are represented by a labor union or are the subject of a collective bargaining agreement.

Property and Environmental Matters

We lease approximately 35,000 square feet of office and laboratory space at our headquarters in South San Francisco, California under leases and subleases that expire in March 2011, and 15,400 square feet of manufacturing and office space at our facility in Singapore under a lease that expires in October 2011. In addition, we lease office space in Tokyo and Osaka, Japan. We are in negotiations to extend and expand our lease relating to our Singapore facility and we believe that our existing office, laboratory and manufacturing space, together with additional space and facilities available on commercially reasonable terms, will be sufficient to meet our needs for at least the next two years.

Our research and development and manufacturing processes involve the controlled use of hazardous materials, including flammables, toxics, corrosives and biologics. Our research and manufacturing operations produce hazardous biological and chemical waste products. We seek to comply with applicable laws regarding the handling and disposal of such materials. Given the small volume of such materials used or generated at our facilities, we do not expect our compliance efforts to have a material effect on our capital expenditures, earnings and competitive position. However, we cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. We do not currently maintain separate environmental liability coverage and any such contamination or discharge could result in significant cost to us in penalties, damages and suspension of our operations.

Legal Proceedings

On June 4, 2008 we received a letter from Applied Biosystems, Inc., one of our competitors, asserting that our BioMark System for gene expression analysis infringes upon U.S. Patent No. 6,814,934, or the ’934 patent, and its European and Canadian counterparts owned by Applied Biosystems’ parent company, Applera Corporation. In response to this letter, on June 9, 2008, we filed suit against Applied Biosystems and Applera in the United States District Court for the Southern District of New York seeking declaratory judgments of non-infringement and invalidity of the ’934 patent. A response from Applied Biosystems and Applera is due September 30, 2008. The Court has yet to set a schedule for this litigation. Applied Biosystems has recently announced that it expects to be acquired by Invitrogen Corporation. This may make it more difficult for us to predict the direction of discussions and litigation among the parties. The ’934 patent is scheduled to expire in May 2011.

We have entered into an agreement with Applied Biosystems that provides for a stay of our proceedings against Applied Biosystems and Applera and provides further that neither party may initiate or expressly threaten to initiate any further patent litigation proceedings against the other during the term of the agreement. Either party may terminate the agreement and request that the stay be lifted anytime after September 20, 2008 by providing seven business days prior written notice to the other. The deadline for Applied Biosystems and Applera to respond to our complaint is extended to 14 calendar days after the lifting of the stay. If the agreement is not terminated sooner by one or both of the parties, the agreement will terminate on December 15, 2008.

Patent infringement suits can be expensive, lengthy and disruptive to business operations. We could incur substantial costs and divert the attention of our management and technical personnel in prosecuting our claims. There can be no assurance that we will prevail in our suit against Applied Biosystems and Applera or in our defense of any claims against us by Applied Biosystems or Applera. Applied Biosystems and Applera may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us, including treble damages and attorneys’ fees and costs in the event that we are found to be a willful infringer of the asserted patent or patents. In addition, we may incur significant costs and expenses as a result of our requirement to defend and indemnify some of our suppliers, distributors, customers and other partners as a result of such claims. In the event that Applied Biosystems is

successful in its claim of infringement against us, we may be required to obtain one or more licenses to the asserted patent, which we may not be able to obtain at a reasonable cost, if at all. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing the asserted patent or patents. This lawsuit or the failure to obtain any required licenses on favorable terms could prevent us from commercializing our BioMark products for gene expression, and the risk of a prohibition on the sale of any of our products could adversely affect our ability to grow and gain market acceptance for our products.

We are not engaged in any other material legal proceedings.

MANAGEMENT

Executive Officers and Directors

Our executive officers and directors, and their ages and positions as of June 28, 2008, are as set forth below:

Name	Age	Position
Gajus V. Worthington	38	President, Chief Executive Officer and Director
Vikram Jog	52	Chief Financial Officer
Robert C. Jones	53	Executive Vice President, Research and Development
William M. Smith	57	Vice President, Legal Affairs and General Counsel, Secretary
Mai Chan (Grace) Yow	49	Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore Pte. Ltd.
Samuel Colella(2),(3)	68	Director
Michael W. Hunkapiller, Ph.D(2)	59	Director
Elaine V. Jones, Ph.D.(1),(3)	53	Director
Kenneth Nussbacher(1),(2)	55	Director
John A. Young(1),(3)	76	Director

(1) Member of the Audit Committee
(2) Member of the Compensation Committee
(3) Member of the Nominating and Governance Committee

Executive Officers

Gajus V. Worthington is a Co-Founder of Fluidigm and has served as our President and Chief Executive Officer and a Director since our inception in June 1999. From May 1994 to April 1999, Mr. Worthington held various staff and management positions at Actel Corporation, a public semiconductor corporation. Mr. Worthington received a B.S. in Physics and an M.S. in Electrical Engineering from Stanford University.

Vikram Jog has served as our Chief Financial Officer since February 2008. From April 2005 to February 2008, Mr. Jog served as Chief Financial Officer for XDx, Inc., a molecular diagnostics company. From March 2003 to April 2005, Mr. Jog was a Vice President of Applera Corporation, a life science company, and Vice President of Finance for its related businesses, Celera Genomics and Celera Diagnostics. From April 2001 to March 2003, Mr. Jog was Vice President of Finance for Celera Diagnostics and Corporate Controller of Applera Corporation. Mr. Jog received a Bachelor of Commerce degree from Delhi University and an M.B.A. from Temple University. Mr. Jog is a member of the American Institute of Certified Public Accountants.

Robert C. Jones has served as our Executive Vice President, Research and Development since August 2005. From August 1984 to July 2005, Mr. Jones held various managerial and research and development positions at Applied Biosystems, a laboratory equipment and supplies manufacturer that is a division of Applera Corporation, including: Senior Vice President Research and Development from April 2001 to August 2005, Vice President and General Manager Informatics Division from 1998 to 2001, and Vice President PCR Business Unit from 1994 to 1998. Mr. Jones received a BSEE and an MSEE in Computer Engineering from the University of Washington.

William M. Smith has served as our Vice President, Legal Affairs and General Counsel as well as our Secretary since May 2000 and served as a Director from May 2000 to April 2008. Mr. Smith served as a partner at the law firm of Townsend and Townsend and Crew, LLP from 1985 through April 2008. Mr. Smith received a J.D. and an M.P.A. from the University of Southern California and a B.A. in Biology from the University of California, San Diego.

Mai Chan (Grace) Yow has served as our Vice President, Worldwide Manufacturing, and Managing Director, Fluidigm Singapore Pte. Ltd., our Singapore subsidiary, since March 2006. From June 2005 to March 2006,

Ms. Yow served as General Manager of Fluidigm Singapore Pte. Ltd. From August 2004 to May 2005, Ms. Yow served as Vice President Engineering (Asia) for Kulicke and Soffa, a public semiconductor equipment manufacturer. From March 1991 to July 2004, Ms. Yow served as Director, Assembly Operations, Plant Facilities and EHS, for National Semiconductor Singapore, a semiconductor fabrication subsidiary of National Semiconductor Corporation. Ms. Yow received a BE in Electronic Engineering from Curtin University, a Certificate in Management Studies from the Singapore Institute of Management and a Diploma in Electrical Engineering from Singapore Polytechnic.

Board of Directors

Samuel Colella has served as a member of our Board of Directors since July 2000. Mr. Colella is a managing director of Versant Ventures, a healthcare venture capital firm he co-founded in 1999, and has been a general partner of Institutional Venture Partners since 1984. Mr. Colella is a member of the Board of Directors of Alexza Pharmaceuticals, Inc., Genomic Health, Inc. and Jazz Pharmaceuticals, Inc. Mr. Colella received a B.S. in business and engineering from the University of Pittsburgh and an M.B.A. from Stanford University.

Michael Hunkapiller, Ph.D. has served as a member of our Board of Directors since August 2005. He has been a Partner at Alloy Ventures, a venture capital firm, since February 2004. From July 1983 to August 2004, he served in various managerial and research and development positions at Applied Biosystems, most recently as President, from March 1997 to August 2004. He received a B.S. in Chemistry from Oklahoma Baptist University and a Ph.D. in Chemical Biology from Caltech.

Elaine V. Jones, Ph.D. has been a member of our Board of Directors since October 2001. Since August 2003, she has been a general partner of EuclidSR Associates, L.P., which is the general partner of EuclidSR Partners, L.P., a venture capital fund that focuses on life sciences and information technology companies, and also a general partner of EuclidSR Biotechnology Associates, L.P., which is the general partner of Euclid Biotechnology Partners, L.P., a venture capital fund that focuses on the life sciences. Dr. Jones was an investment manager from June 1999 to September 2001, and was a Vice President from September 2001 to August 2003, for S.R. One, Limited, a venture capital subsidiary of SmithKline Beecham. Dr. Jones received a B.S. in Biology from Juniata College and received a Ph.D. in Microbiology from the University of Pittsburgh.

Kenneth J. Nussbacher has been a member of our Board of Directors since July 2003. Since 2000, Mr. Nussbacher has served as an Affymetrix Fellow, a non-executive employee position, at Affymetrix, Inc., a biotechnology company. From 1995 to 2000, Mr. Nussbacher was Executive Vice President of Affymetrix, Inc. and from 1995 to 1997, he was also Chief Financial Officer of Affymetrix. Prior to joining Affymetrix, Mr. Nussbacher was Executive Vice President for business and legal affairs of Affymax Technologies N.V. He received a B.S. from Cooper Union and a J.D. from Duke University. Mr. Nussbacher is also a member of the Board of Directors of Xenoport, a biopharmaceutical company.

Gajus V. Worthington is a Co-Founder of Fluidigm Corporation and has served as our President and Chief Executive Officer and a Director since our inception in June 1999.

John A. Young has been a member of our Board of Directors since March 2001. Mr. Young retired as President and Chief Executive Officer of Hewlett-Packard Company, a diversified electronics manufacturer, in October 1992, where he had served as President and Chief Executive Officer since 1978. Mr. Young received a B.S. in Electrical Engineering from Oregon State University and an M.B.A. from Stanford University. Mr. Young serves as a director of Affymetrix, Inc., Vermillion, Inc., a molecular diagnostics company, Perlegen Sciences, Inc., a drug development company, and Nanosys, Inc., a nanotechnology company.

Board Composition

Our Board of Directors is currently composed of six members, five of whom are independent within the meaning of the independent director guidelines of the NASDAQ Stock Market LLC. Immediately prior to this offering, our Board of Directors will be divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the

Annual Meeting of Stockholders to be held during the years 2009 for the Class I directors, 2010 for the Class II directors and 2011 for the Class III directors.

- Our Class I directors will be Elaine Jones and Michael Hunkapiller.
- Our Class II directors will be Samuel Colella and Kenneth Nussbacher.
- Our Class III directors will be John Young and Gajus Worthington.

Our amended and restated certificate of incorporation and bylaws provide that the number of our directors, which is currently six members, shall be fixed from time to time by a resolution of the majority of our Board of Directors. Each officer serves at the discretion of the Board of Directors and holds office until his successor is duly elected and qualified or until his or her earlier resignation or removal. There are no family relationships among any of our directors or executive officers.

The division of our Board of Directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change of control. See “Description of Capital Stock — Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws” for a discussion of other anti-takeover provisions found in our certificate of incorporation.

Board Committees

Our Board has an audit committee, a compensation committee and a nominating and governance committee, each of which has the composition and the responsibilities described below.

Audit Committee. Our audit committee oversees our corporate accounting and financial reporting process and assists the Board in monitoring our financial systems and our legal and regulatory compliance. Our audit committee will also:

- oversee the work of our independent auditors;
- approve the hiring, discharging and compensation of our independent auditors;
- approve engagements of the independent auditors to render any audit or permissible non-audit services;
- review the qualifications and independence of the independent auditors;
- monitor the rotation of partners of the independent auditors on our engagement team as required by law;
- review our financial statements and review our critical accounting policies and estimates;
- review the adequacy and effectiveness of our internal controls; and
- review and discuss with management and the independent auditors the results of our annual audit, our quarterly financial statements, and our publicly filed reports.

The members of our audit committee are Elaine Jones, Kenneth Nussbacher and John Young. Mr. Nussbacher is our acting audit committee chairman. Mr. Young was appointed to our audit committee on August 21, 2008. Our Board of Directors has concluded that the composition of our audit committee meets the requirements for independence under the current requirements of the NASDAQ Stock Market LLC and SEC rules and regulations. We believe that the functioning of our audit committee complies with the applicable requirements of the NASDAQ Stock Market LLC and SEC rules and regulations.

Compensation Committee. Our compensation committee oversees our corporate compensation programs. The compensation committee will also:

- review and recommend policy relating to compensation and benefits of our officers and employees;
- review and approve corporate goals and objectives relevant to compensation of our Chief Executive Officer and other senior officers;
- evaluate the performance of our officers in light of established goals and objectives;
- recommend compensation of our officers based on its evaluations; and

- administer the issuance of stock options and other awards under our stock plans.

The members of our compensation committee are Samuel Colella, Michael Hunkapiller and Kenneth Nussbacher. Mr. Colella is the chairman of our compensation committee. Our Board of Directors has determined that each member of our compensation committee is independent within the meaning of the independent director guidelines of the NASDAQ Stock Market LLC. We believe that the composition of our compensation committee meets the requirements for independence under, and the functioning of our compensation committee complies with, any applicable requirements of the NASDAQ Stock Market LLC and SEC rules and regulations.

Nominating and Governance Committee. Our nominating and governance committee oversees and assists our Board of Directors in reviewing and recommending nominees for election as directors. The nominating and governance committee will also:

- evaluate and make recommendations regarding the organization and governance of the Board and its committees;
- assess the performance of members of the Board and make recommendations regarding committee and chair assignments;
- recommend desired qualifications for Board membership and conduct searches for potential Board members; and
- review and make recommendations with regard to our corporate governance guidelines.

The members of our nominating and governance committee are Elaine Jones, John Young and Samuel Colella. Ms. Jones is the chairman of our nominating and governance committee. Our Board of Directors has determined that each member of our nominating and governance committee is independent within the meaning of the independent director guidelines of the NASDAQ Stock Market LLC.

Our Board of Directors may from time to time establish other committees.

Director Compensation

The following table sets forth information concerning compensation paid or accrued for services rendered to us by members of our Board of Directors for the fiscal year ended December 29, 2007. The table excludes Mr. Worthington and Mr. Smith, who are Named Executive Officers and did not receive any compensation from us in their roles as directors in the fiscal year ended December 29, 2007.

	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Bruce Burrows(3)		$ —	$ —	$ —	$ —	$ —
Samuel D. Colella		$ —	$ —	$ —	$ —	$ —
Hingge Hsu(3)		$ —	$ —	$ —	$ —	$ —
Michael Hunkapiller		$ —	$ —	$ —	$ —	$ —
Elaine V. Jones		$ —	$ —	$ —	$ —	$ —
S. Edward Torres(3)		$ —	$ —	$ —	$ —	$ —
Kenneth J. Nussbacher(2)		$ —	$ 72,885	$ —	$ 40,000	$ 112,885
John A. Young		$ —	$ —	$ —	$ —	$ —

(1) Amounts represent the aggregate compensation expense recognized by us for financial statement reporting purposes in fiscal 2007 related to grants of stock options, calculated in accordance with Financial Accounting Standards Board Statement of Financial Accounting Standards No. 123 (Revised 2004) ("SFAS 123(R)") without regard to estimated forfeitures. See Note 10 of Notes to Consolidated Financial Statements for a discussion of valuation assumptions made in determining the grant date fair value and compensation expense of our stock options.
(2) Mr. Nussbacher was granted an option to purchase 28,571 shares of common stock on December 28, 2007 at an exercise price of $8.40, with a grant date fair value of $143,151, computed in accordance with SFAS 123(R) and was paid fees of $40,000 for services rendered pursuant to a consulting agreement with us. This consulting agreement was terminated on April 14, 2008.
(3) Resigned from the Board of Directors on or prior to April 2008.

The aggregate number of shares subject to stock options outstanding at December 29, 2007 for each director is as follows:

Name	Aggregate Number of Stock Options Outstanding as of December 29, 2007
Bruce Burrows	14,285
Samuel D. Colella	—
Hingge Hsu	—
Michael Hunkapiller	—
Elaine V. Jones	—
Kenneth J. Nussbacher	57,142
S. Edward Torres	—
John A. Young	—

Our directors do not currently receive any cash compensation for their services as members of our Board of Directors or any committee of our Board of Directors.

Upon consummation of our initial public offering, non-employee directors will receive an annual retainer of $20,000. The chairman of the audit committee will be paid an additional annual retainer of $15,000. The chairman of the compensation committee will be paid an additional annual retainer of $10,000. The chairman of the nominating and governance committee will be paid an additional annual retainer of $5,000.

Our outside director equity compensation policy was adopted by our Board of Directors on January 29, 2008 and will become effective immediately upon the completion of this offering. The policy is intended to formalize the granting of equity compensation to our non-employee directors under the 2008 Equity Incentive Plan. Non-employee directors may receive all types of awards under the 2008 Equity Incentive Plan, except for incentive stock options, including discretionary awards not covered by the policy. The policy provides for automatic and nondiscretionary grants of nonstatutory stock options subject to the terms and conditions of the policy and the 2008 Equity Incentive Plan.

Under the policy, each non-employee director, who first becomes a non-employee director following the effective date of the first registration statement filed by us and declared effective with respect to any class of our securities, will be automatically granted a stock option to purchase 11,428 shares of our common stock on the date such person first becomes a non-employee director. A director who is an employee and who ceases to be an employee, but who remains a director will not receive such an initial award.

In addition, each non-employee director will be automatically granted an annual stock option to purchase 2,857 shares of our common stock on the date of each annual meeting beginning on the date of the first annual meeting that is held at least six months after such non-employee director received his or her initial award. In connection with the pricing of this initial public offering, each non-employee director serving on our Board at the time of this offering will be automatically granted an option to purchase 2,857 shares of our common stock at the price per share at which such common stock is sold in this offering.

The exercise price of all stock options granted pursuant to the policy will be equal to the fair market value of our common stock on the date of grant. The term of all stock options will be 10 years. Subject to the adjustment provisions of the 2008 Equity Incentive Plan, initial awards will vest as to 25% of the shares subject to such awards each anniversary of the date of grant, provided such non-employee director continues to serve as a director through each such date. Subject to the adjustment provisions of the 2008 Equity Incentive Plan, the annual awards, including such awards granted in connection with this offering, will vest monthly over a twelve month period following the date of grant, provided such non-employee director continues to serve as a director through such date.

The administrator of the 2008 Equity Incentive Plan in its discretion may change or otherwise revise the terms of awards granted under the outside director equity compensation policy.

In the event of a “change in control,” as defined in our 2008 Equity Incentive Plan, with respect to awards granted under the 2008 Equity Incentive Plan to non-employee directors, the participant non-employee director will fully vest in and have the right to exercise awards as to all shares underlying such awards and all restrictions on

awards will lapse, and all performance goals or other vesting criteria will be deemed achieved at 100% of target level and all other terms and conditions met.

Code of Business Conduct and Ethics

Prior to the completion of this offering, we expect to adopt a code of business conduct and ethics that is applicable to all of our employees, officers and directors.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the Board of Directors or compensation committee of any entity that has one or more executive officers serving on our Board of Directors or compensation committee.

Executive Compensation

Compensation Discussion and Analysis

Overview

We seek to have a compensation program that supports a team ethic among our management, fairly rewards executives for corporate performance and provides incentives for executives to meet or exceed our short and long term goals. The primary components of our compensation program are base salary, an annual incentive bonus plan, option awards and change of control arrangements. In addition, we provide our executive officers a variety of benefits that are available generally to all salaried employees. The compensation committee of our Board of Directors is responsible for evaluating the compensation of our executive officers and making recommendations to the Board of Directors. The independent members of the Board of Directors have final approval authority with respect to executive compensation.

Objectives and Principles of Our Executive Compensation

The primary goal of our executive compensation program is to ensure that we hire and retain talented and experienced executives that are motivated toward achieving or exceeding our short-term and long-term corporate goals. As a starting point, we believe that it is critical that our executive officers work together as a team and look beyond departmental lines to achieve overall corporate goals rather than focusing on individual departmental objectives. Our compensation philosophy is team oriented and our success dependent on what our management team can accomplish together. Therefore, we seek to provide the executive officers listed in the Summary Compensation table below, or our “named executive officers,” with comparable levels of base salary, bonuses and equity awards that are based largely on overall company performance.

For our fiscal year 2007, our named executive officers were Gajus Worthington, President and Chief Executive Officer, Richard DeLateur, our former Chief Financial Officer, Michael Lucero, our former Executive Vice President, Sales and Marketing, William Smith, Vice President, Legal Affairs and General Counsel, Robert Jones, our Executive Vice President, Research and Development, Grace Yow, Vice President, Worldwide Manufacturing and Managing Director, Fluidigm Singapore. Mr. DeLateur resigned as our Chief Financial Officer effective February 29, 2008 and Mr. Lucero resigned as our Executive Vice President, Sales and Marketing on March 14, 2008.

While the compensation level of Mr. Worthington, our Chief Executive Officer, is marginally higher than our other executive officers, his compensation has historically been based on our team-based compensation philosophy rather than on CEO compensation levels reported in market surveys of other companies in the life science industry.

We strongly believe that executive compensation should be directly linked to our performance. Our compensation program is designed so that a significant portion of the potential compensation of all of our executive officers is contingent on the achievement of our business objectives. In rewarding performance, we seek to reward

both short and long term performance. We expect our executive leadership to manage our company so that we achieve our annual goals while at the same time positioning us to achieve our longer term strategic objectives. Short term elements of compensation include annual salary reviews, stock option awards and incentive bonuses that are tied closely to achieving our corporate and, to a lesser extent, on achieving individual performance objectives. Long term elements have historically been limited to stock options with multi-year vesting designed to retain executives and align their long term interests with those of our stockholders.

We believe that hiring and retaining well performing executives is important to our ongoing success. While we review generally available surveys on executive compensation to confirm that our compensation decisions do not result in compensation levels that are dramatically different from other companies in our industry, the compensation committee has not in the past attempted to benchmark our executive compensation against any particular indices or salary surveys. While occasional review of market surveys is considered helpful, the compensation committee has historically placed substantially greater weight on internal considerations than on position-specific pay differences found in the market.

Except as described below, neither the Board of Directors nor the compensation committee has adopted any formal or informal policies or guidelines for allocating compensation between cash and non-cash compensation, among different forms of non-cash compensation or with respect to long and short term performance. The determination of the Board of Directors or compensation committee as to the appropriate use and weight of each component of executive compensation is subjective, based on their view of the relative importance of each component in meeting our overall objectives and factors relevant to the individual executive. Historically, our Board of Directors has focused significantly on the affordability of our compensation arrangements. As a result, when weighting forms of compensation, the Board of Directors and the compensation committee have historically placed greater emphasis on non-cash equity incentive compensation together with base salary. In 2006, the Board of Directors determined that our business was of sufficient maturity to permit us to establish a cash bonus plan.

As a publicly held company, we expect to periodically engage the services of a compensation consultant to assist us in further aligning our compensation philosophy with our corporate objectives. In particular, in order to attract and retain key executives, we may be required to modify individual executive compensation levels to remain competitive in the market for such positions.

Compensation Process and Compensation Committee

For 2007 and January 2008, the compensation committee consisted of Messrs. Colella and Nussbacher and Ms. Jones. Since January 29, 2008, the compensation committee has consisted of Messrs. Colella, Nussbacher and Hunkapiller, each of whom is an independent director under the rules of the NASDAQ Stock Market LLC and a “non-employee director” for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended.

The compensation committee makes recommendations to the Board regarding compensation structure, goals and individual compensation levels, which recommendations are considered for approval by the independent members of the Board. The compensation committee makes its compensation recommendations based on input from Mr. Worthington, our Chief Executive Officer, the judgment of its members based on their tenure and experience in our industry, and, starting with compensation levels for 2007, the advice of Compensia, Inc., an independent compensation consultant hired by the compensation committee in April 2007. The compensation committee has the responsibility of formulating, evaluating and recommending to the Board of Directors the compensation of our executive officers. Historically, our annual compensation review process has been initiated by Mr. Worthington who performs a review of the performance of each executive officer in the prior year and formulates proposals regarding the elements of compensation, corporate and individual goals and compensation levels for our executive officers, other than himself. Mr. Worthington’s proposals for compensation structure, goals and individual compensation levels are typically based on discussions with and directions from members of the compensation committee. Mr. Worthington does not prepare proposals or advise the compensation committee on his own compensation.

Compensation levels and mix for Mr. Worthington, our Chief Executive Officer, are recommended by the compensation committee based on the committee’s assessment of our overall corporate performance and Mr. Worthington’s contribution to that performance. Mr. Worthington does not participate in compensation

committee or Board deliberations regarding his own compensation. As with other members of our executive team, the compensation committee determines Mr. Worthington's compensation based on our achievement of corporate objectives and compensation levels of other members of our executive team, rather than attempting to tie Mr. Worthington's compensation to a specific percentile of CEO compensation reported in market compensation surveys.

Subject to any limitations or guidelines that may be adopted by the Board of Directors in the future, the compensation committee does have the authority to approve the grant of stock options or stock purchase rights to individuals eligible for such grants, including officers and directors. The compensation committee met three times during 2007 and we expect that it will meet at least quarterly during 2008.

The compensation committee has the authority under its charter to engage the services of outside advisors, experts and others for assistance. In April 2007, the compensation committee engaged Compensia, Inc., an outside consulting firm, to advise it on developing a principles based executive compensation strategy to help transition us from a privately held to a publicly held company and on matters relating to our equity compensation plans as a whole. Compensia reviewed our proposed 2007 compensation philosophy and compensation levels and provided advice regarding the suitability of our executive compensation structure for a company at our stage of development and the impact the structure was likely to have on executive performance and our ability to attract executive talent. Compensia did not prepare a formal report or recommend specific compensation levels. In 2008, we expect the compensation committee will engage an outside consulting firm to review more broadly our compensation practices and provide specific recommendations on executive compensation levels.

After setting compensation levels for our executive officers for 2007, but before making its recommendations to the Board, the compensation committee reviewed the 2006 Radford Biotechnology Survey by Aon Consulting and the 2006 Executive Compensation Survey for pre-IPO life science companies by Top Five Data Services, Inc. to confirm that the proposed mix and levels of compensation for our executive officers was not outside of the ranges reported for senior executive officers in general. The compensation committee did not benchmark or tie compensation levels for our executive officers to any particular compensation level provided by the companies included in these surveys.

Corporate and Individual Performance Goals

2007 Corporate Goals. Our corporate and individual performance goals for each year are formulated by the Board of Directors with input from the compensation committee and our Chief Executive Officer. For 2007, two corporate goals were established. The first related to our selling a certain number of IFC systems and reaching certain revenue targets, whether through system sales or collaboration agreements. The second goal related to our equity fund raising activity. The compensation committee believed attaining these goals would take a high level of executive performance and that such goals would be very challenging given the initial lack of market awareness of our products in 2007. The committee did not assign weights to these goals, except to treat them as equally important.

2007 Individual Goals. Individual goals for 2007 were as follows:

Named Executive Officer	2007 Individual Goals
Gajus Worthington, Chief Executive Officer	Achieving target levels of sales of our IFC systems and achieving target revenues, whether through system sales or collaboration agreements. Raising target levels of equity financing.
Richard DeLateur, former Chief Financial Officer	Preparing our finance organization for an initial public offering and public company status.
Michael Lucero, former Executive Vice President, Sales and Marketing	Launching our BioMark product and developing a strategy for new market penetration.
William Smith, Vice President, Legal Affairs and General Counsel	Maintaining and advancing our intellectual property position with respect to existing and new products.
Robert Jones, Executive Vice President, Research and Development	Deliver commercial genotyping applications, digital array applications and finish feasibility phase of additional products.
Mai Chan (Grace) Yow, Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	Achieving specified IFC manufacturing yields and output levels.

2008 Corporate Goals. For 2008, the Board, with the participation of the compensation committee and members of management, reassessed our corporate goals in light of the maturation of our business and commercialization of our products. Following this reassessment, the Board approved corporate goals that include achieving specified levels of product sales and product gross margins, completing an initial public offering and keeping expenses and cash outlays within the budget approved by the Board of Directors. The Board believes that the goals are attainable with a very high level of executive performance. The target sales level represents significant growth from 2007 levels and will be achieved only if we are able to increase market awareness of our products and expand our customer base. The targeted gross margin will require significant contributions from both our manufacturing and research and development groups. Given the uncertainty in global financial markets, our ability to complete an initial public offering was also uncertain at the time these corporate goals were established. Achieving our overall corporate goals while staying within our proposed budget will require strong fiscal discipline.

2008 Individual Goals. The goals for our individual executives in 2008 are as follows:

Named Executive Officer	2008 Individual Goals
Gajus Worthington, Chief Executive Officer	Achieving specified levels of product sales and product gross margins, completing an initial public offering and keeping expenses and cash outlays within the budget approved by the Board of Directors.
Vikram Jog, Chief Financial Officer	Ensuring accurate revenue recognition during each quarter, closing our books in an accurate and timely manner, completing our 2005, 2006 and 2007 audits and ensuring compliance with applicable financial and disclosure regulations of the Securities and Exchange Commission.
William Smith, Vice President, Legal Affairs and General Counsel	Maintaining our intellectual property position and supporting our initial public offering.
Robert Jones, Executive Vice President, Research and Development	Completing market-ready 96.96 BioMark IFC, loaders and readers for 96.96 and certain future applications.
Mai Chan (Grace) Yow, Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	Achieving overall IFC yields sufficient to achieve our gross margin goals, achieving specified yields on our new 96.96 Dynamic Array IFC, maintaining or improving 2007 quality levels for our IFC systems and ensuring on-time manufacture and delivery of IFCs and IFC systems.

Elements of Executive Compensation

Our executive compensation program consists of four main elements: base salary, an annual incentive bonus plan, option awards and change of control arrangements. The following is a discussion of each element.

Base Salary.

Prior to 2007, the Board and the compensation committee established base salaries based on a number of factors including the scope of responsibility of each individual and a desire to encourage a team ethic. In 2007, the compensation committee and the Board concluded that our company and its stockholders would be better served by placing greater emphasis on creating a team ethic among our executive officers and that a team ethic would be better supported if all executive officers received approximately the same salary. Therefore, in May 2007, the compensation committee recommended and the Board approved a raise in the base annual salaries of Richard DeLateur, Michael Lucero, William Smith and Robert Jones to $265,000 effective February 1, 2007, which represented a 20% increase for Mr. DeLateur, a 2.2% increase for Mr. Lucero, a 16% increase for Mr. Smith and a 6% increase for Mr. Jones, based on their salaries for 2006. This salary increase was based upon the compensation committee's assessment of the life science industry in the San Francisco Bay Area gathered from the active involvement of committee members as investors in such industry and the committee's conclusion that competition for executives in our industry was increasing. Ms. Yow's salary was set at SG$307,224, or US$200,000 using the exchange rate at the time such salary was set, to reflect the lower cost of living in Singapore where she is based. At the same time, the compensation committee also recommended that Mr. Worthington's salary be increased by 5% to $283,920 based on the factors described above. However, Mr. Worthington requested that this salary increase be deferred until his performance during 2007 could be assessed. In December 2007, the compensation committee reviewed Mr. Worthington's overall performance during the year. In particular, it noted that Mr. Worthington had fully met his individual goal for equity financing as we had raised more money than had been targeted and had partially met his individual goal for revenue, as we had strong sales performance although the target revenue level was not achieved. The compensation committee therefore recommended and the Board approved the 5% raise that had been originally proposed for Mr. Worthington. The raise was made retroactive to February 15, 2007 so that it would be effective as of the same date as the raises for all the other executive officers.

In January 2008, the compensation committee reviewed 2008 base salaries in light of general market conditions in the San Francisco Bay Area life science industry. The compensation committee concluded that competition for executive talent remained strong as a result of the solid economic performance of the industry and the region overall, the continued high level of investment by venture capital firms in new and existing life science companies and the specialized skills and experiences required to manage life science companies. The compensation committee's assessment of general market conditions in the life science industry, and the life science industry in the San Francisco Bay Area in particular, was based on the experience of the committee members who were and are actively involved in venture capital investing in such industry and area. The compensation committee did not rely on any formal compensation survey data in making its assessment. The compensation committee therefore recommended and the Board approved an approximate raise of 4.0% for all executive officers other than Messrs. DeLateur and Lucero, who were expected to be leaving Fluidigm in early 2008. This approximate 4.0% raise was applied to Ms. Yow's salary in Singapore dollars, resulting in an increase of SG$12,289. As a result, the 2008 base salary for Mr. Smith and Mr. Jones was increased to $275,600, the 2008 base salary for Ms. Yow was increased to SG$319,513, or US$232,002 on the date of the increase, and the 2008 salary for Mr. Worthington was increased to $294,840. These salary increases became effective on February 1, 2008.

In January 2008, we entered into an offer letter with Vikram Jog, our Chief Financial Officer that provides for him to receive a base salary of $278,000 per year and a signing bonus of $20,000. The Board approved this departure from our standard base salary and bonus practice for executive officers based on several factors, including his unique qualifications, the need to induce him to leave his existing employment, his base salary at his previous employer and our need to fill the position as soon as possible.

Incentive Bonus Plan.

For 2007, the compensation committee and the Board established a bonus structure for all named executive officers that provided for performance bonuses of up to 35% of base salary. 80% of the performance bonus was payable based upon our reaching our corporate goals described above, with each corporate goal receiving equal weighting and the remaining 20% payable to each executive based on the executive's attainment of his or her individual performance goals described above. Payment of performance bonuses was allocated among corporate and individual goals in this manner in recognition of our compensation philosophy in which the compensation committee sought to incentivize executive officers to look beyond their individual departmental goals and work with other executive officers to achieve our overall corporate goals. The compensation committee and Board concluded that the corporate goals portion of the bonus would not be payable if the goals were less than 80% attained, based on the average percentage completion of all such goals, and would be paid in full if the goals were 100% attained. The compensation committee retained discretion to determine the portion of the bonus that would be paid if the corporate goals were achieved at a level between 80% and 100%. The compensation committee also retained the discretion to change the bonus structure and the bonus payment amounts as it considered appropriate.

In January 2008, the compensation committee concluded that the first 2007 corporate goal described above had been partially met and the second 2007 corporate goal had been fully met, but that taken together the 80% threshold had not been attained. As a result, no 2007 bonuses were paid to our executive officers with respect to achievement of corporate goals.

The compensation committee also considered the achievement of 2007 individual performance goals in January 2008 and concluded that Mr. Smith had achieved his goals by maintaining and advancing our intellectual property position with respect to existing and new products. The Board awarded Mr. Smith 100% of his individual performance bonus of $18,550. The compensation committee concluded that Mr. Jones achieved his 2007 individual goals of delivering a commercial genotyping application and digital array applications and awarded him his maximum individual performance bonus of $18,550. The compensation committee concluded that Ms. Yow had achieved her 2007 individual goals by achieving specified IFC manufacturing yields and output levels in 2007 and the Board awarded Ms. Yow 100% of her individual performance bonus of $14,000. The compensation committee concluded that Mr. Worthington had partially achieved his 2007 individual performance goals of achieving target levels of IFC system sales and revenue and raising target levels of equity financing, and the Board awarded Mr. Worthington a partial bonus of $14,175. No other individual performance bonuses were awarded to our named executive officers for 2007.

For 2008, the compensation committee and Board have approved the same bonus structure and potential bonus percentages as for 2007.

In making recommendations regarding and approving compensation with respect to 2007, the compensation committee and the Board have not exercised their discretion to either award compensation absent attainment of relevant performance goals or to reduce the size of an award or payout following the attainment of relevant performance goals. We intend for the bonus plan to provide a significant portion of an executive's potential compensation. It is designed to help ensure that executives are focused on our near-term performance and on working together to achieve key corporate objectives. We expect that corporate and individual goals will be reviewed each year and adjusted to reflect changes in our stage of development, competitive position and corporate objectives.

Option Awards.

We grant options to new executives upon the commencement of their employment and on an annual basis make additional grants to existing executives based on our overall corporate performance, individual performance and the executives' existing option grants and equity holdings. We believe that option awards are an effective means of aligning the interests of executives and stockholders, rewarding executives for our achieving success over the long term and providing executives an incentive to remain with us. Most option grants to our named executive officers provide the holder with the right to exercise the option and purchase shares prior to vesting, subject to our right to repurchase unvested shares pursuant to the terms of our restricted stock purchase agreement.

In 2007, the compensation committee redesigned our option granting policy in light of the shift in our compensation philosophy toward team-based compensation. The compensation committee concluded that the number of shares that vest each year for each executive should be relatively consistent and should be comparable to the number of shares that vest for other executives. The committee determined that each executive should vest in approximately 20,000 shares per year over a four year period. For each executive, the exact number of shares that vest in any year would be subject to adjustment either upward or downward by up to 10,000 shares based on the executive's performance relative to the corporate goals and his or her individual performance goals. The compensation committee's selection of 20,000 shares as the target number of shares to vest annually for each executive officer was based on the committee's determination that such number of shares would provide meaningful compensation to our executive officers. The committee did not rely on compensation surveys or other third party sources in arriving at the 20,000 annual vesting target. In addition to this annual vesting target and the possible adjustment of actual vesting amounts by up to 10,000, the compensation committee retained the authority to approve additional option grants to executive officers who demonstrated exceptional performance in a given year.

As a result of our adoption of this new approach to equity compensation, our grants in 2007 were primarily intended to regularize each executive's vesting schedules to approximately 20,000 per year. As a result, certain executives received option grants where shares were immediately vested while others received grants where the vesting occurs largely three or four years from the grant of the date. The number of shares vesting for each such officer in 2007 were 19,523 shares for Mr. Worthington, 53,570 shares for Mr. DeLateur, 31,738 shares for Mr. Lucero, 21,428 for Mr. Smith, 28,571 for Mr. Jones and 27,856 for Ms. Yow. Variations in the number of shares vested in 2007 for these officers was the result of vesting under options granted prior to 2007 rather than intentional variation in 2007 grants on the part of the compensation committee. In the future, once the vesting of existing options are normalized at approximately 20,000 shares per year, we intend for executives to receive additional grants that vest only in the fourth year following the date of their grant. We also expect to reconsider the target share amount each year and may in the future consider granting restricted stock as a form of equity compensation.

For 2008, the compensation committee did not alter the target amount of annual vesting for any executive. To give effect to this target annual vesting rate, the committee recommended and the Board approved grants of options to purchase 20,000 shares each to Mr. Jones, Mr. Smith, Mr. Worthington and Ms. Yow. These options vest fully on December 31, 2011, subject to continued service through the vesting date. In addition, the compensation committee recommended that additional discretionary option grants be made to Mr. Jones, Mr. Smith, Mr. Worthington and Ms. Yow for their exceptional performance in 2007. Mr. Smith and Mr. Worthington received a fully-vested option to purchase 20,000 shares and Mr. Jones and Ms. Yow received a fully-vested option to purchase 11,428 shares. These grants were issued separately from the annual grants and were not considered an adjustment to the annual grants. Accordingly, the 10,000 share adjustment limit for annual grants did not apply.

As discussed above, the compensation committee retains the discretion to grant additional options to executive officers as a reward for exceptional performance. In addition, the committee may decide to grant options that vest upon the achievement of certain performance goals. Finally, the committee is exploring the desirability of other forms of equity based compensation including restricted stock grants.

In January 2008, the Board approved amendments to our 1999 Stock Option Plan to permit the use of performance based vesting in connection with equity grants under the plan. The amendment provided the Board and compensation committee with the ability to grant options or other equity awards under the plan that vest upon the achievement of specified milestones or goals. These amendments were made to enhance the ability of the Board and compensation committee to closely align equity compensation with the achievement of corporate or individual goals.

Our Board adopted our 2008 Equity Incentive Plan in January 2008 and we expect our stockholders will approve it prior to the completion of this offering. Subject to stockholder approval, the 2008 Equity Incentive Plan is effective upon its adoption by our Board, but is not expected to be utilized until after the completion of this offering. Our 2008 Equity Incentive Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants. Our Board and compensation committee are evaluating the costs and benefits of the various forms of equity compensation issuable under the 2008 plan and may elect to use restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares in the future to further align the interests of our management and stockholders and to manage the financial statement impact of such forms of equity compensation.

In January 2008, the compensation committee participated in the negotiation of a compensation package for Vikram Jog, our Chief Financial Officer, in which the compensation committee agreed to grant Mr. Jog compensation that exceeded our standard compensation package for the named executive officers. As indicated above, the compensation committee approved this package based on Mr. Jog's unique qualifications, our need to fill this position and the need to induce Mr. Jog to leave his then current employer. In February 2008, the compensation committee approved the grant of the following options to Mr. Jog in February 2008 under our 1999 Stock Option Plan:

Number of Shares	Standard Vesting	Accelerated Vesting if Milestones Met	Performance Milestones
142,857	25% on first anniversary of the vesting commencement date, and 1/48 per month thereafter	n/a	n/a
14,285	100% on December 31, 2011	100% upon achievement of Milestones prior to December 31, 2008	(1) Revenue recognition - no material changes upon quarterly reviews and annual audit; (2) Accurate and timely closing of books and reporting (timeliness as required by investors and SEC); (3) SEC and Sarbanes-Oxley compliance, as needed; and (4) Produce audited financial statements for 2005, 2006 and 2007 (and the first quarter of 2008, if necessary) to enable the filing of a Form S-1 registration statement.
14,285	25% on first anniversary of the vesting commencement date and 1/48 per month thereafter	100% upon achievement of Milestones prior to December 31, 2008	(1) Achievement of target revenues; (2) Achievement of target margins for 2008; (3) Completion of an initial public offering in 2008; and (4) Compliance with 2008 budget for expenses and cash outflows.

In light of the performance based option grants made to Mr. Jog and our team-based approach to executive compensation, the compensation committee recommended to the Board, and the Board approved similar grants for all other named executive officers other than Mr. Worthington. Thus, Mr. Jones, Mr. Smith and Ms. Yow each received two additional options to purchase 14,285 shares on April 24, 2008. The first option becomes fully vested on the earlier of December 11, 2011 or, with respect to each officer, December 31, 2008 if that officer meets his or her individual goals for 2008. The second option vest with respects 25% of the shares subject to the option on February 1, 2009 and 1/48th of the shares each month thereafter; provided that the option becomes fully vested on December 31, 2008 if the corporate goals for 2008 are achieved.

Employment and Severance Agreements.

In February 2008, we entered into Employment and Severance Agreements with each of our named executive officers that provide for specified payments and benefits if the officer's employment is terminated without cause, or if the officer's employment is terminated without cause or for good reason within 12 months following a change of control. The terms of these agreements are described under "Potential Payments Upon Termination or Change of

Control." We adopted these arrangements because we recognize that we will from time to time consider the possibility of an acquisition by another company or other change of control transaction and that such consideration can be a distraction to our executive officers and can cause such officers to consider alternative employment opportunities. Accordingly, the Board concluded that it is in the best interests of our company and its stockholders to provide executives with certain severance benefits upon termination of employment without cause or for good reason following a change of control. Our Board determined to provide such executives with certain severance benefits upon their termination of employment without cause outside of the change of control context in order to provide executives with enhanced financial security and incentive to remain with our company. In addition, we believe that providing for acceleration of options if an officer is terminated following a change of control transaction aligns the executive officer's interest more closely with those of other stockholders when evaluating the transaction rather than putting the officer at risk of losing the benefits of those equity incentives.

In determining the amount of cash payments, benefits coverage and acceleration of vesting to be provided to officers upon termination prior to a change of control or within 12 months following a change of control, our Board considered the following factors:

- the expected time required for an officer to find comparable employment following a termination event;
- feedback received from potential candidates for officer positions at our company as to the level of severance payments and benefits they would require to leave other employment and join our company;
- in the context of a change of control, the amount of vesting acceleration that would align the officer's interests more closely with the interests of stockholders when considering a potential change of control transaction; and
- the period of time following a change of control during which management positions are evaluated and subject to a heightened risk of elimination.

In addition, all outstanding options granted to our employees will become fully vested upon a change of control if the options are not assumed by the acquiring company.

In connection with the resignation of Mr. Lucero, our former Vice President of Sales and Marketing, on March 22, 2008, we entered into a Settlement Agreement and General Release of Claims with Mr. Lucero that provided for mutual releases of us and Mr. Lucero, our continued payment of Mr. Lucero's salary and health insurance premiums through July 2008 and payment of an additional $144,000 ($90,000 net applicable payroll withholding taxes) to Mr. Lucero. The amount and timing of payments to Mr. Lucero under this agreement were the result of negotiations between us and Mr. Lucero, with the involvement of the compensation committee. The compensation committee concluded that this agreement was in the best interests of our company in reaching an amicable separation with Mr. Lucero.

In connection with Mr. DeLateur's resignation, we entered into a consulting agreement dated February 29, 2008. Under the consulting agreement, we agreed to pay Mr. DeLateur $200 per hour for performing various consulting services, provided that Mr. DeLateur work no more than five hours per week without our written authorization. We entered into this arrangement to ensure that Mr. DeLateur would be available as needed to ensure an orderly transition to our new Chief Financial Officer, Mr. Jog.

Other Benefits.

Executive officers are eligible to participate in all of our employee benefit plans, such as medical, dental, vision, group life, disability, and accidental death and dismemberment insurance and our 401(k) plan, in each case on the same basis as other employees, subject to applicable law. We also provide vacation and other paid holidays to all employees, including our executive officers, which we believe are comparable to those provided at peer companies.

CEO Loan and Stock Repurchase

On January 20, 2004, we entered into an Employee Loan Agreement, Secured Promissory Note and Stock Pledge Agreement with Mr. Worthington pursuant to which we loaned Mr. Worthington $250,000 at an interest rate

of 3.52% per annum. The loan was secured by the pledge of 238,095 shares of our common stock held by Mr. Worthington. On April 10, 2008, Mr. Worthington repaid the loan in full in accordance with Section 2.2(d) of the note by exchanging shares of our common stock held by Mr. Worthington to us at the fair market value of such stock, which was determined by the Board of Directors to be $11.16 per share. The note and Mr. Worthington's loan were repaid in full and cancelled in exchange for 25,975 shares of our common stock which Mr. Worthington transferred to us pursuant to the terms of a repurchase agreement dated April 10, 2008. This loan repayment and share cancellation transaction were approved by the Board based on its determination that we received full and fair consideration for the cancellation of the loan and that the cancellation of the loan was in the best interests of our company and its stockholders.

Accounting and Tax Considerations

Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code, places a limit of $1,000,000 on the amount of compensation that we may deduct as a business expense in any year with respect to our Chief Executive Officer and certain of our highly paid executive officers. We can, however, preserve the deductibility of certain performance-based compensation in excess of $1,000,000 if the conditions of Code Section 162(m) are met. Under applicable tax guidance for newly-public companies, the deduction limitation generally will not apply to compensation paid pursuant to any plan or agreement that existed before the company became publicly held. In addition, compensation provided by newly-public companies through the first stockholder meeting to elect directors after the close of the third calendar year following the year in which the initial public offering occurs, or earlier upon the occurrence of certain events (e.g., a material modification of the plan or agreement under which the compensation is granted), will not be included in for purposes of the Code Section 162(m) limit provided the arrangement is adequately described in this prospectus. Accordingly, we believe that deductibility of all income recognized by executives pursuant to equity compensation granted by us prior to this offering, as well as any equity compensation granted by us under the 2008 Equity Incentive Plan following this offering through the expiration of the reliance period, will not be limited by Code Section 162(m). While the compensation committee cannot predict how the deductibility limit may impact our compensation program in future years, the compensation committee intends to maintain an approach to executive compensation that strongly links pay to performance. While the compensation committee has not adopted a formal policy regarding tax deductibility of compensation paid to our executive officers, the compensation committee intends to consider tax deductibility under Section 162(m) as a factor in compensation decisions.

Code Section 409A imposes additional taxes on certain non-qualified deferred compensation arrangements that do not comply with its requirements. These requirements regulate an individual's election to defer compensation and the individual's selection of the timing and form of distribution of the deferred compensation. Code Section 409A generally also provides that distributions of deferred compensation only can be made on or following the occurrence of certain events (i.e., the individual's separation from service, a predetermined date, a change in control, or the individual's death or disability). For certain executives, Code Section 409A requires that such individual's distribution commence no earlier than six (6) months after such officer's separation from service. We have and will continue to endeavor to structure our compensation arrangements to comply with Code Section 409A so as to avoid the adverse tax consequences associated therewith.

Summary Compensation Table

The following table presents information concerning the total compensation of our Chief Executive Officer, Chief Financial Officer and our four other most highly compensated officers during the last fiscal year (the "Named Executive Officers") for services rendered to us in all capacities for the fiscal year ended December 29, 2007:

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)(6)	Total ($)
Gajus V. Worthington President and Chief Executive Officer	2007	$ 270,400	$ 30,672	$ 14,175	$ 315,247
Richard A. DeLateur(2) Former Chief Financial Officer	2007	$ 241,375	$ 71,525	0	$ 312,900
Robert C. Jones(3) Executive Vice President Research and Development	2007	$ 247,502	$ 15,577	$ 18,550	$ 281,629
Michael Y. Lucero(4) Former Executive Vice President, Sales and Marketing	2007	$ 264,517	$ 14,369	0	$ 278,886
William M. Smith Vice President, Legal Affairs and General Counsel	2007	$ 261,983	$ 35,191	$ 18,550	$ 315,724
Mai Chan (Grace) Yow(5) Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	2007	$ 208,044	$ 84,327	$ 14,000	$ 306,371

(1) Amounts represent the aggregate expense recognized for financial statement reporting purposes for fiscal 2007 calculated in accordance with SFAS No. 123(R) without regard for estimated forfeitures. See Note 2 of Notes to Consolidated Financial Statements for a discussion of assumptions made in determining the grant date fair value and compensation expense of our stock options.
(2) Mr. DeLateur resigned effective February 29, 2008. From August 16, 2007 to December 31, 2007, Mr. DeLateur worked for us on a part-time basis.
(3) Mr. Jones took unpaid leave during a portion of 2007.
(4) Mr. Lucero resigned effective March 22, 2008. See "Employment and Severance Agreements."
(5) Ms. Yow's salary was converted to US$ using the exchange rate as of December 29, 2007.
(6) The amounts in this column represent total performance-based bonuses earned for service rendered during fiscal 2007 under our incentive bonus plan. Under our incentive bonus plan, each executive was eligible to receive a cash bonus of up to 35% of his or her base salary based on achievement of certain corporate goals and certain individual performance goals. Please see "Incentive Bonus Plan" under "Compensation Discussion and Analysis" above for additional information regarding our fiscal 2007 cash bonuses.

Grants of Plan-Based Awards

The following table presents information concerning grants of plan-based awards to each of the Named Executive Officers during the fiscal year ended December 29, 2007.

Grants of Plan-Based Awards

Name	Grant Date	Estimated Payouts Under Non-Equity Incentive Plan Awards Target ($)	All Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)(8)	Grant Date Fair Value of Stock and Option Awards(7)
Gajus V. Worthington	5/8/2007		44,285(1)	$ 4.76	$ 131,533
	4/24/2007	$ 99,225			
Richard DeLateur	5/8/2007		39,999(2)	$ 4.76	$ 115,674
	4/24/2007	$ 92,750			
Robert C. Jones	5/8/2007		22,856(6)	$ 4.76	$ 69,284
	4/24/2007	$ 92,750			
Michael Y. Lucero	5/8/2007		7,142(3)	$ 4.76	$ 21,753
	4/24/2007	$ 92,750			
William M. Smith	5/8/2007		33,714(4)	$ 4.76	$ 101,119
	4/24/2007	$ 92,750			
Mai Chan (Grace) Yow	5/8/2007		56,857(5)	$ 4.76	$ 165,255
	4/24/2007	$ 70,000			

(1) 2,857 of the shares subject to this grant were vested as of the grant date, 2,857 shares vested on February 1, 2008, 18,571 shares vest on February 1, 2009, and 20,000 shares vest on February 1, 2010.
(2) 19,999 of the shares subject to this grant were vested as of the grant date and 20,000 shares vest on February 1, 2010.
(3) All of the shares subject to this grant vest on February 1, 2010.
(4) 2,857 of the shares subject to this grant vested on February 1, 2008, 10,857 shares vest on February 1, 2009, and 20,000 shares vest on February 1, 2010.
(5) 14,285 of the shares subject to this grant were vested as of the grant date, 14,285 shares vested on February 1, 2008, 11,428 shares vest on February 1, 2009, and 16,859 shares vest on February 1, 2010.
(6) 2,856 of the shares subject to this grant vest on February 1, 2009 and 20,000 shares vest on February 1, 2010.
(7) Amounts represent the aggregate grant date fair value of stock options granted in fiscal 2007, calculated in accordance with SFAS No. 123(R) without regard to estimated forfeitures. See Note 2 of Notes to Consolidated Financial Statements for a discussion of assumptions made in determining the grant date fair value of our stock options.
(8) Our shares of common stock were not publicly traded during the 2007 fiscal year; our Board of Directors in good faith determined the fair market value on the date of grant.

Outstanding Equity Awards at Fiscal Year-End

The following table presents certain information concerning equity awards held by the Named Executive Officers at the end of the fiscal year ended December 29, 2007.

Outstanding Equity Awards at Fiscal Year-End

	Option Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable[1]	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Gajus V. Worthington	57,142(2)	0	$ 1.96	01/17/2015
	44,285(3)	0	$ 4.76	05/08/2017
Richard DeLateur	27,142(4)	67,141(6)	$ 1.96	12/20/2015
	39,999(5)	0	$ 4.76	05/08/2017
Robert C. Jones	114,285(22)	0	$ 1.96	08/03/2015
	22,856(23)	0	$ 4.76	05/08/2017
Michael Y. Lucero	85,714(7)	0	$ 1.05	12/04/2011
	51,428(8)	0	$ 1.40	04/18/2014
	28,571(9)	0	$ 1.05	07/15/2013
	42,857(10)	0	$ 1.96	01/17/2015
	20,000(11)	0	$ 2.90	08/14/2016
	7,142(12)	0	$ 4.76	05/08/2017
William M. Smith	11,142(13)	0	$ 1.05	12/04/2011
	50,000(14)	0	$ 1.05	07/15/2013
	12,857(15)	0	$ 1.40	04/18/2014
	28,571(16)	0	$ 1.96	01/17/2015
	28,571(17)	0	$ 2.90	08/14/2016
	33,714(18)	0	$ 4.76	05/08/2017
Mai Chan (Grace) Yow	42,857(19)	0	$ 1.96	08/03/2015
	3,571(20)	10,714	$ 2.90	09/26/2016
	14,285(21)	42,572	$ 4.76	05/08/2017

(1) Unless otherwise noted, all option grants may be exercised pursuant to a restricted stock purchase agreement prior to vesting; any shares purchased prior to vesting are subject to a right of repurchase in our favor in the event the individual ceases to provide services for any reason which right lapses in accordance with the vesting schedule of the option.

(2) These stock options were granted on January 18, 2005 and vest over 4 years. 20% of the shares subject to the stock option vest one year after grant. 1.667% of the shares vest at the end of each monthly period during the subsequent year and 2.5% of the shares vest at the end of each monthly period thereafter.

(3) 2,857 of the shares subject to this grant were vested as of May 8, 2007, the grant date, 2,857 shares vested on February 1, 2008, 18,571 shares vest on February 1, 2009, and 20,000 vest on February 1, 2010.

(4) These stock options were granted on December 21, 2005 and vest over 4 years. 25% of the shares vest one year after grant and 2.083% of the shares vest at the end of each monthly period thereafter.

(5) 19,999 of the shares subject to this grant were vested as of May 8, 2007, the grant date, and 20,000 shares vest on February 1, 2010.

(6) This option may not be exercised prior to vesting.

(7) These stock options were granted on December 4, 2001 and vest over 4 years. 25% of the shares vest one year after grant and 2.083% of the shares vest at the end of each monthly period thereafter.

(8) These stock options were granted on April 19, 2004 and vest over 4 years at the rate of 2.083% of the shares per month.

(9) These stock options were granted on July 16, 2003 and vest over 4 years at the rate of 2.083% of the shares per month.

(10) These stock options were granted on January 18, 2005 and vest over 4 years. 20% of the shares subject to the stock option vest one year after grant. 1.667% of the shares vest at the end of each monthly period during the subsequent year and 2.5% of the shares vest at the end of each monthly period thereafter.

(11) These stock options were granted on August 15, 2006 vest over 4 years. 1.67% of the shares vest each month for the first two years and 2.5% of the shares vest each month in the final two years.

(12) These stock options were granted on May 8, 2007. All of the shares subject to this grant vest on February 1, 2010.

(13) These stock options were granted on December 4, 2001 and vest over 4 years at the rate of 2.083% of the shares per month.

(14) These stock options were granted on July 16, 2003 and vest over 4 years at the rate of 2.083% of the shares per month.

(15) These stock options were granted on April 19, 2004 and vest over 4 years at the rate of 2.083% of the shares per month.

(16) These stock options were granted on January 18, 2005 and vest over 4 years. 20% of the shares subject to the stock option vest one year after grant. 1.667% of the shares vest at the end of each monthly period during the subsequent year and 2.5% of the shares vest at the end of each monthly period thereafter.

(17) These stock options were granted on August 15, 2006 vest over 4 years. 1.67% of the shares vest each month for the first two years and 2.5% of the shares vest each month in the final two years.

(18) These stock options were granted on May 8, 2007. 2,857 of the shares subject to this grant vested on February 1, 2008, 10,857 shares vest on February 1, 2009, and 20,000 shares vest on February 1, 2010.

(19) These stock options were granted on August 3, 2005 and vest over 4 years. 25% of the shares vest one year after grant and 2.083% of the shares vest at the end of each monthly period thereafter.

(20) These stock options were granted on September 27, 2006. These stock options vest over 4 years in monthly increments. During the first two years, 1.67% of the shares vest each month and during the final two years, 2.5% of the shares vest each month.

(21) 14,285 of the shares subject to this grant were vested as of May 8, 2007, the grant date, 14,285 shares vested on February 1, 2008, 11,428 shares vest on February 1, 2009, and 16,859 shares vest on February 1, 2010.

(22) This option was granted on August 3, 2005 and vests over 4 years. Twenty-five percent of the shares vest one year after grant and 2.083% of the shares vest each month thereafter.

(23) These stock options were granted on May 8, 2007. 2,856 of the shares subject to this grant vest on February 1, 2009, and 20,000 shares subject to this grant vest on February 1, 2010.

Employment Agreements and Offer Letters

Richard A DeLateur. We entered into a consulting agreement dated February 29, 2008 with Richard A. DeLateur, our former Chief Financial Officer. Under the consulting agreement, we agreed to pay Mr. DeLateur $200 per hour for performing various consulting services, provided that Mr. DeLateur shall work no more than five hours per week without our written authorization. The consulting agreement terminated on May 17, 2008.

Michael Y. Lucero. We entered into to a Settlement Agreement and General Release of Claims effective March 30, 2008 with Michael Y. Lucero, our former Executive Vice President of Sales and Marketing. Under the settlement agreement, we agreed, in exchange for a general release of all claims and other customary terms and conditions, (i) to pay Mr. Lucero on each pay day through July 15, 2008 an amount equal to what he would have received on that pay day based on an annual base salary of $265,000 and (ii) to reimburse Mr. Lucero for costs of coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, or COBRA, that are incurred during April, May, June and July of 2008, in an amount no greater than the amount we contributed on Mr. Lucero's behalf for February 2008. We also agreed to make a one time payment to Mr. Lucero of $144,000 ($90,000 net of applicable payroll withholding taxes).

Vikram Jog. We are a party to an offer letter dated January 29, 2008, with Vikram Jog, our Chief Financial Officer. Under the offer letter, we employ Mr. Jog on an at-will basis for no specified term and agreed to pay Mr. Jog an annual base salary of $278,000, which continues to be his base salary. We also agreed to pay Mr. Jog a signing bonus of $20,000 pursuant to his offer letter. Pursuant to the offer letter, we granted Mr. Jog an initial options to purchase a total of 171,428 shares of our common stock.

Potential Payments Upon Termination or Change of Control

In February 2008, we entered into employment and severance agreements with Gajus V. Worthington, William M. Smith, Mai Chan (Grace) Yow, Robert C. Jones and Vikram Jog, which require us to make payments if the named executive officer's employment with us is terminated in certain circumstances.

Pursuant to our employment and severance agreements with our named executive officers, a "change of control" is defined as the occurrence of the following events:

- any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended, is or becomes the "beneficial owner," as such term is defined in Rule 13d-3 under said Act, directly or indirectly, of our securities representing 50% or more of the total voting power represented by our then outstanding voting securities;
- a change in the composition of our Board occurring within a two-year period, as a result of which fewer than a majority of our directors are "incumbent directors," which term is defined as either (i) our directors as of the execution date of the relevant agreement or (ii) directors who are elected, or nominated for election, to our Board with the affirmative votes of at least a majority of the incumbent directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of our directors);
- the date of the consummation of our merger or consolidation with any other corporation that has been approved by the our stockholders, other than a merger or consolidation that would result in our voting securities outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the total voting power represented by our voting securities or such surviving entity outstanding immediately after such merger or consolidation, or our stockholders approve a plan of our complete liquidation; or
- the date of the consummation of the sale or disposition by us of all or substantially all of our assets.

Pursuant to our employment and severance agreements with our named executive officers, "cause" is defined as:

- an act of dishonesty in connection with a named executive officer's responsibilities as an employee;
- a conviction of, or plea of *nolo contendere* to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude;
- gross misconduct;
- an unauthorized use or disclosure of any of our proprietary information or of any other party to whom he or she owes an obligation of nondisclosure as a result of his or her relationship with us;
- a willful breach of any obligations under any written agreement or covenant with us; or
- a named executive officer's continued failure to perform his or her employment duties after he or she has received a written demand of performance from us and has failed to cure such non-performance to our satisfaction within 10 business days after receiving such notice.

Pursuant to our employment and severance agreements with Gajus V. Worthington, William M. Smith, Robert C. Jones and Vikram Jog, "good reason" means the occurrence of one or more of the following events effected without the named executive officer's prior consent, provided that he or she terminates his or her employment within one year thereafter:

- the assignment to the named executive officer of any duties or a reduction of the named executive officer's duties, either of which significantly reduces his or her responsibilities; provided that the continuance of his or her responsibilities at the subsidiary or divisional level following a change of control, rather than at the parent, combined or surviving company level following such change of control shall not be deemed "good reason" within the meaning of this clause;
- a material reduction of the named executive officer's base salary;
- the relocation of the named executive officer to a facility or a location greater than 50 miles from his or her present location;
- a material breach by us of any material provision of the employment and severance agreement.

However, no act or omission by us shall constitute "good reason" if we fully cure that act or omission within 30 days of receiving notice of receiving notice from the named executive officer.

Pursuant to our employment and severance agreement with Mai Chan (Grace) Yow, "good reason" means the occurrence of one or more of the following events effected without her consent, provided that she terminates her employment within one year thereafter:

- the assignment to Ms. Yow of any duties or a reduction of her duties, either of which significantly reduces her responsibilities; provided that the continuance of her responsibilities at the subsidiary or divisional level following a change of control, rather than at the parent, combined or surviving company level following such change of control shall not be deemed "good reason" within the meaning of this clause;
- a material reduction of Ms. Yow's base salary;
- the relocation of Ms. Yow to a facility or a location outside the country of Singapore;
- a material breach by us of any material provision of the employment and severance agreement.

However, no act or omission by us shall constitute "good reason" if we fully cure that act or omission within 30 days of receiving notice of receiving notice from the named executive officer.

The employment and severance agreements provide that in the event the named executive officer's employment is terminated by us or our successor without "cause" prior to a "change of control" or after 12 months following a "change of control" and the named executive officer executes a standard release of claims with us, the named executive officer is entitled to receive, in addition to such officer's salary payable through the date of termination of employment and any other benefits earned and owed through the date of termination, the following cash payments:

- an amount, payable in accordance with our customary payroll practices, equal to six months of the named executive officer's base salary in effect immediately prior to the time of termination; and
- reimbursement of costs and expenses incurred by the executive officer and his or her eligible dependents for coverage under group health plans, policies or arrangements sponsored by us for a period of up to six months, provided that such coverage is timely elected under COBRA or similar applicable state statute.

The employment and severance agreements further provide that in the event the named executive officer's employment is terminated by (i) us or our successor without "cause" and within 12 months following a "change of control" or (ii) by the executive officer for "good reason" and within 12 months following a "change of control", and in each case the named executive officer executes a standard release of claims with us, the executive officer is entitled to receive, in addition to such officer's salary payable through the date of termination of employment and any other benefits earned and owed through the date of termination, the following cash payments and benefits:

- an amount, payable in a lump sum, equal to the greater of (i) six months of the named executive officer's base salary in effect immediately prior to the change in control or (ii) six months of the named executive's officer's base salary in effect immediately prior to the time of termination;
- all outstanding unvested stock options, equity appreciation rights or similar equity awards then held by the named executive officer as of the date of termination will immediately vest and become exercisable as to all shares underlying such options;
- any shares of restricted stock, restricted stock units and similar equity awards then held by the named executive officer will immediately vest and any of our rights of repurchase or reacquisition with respect to such shares will lapse as to all shares; and
- reimbursement of costs and expenses incurred by the executive officer and his or her eligible dependents for coverage under group health plans, policies or arrangements sponsored by us for a period of up to six months, provided that such coverage is timely elected under COBRA or similar applicable state statute.

The following table describes the payments and benefits that each of our named executive officers would be entitled to receive pursuant to the employment and severance agreements, assuming that each of the following

triggers occurred in December 29, 2007: their employment was terminated without "cause" prior to or after 12 months following a "change of control" and (ii) their employment was terminated without "cause" or for "good reason" within 12 months following a "change of control".

Name and Principal Position	Employment Terminated without Cause Prior to or After 12 Months Following Change of Control		Employment Terminated within 12 Months Following Change of Control(1)		
	Severance Payments ($)(2)	Health Care Benefits ($)	Equity Acceleration ($)(3)	Severance Payments ($)(2)	Health Care Benefits ($)(4)
Gajus V. Worthington President and Chief Executive Officer	$ 135,200	$ 9,213	$	$ 135,200	$ 9,213
William M. Smith Vice President, Legal Affairs and General Counsel	$ 132,500	$ 8,056	$	$ 132,500	$ 8,056
Mai Chan (Grace) Yow Vice President, Worldwide Manufacturing and Managing Director of Fluidigm Singapore	$ 106,130(5)	$ 525(5)	$	$ 106,130(5)	$ 525(5)
Robert C. Jones Executive Vice President, Research and Development	$ 132,500	$ 9,213	$	$ 132,500	$ 9,213
Vikram Jog Chief Financial Officer	$ 139,000	$ 10,142	$	$ 139,000	$ 10,142

(1) Includes involuntary termination other than for cause, death or disability, and voluntary termination for good reason.
(2) The amounts shown in this column are equal to 6 months of the named executive officer's base salary as of December 29, 2007.
(3) The amounts shown in this column are equal to the spread value between (i) the unvested portion of all outstanding stock options, equity appreciation rights or similar equity awards held by the named executive officer on December 29, 2007 and (ii) the initial public offering price of our common stock, which we have assumed to be the midpoint of the price range set forth on the cover page of this prospectus.
(4) The amounts shown in this column are equal to the cost of covering the named executive officer and his or her eligible dependents coverage under our benefit plans for a period of six months, assuming that such coverage is timely elected under COBRA.
(5) Amount shown has been converted from Singapore dollars to U.S. dollars based on the interbank exchange rate for December 29, 2007 of 1 Singapore dollar = 0.6909 U.S. dollars.

In addition to the benefits described above, our 2008 Equity Incentive Plan and 1999 Stock Option Plan provide for full acceleration of all outstanding options in the event of a change of control of our company where the successor company does not assume our outstanding options and other awards in connection with such acquisition transaction. We estimate the value of this benefit for each named executive officer to be equal to the amount listed above in the column labeled "Equity Acceleration."

Employee Benefit Plans

2008 Equity Incentive Plan.

Our Board of Directors adopted our 2008 Equity Incentive Plan on January 29, 2008, and we expect our stockholders will approve it prior to the completion of this offer. Subject to stockholder approval, the 2008 Equity Incentive Plan is effective upon its adoption by our Board of Directors, but is not expected to be utilized until after the completion of this offering. Our 2008 Equity Incentive Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

A total of 2,000,000 shares of our common stock are reserved for issuance pursuant to the 2008 Equity Incentive Plan, of which no options are issued and outstanding. In addition, the shares reserved for issuance under our 2008 Equity Incentive Plan will also include (a) those shares reserved but unissued under the 1999 Stock Option

Plan as of the effective date of the first registration statement filed by us and declared effective with respect to any class of our securities and (b) shares returned to the 1999 Stock Option Plan as the result of expiration or termination of options (provided that the maximum number of shares that may be added to the 2008 Equity Incentive Plan pursuant to (a) and (b) is 3,000,000 shares). The number of shares available for issuance under the 2008 Equity Incentive Plan will also include an annual increase on the first day of each fiscal year beginning in 2009, equal to the lesser of:

- 1,200,000 shares;
- 4% of the outstanding shares of common stock as of the last day of our immediately preceding fiscal year; or
- such other amount as our Board of Directors may determine.

Our Board of Directors or a committee appointed by our Board administers our 2008 Equity Incentive Plan. Our compensation committee will administer our 2008 Equity Incentive Plan after the completion of the offering. In the case of options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m).

Subject to the provisions of our 2008 Equity Incentive Plan, the administrator has the power to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. The administrator also has the authority to amend existing awards to reduce their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator and to institute an exchange program by which outstanding awards may be surrendered in exchange for awards with a higher or lower exercise price.

The exercise price of options granted under our 2008 Equity Incentive Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed 10 years, except that with respect to any participant who owns 10% of the voting power of all classes of our outstanding stock, the term must not exceed 5 years and the exercise price must equal at least 110% of the fair market value on the grant date. Subject to the provisions of our 2008 Equity Incentive Plan, the administrator determines the term of all other options.

After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months following the termination of service. However, in no event may an option be exercised later than the expiration of its term.

Stock appreciation rights may be granted under our 2008 Equity Incentive Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Subject to the provisions of our 2008 Equity Incentive Plan, the administrator determines the terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted stock may be granted under our 2008 Equity Incentive Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted to any employee, director or consultant. The administrator may impose whatever conditions to vesting it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Restricted stock units may be granted under our 2008 Equity Incentive Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our common stock. The administrator determines the terms and conditions of restricted stock units including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion may accelerate the time at which any restrictions will lapse or be removed.

Performance units and performance shares may be granted under our 2008 Equity Incentive Plan. Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals in its discretion, which, depending on the extent to which they are met, will determine the number and/or the value of performance units and performance shares to be paid out to participants. After the grant of a performance unit or performance share, the administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such performance units or performance shares. Performance units shall have an initial dollar value established by the administrator prior to the grant date. Performance shares shall have an initial value equal to the fair market value of our common stock on the grant date. The administrator, in its sole discretion, may pay earned performance units or performance shares in the form of cash, in shares or in some combination thereof.

Our 2008 Equity Incentive Plan provides that all non-employee directors will be eligible to receive all types of awards (except for incentive stock options) under the 2008 Equity Incentive Plan. Please see the description of our Outside Director Equity Compensation Policy below.

Unless the administrator provides otherwise, our 2008 Equity Incentive Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Our 2008 Equity Incentive Plan provides that in the event of a merger or “change in control,” as defined in the 2008 Equity Incentive Plan, each outstanding award will be treated as the administrator determines, including that the successor corporation or its parent or subsidiary will assume or substitute an equivalent award for each outstanding award. The administrator is not required to treat all awards similarly. If there is no assumption or substitution of outstanding awards, the awards will fully vest, all restrictions will lapse, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and the awards will become fully exercisable. The administrator will provide notice to the recipient that he or she has the right to exercise the option and stock appreciation right as to all of the shares subject to the award, all restrictions on restricted stock will lapse, and all performance goals or other vesting requirements

1999 Stock Option Plan, as amended

Our 1999 Stock Option Plan was adopted by our Board of Directors and approved by our stockholders on May 12, 1999. Our 1999 Stock Option Plan was most recently amended on April 24, 2008. Our 1999 Stock Option Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations’ employees, and for the grant of nonstatutory stock options to our employees, directors and consultants and our parent and subsidiary corporations’ employees and consultants. Our Board of Directors has decided not to grant any additional options under our 1999 Stock Option Plan following the completion of this offering. However, our 1999 Stock Option Plan will continue to govern the terms and conditions of the outstanding stock options previously granted thereunder.

Subject to the provisions of our 1999 Stock Option Plan, the maximum aggregate number of shares which may be subject to option and sold under our 1999 Stock Option Plan is 4,228,571 shares. As of June 28, 2008, options to purchase 2,373,978 shares of our common stock were outstanding and 601,584 shares were available for future grant under the 1999 Stock Option Plan.

Our compensation committee appointed by our Board of Directors currently administers our 1999 Stock Option Plan. Under our 1999 Stock Option Plan, the administrator has the power to determine the terms of the stock options, including the employees, directors and consultants who will receive stock options, the number of shares subject to each stock option, the vesting schedule, any vesting acceleration, and the exercisability of stock options.

The administrator also has the authority to initiate an option exchange program whereby stock options are exchanged for stock options with a lower exercise price. The administrator may also reduce the exercise price of any option to the then current fair market value if the fair market value of our common stock has declined since the date the option was granted.

The exercise price of options granted under our 1999 Stock Option Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed 10 years, except that with respect to any optionee who owns 10% of the voting power of all classes of our outstanding stock as of the grant date, the term must not exceed 5 years and the exercise price must equal at least 110% of the fair market value on the grant date. Subject to the provisions of our 1999 Stock Option Plan, the administrator determines the terms of all other options in its discretion.

After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months following the termination of service. In some cases, options issued to consultants pursuant to our 1999 Stock Option Plan provide that they may be exercised at anytime prior to the expiration of the ten year term of the option. However, in no event may an option be exercised later than the expiration of its term.

Unless the administrator provides otherwise, our 1999 Stock Option Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Our 1999 Stock Option Plan provides that in the event of a merger of our company or a sale of substantially all of our assets, each outstanding stock option will be assumed or an equivalent option or right substituted by the successor corporation. If there is no assumption or substitution of outstanding options (or portions thereof), the options (or portions thereof) will fully vest and become fully exercisable. In such case, the administrator will provide notice to the optionee that he or she has the right to exercise the option as to all of the shares subject to the option for a period of at least 15 days. The option will terminate upon the expiration of the period of time the administrator provides in the notice.

Our Board of Directors has the authority to amend, suspend or terminate the 1999 Stock Option Plan provided such action does not impair the rights of any optionee without his or her written consent.

Retirement Plans

401(k) Plan. We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to participate in the 401(k) plan as of the first day of the month on or following the date they begin employment and participants are able to defer up to 60% of their eligible compensation subject to applicable annual Internal Revenue Code limits. All participants' interests in their deferrals are 100% vested when contributed. The 401(k) plan permits us to make matching contributions and profit sharing contributions to eligible participants, although we have not made any such contributions to date. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Internal Revenue Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan and all contributions are deductible by us when made.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation and bylaws that will become effective upon the completion of this offering contain provisions that limit the personal liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Our amended and restated certificate of incorporation that will become effective upon the completion of this offering, provides that we indemnify our directors to the fullest extent permitted by Delaware law. In addition, our amended and restated bylaws, that will become effective upon the completion of this offering, provides that we indemnify our directors and officers to the fullest extent permitted by Delaware law. Our amended and restated bylaws, that will become effective upon the completion of this offering, also provide that we shall advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity, regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the Board of Directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among others, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and bylaws, that will become effective upon the completion of this offering, may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty of care. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the director and executive compensation arrangements discussed above in "Management," we have been a party to the following transactions since January 1, 2005, in which the amount involved exceeded or will exceed $120,000, and in which any director, executive officer or holder of more than 5% of any class of our voting stock, or any member of the immediate family of or entities affiliated with any of them, had or will have a material interest.

Sales of Series E Preferred Stock

The table below summarizes purchases of shares of our Series E preferred stock since January 1, 2005, by our directors, executive officers, holders of more than 5% of any class of our voting securities, or any member of the immediate family of or any entities affiliated with any of the foregoing persons. In connection with these sales, we granted the purchasers certain registration rights with respect to their securities. See "Description of Capital Stock — Registration Rights." Each outstanding share of our preferred stock will be converted automatically into one share of our common stock upon the completion of this offering.

Purchasers	Shares of Series E Preferred Stock	Aggregate Purchase Price
Entities affiliated with Alloy Funds(1)	46,070	$ 644,980
Bruce Burrows(2)	112,785	$ 1,578,990
Entities affiliated with EuclidSR Funds(3)	60,500	$ 847,000
Biomedical Sciences Investment Fund Pte Ltd(4)	1,273,793	$ 17,833,102
Entities affiliated with InterWest Funds(5)	14,284	$ 199,976
Entities affiliated with Lehman Brothers Holdings, Inc.(6)	45,642	$ 638,988
Lilly Ventures(7)	25,642	$ 358,988
Entities affiliated with Versant Ventures(8)	71,427	$ 999,978
Total	1,650,143	$ 23,102,002

(1) Consists of 605 shares purchased by Alloy Partners 2002, L.P., 22,430 shares purchased by Alloy Ventures 2002, L.P. and 23,035 shares purchased by Alloy Ventures 2005, L.P. Michael Hunkapiller, an affiliate of Alloy Ventures, is a member of our Board of Directors.

(2) Bruce Burrows served as member of our Board of Directors from January 3, 2000 to January 15, 2008.

(3) Consists of 30,250 shares purchased EuclidSR Biotechnology Partners, L.P. and 30,250 shares purchased by EuclidSR Partners, L.P. Elaine Jones, an affiliate of Euclid SR Partners, is a member of our Board of Directors.

(4) Consists of shares issued to Biomedical Sciences Investment Fund Pte Ltd in connection with the conversion of convertible promissory notes.

(5) Consists of 652 shares purchased by InterWest Investors VII, L.P. and 13,632 shares purchased by InterWest Partners VII, L.P.

(6) Consists of 11,410 shares purchased by Lehman Brothers Healthcare Venture Capital L.P., 2,552 shares purchased by Lehman Brothers Offshore Partnership Account 2000/2001, L.P., 21,840 shares purchased by Lehman Brothers P.A., LLC, and 9,840 purchased by Lehman Brothers Partnership Account 2001/2001, L.P. Hingge Hsu, an affiliate of Lehman Brothers Holdings, Inc., served as a member of our Board of Directors at the time of the financing.

(7) Ed Torres, an affiliate of Lilly Ventures, served as a member of our Board of Directors at the time of the financing.

(8) Consists of 1,428 shares purchased by Versant Affiliates Fund 1-A, L.P., 3,000 shares purchased by Versant Affiliates Fund 1-B, L.P., 1,285 shares purchased by Versant Side Fund I, L.P. and 65,714 shares purchased by Versant Venture Capital I, L.P. Sam Colella, an affiliate of Versant Ventures, is a member of our Board of Directors.

Transactions with the Singapore Government

Convertible Note Financings

On December 18, 2003, we entered into a convertible note purchase agreement (as amended December 17, 2004) with Biomedical Sciences Investment Fund Pte Ltd, or BMSIF, an investment arm of the Singapore Economic Development Board, or EDB. Upon execution of the agreement, BMSIF purchased a convertible promissory note in the principal amount of $2,000,000 at an interest rate equal to 8% per annum. The principal and

interest on this note was convertible into our Series D preferred stock at a price of $9.80 per share, which was equal to the per share purchase price of our Series D preferred stock sold to other investors in December 2003. This note was converted into 237,895 shares of our Series D preferred stock on December 15, 2005. Additionally, the agreement provided for the issuance of up to two additional convertible promissory notes, each in the principal amount of $1,500,000, or a single additional convertible promissory note in the principal amount of $3,000,000, and all at an interest rate of 8% per annum. Pursuant to the terms of the agreement, on June 20, 2006 we issued a single note in the principal amount of $3,000,000 to BMSIF. The principal and interest on this note was also convertible into our Series D preferred stock at a price of $9.80 per share. This note was converted into 330,612 shares of our Series D preferred stock on July 2, 2007.

On August 7, 2006, we entered into a second convertible note purchase agreement with BMSIF pursuant to which BMSIF purchased three convertible promissory notes each in the principal amount of $5 million, for an aggregate principal amount of $15,000,000, and each at an interest rate equal to 8% per annum. The principal and interest on these notes was convertible into our Series E preferred stock at a price of $12.60 per share, which represented a 10% discount on the $14.00 per share price at which our Series E preferred stock was sold to other investors in our Series E preferred stock financing which occurred between June 2006 and December 2007. The first note was issued on August 7, 2006 and was converted into 417,351 shares of our Series E preferred stock on March 31, 2007. The second note was issued on November 20, 2006 and was converted into 426,744 shares of our Series E preferred stock on March 31, 2007. The last note was issued on April 19, 2007 and was converted into 429,698 shares of our Series E preferred stock on April 30, 2008. Each such conversion was completed following the agreement of the parties that the required milestones had been met to the parties satisfaction or waived.

Government Incentive Grants

In October 2005, Fluidigm Singapore entered into a letter agreement providing for up to SG$10 million (approximately US$7.3 million using June 28, 2008 exchange rates) in incentive grants from the Singapore Economic Development Board, or EDB. The incentive grants are payable for the period August 1, 2005 through July 31, 2010 in connection with the establishment and operation of a research, development and manufacturing center for IFCs in Singapore. Incentive grant payments are calculated as a portion of qualifying expenses we incur in Singapore relating to salaries, overhead, outsourcing and subcontracting expenses, operating expenses and royalties paid. Fluidigm Singapore is required to submit requests for incentive grant payments on a quarterly basis along with reports regarding its compliance with the development, hiring, expenditure and other conditions through the end of the applicable quarter.

On January 11, 2006, Fluidigm Singapore and EDB entered into a supplement to the October 2005 letter agreement. This supplement was entered into to create a process whereby Fluidigm Singapore and EDB would agree on new quarterly development targets at the start of each year, Fluidigm Singapore would submit to EDB a progress report and evidence of the achievement of targets on a quarterly basis and the parties would resolve any disagreements regarding the satisfaction of targets using an established procedure and the parties would be entitled to obtain a third party audit of our incentive grant payment requests on a semi-annual rather than an annual basis.

Fluidigm Singapore's continued eligibility for such incentive grant payments is subject to its compliance with increasing levels of research, development and manufacturing activity in Singapore, including employment of specified numbers of research scientists and engineers, its incurrence of specified levels of research and development expenses in Singapore over the course of each calendar year, its use of local service providers, its manufacture in Singapore of the products developed in Singapore and its achievement of certain targets relating to new product development or completion of specific manufacturing process objectives. Specifically, this agreement requires that we must employ at least 24 research scientists and engineers in Singapore by December 31, 2009 to remain eligible for incentive grant payments. As of June 28, 2008, we employed 16 research scientists and engineers involved in the research and development of our IFCs. These required levels of research, development and manufacturing activity in Singapore and the associated increases from one year to the next are the result of negotiations between the parties and are generally consistent with our business strategy for our Singapore operations. All ownership rights in the intellectual property developed by Fluidigm Singapore remain with Fluidigm Singapore and no such rights are conveyed to EDB under the agreement.

On February 12, 2007, Fluidigm Singapore entered into a second letter agreement with EDB which provided for up to an additional SG$3.7 million (approximately US$2.7 million using a June 28, 2008 exchange rate) in incentive grant payments. The terms and conditions of this letter agreement are substantially the same as the October 2005 letter agreement, with the exception of the size of the potential grant, the term of the agreement and the specific levels of research, development and manufacturing activity required to maintain eligibility for such grants. This letter agreement requires that we employ at least 10 new research scientists and engineers in Singapore by May 31, 2009, that we employ at least 12 new research scientists and engineers in Singapore by May 31, 2011 and that we maintain at least 12 research scientists and engineers in total until May 31, 2013 to remain eligible for incentive grant payments. The requirements of the February 2007 agreement may only be satisfied by personnel employed in the research and development of IFC instrumentation. As of June 28, 2008, we employed 10 research scientists and engineers involved in the research and development of our IFC instrumentation. The primary focus of this grant agreement was the ongoing development and manufacture in Singapore of instrumentation to be used with our IFCs. This letter agreement applies to research, development and manufacturing activity by Fluidigm Singapore in Singapore from June 1, 2006 through May 31, 2011.

On March 27, 2008, Fluidigm Singapore entered into amended and restated versions of our October 2005 and February 2007 letter agreements with EDB. The purpose of these amendments was to consolidate and streamline the original agreements to eliminate sub-categories of eligible expenditures and rely on more general descriptions of the eligible expenditures that the parties had been applying in practice, to consolidate certain administrative terms and conditions of the incentive grant payments, and to remove various forms attached to the original letter agreements that had changed over time or were not part of the ongoing agreement between the parties. The January 2006 supplement to the October 2005 letter agreement remains in effect.

Loan to Gajus Worthington

On January 20, 2004, we entered into an Employee Loan Agreement, Secured Promissory Note and Stock Pledge Agreement with Mr. Worthington pursuant to which we loaned Mr. Worthington $250,000 at an interest rate of 3.52% per annum and the principal and interest were not due and payable until 7 years after the date of the loan or upon the earlier occurrence of certain events. The loan was secured by the pledge of 238,095 shares of our common stock held by Mr. Worthington and was otherwise non-recourse. The loan was extended to Mr. Worthington to assist him in purchasing a home for his personal residence in Northern California. On April 10, 2008, Mr. Worthington repaid the loan in full in accordance with Section 2.2(d) of the note by selling shares of our common stock held by Mr. Worthington to us at the fair market value of such stock on the date of such sale, which was determined by the Board of Directors to be $11.16 per share. The note and Mr. Worthington's loan were repaid in full and cancelled in exchange for 25,975 shares of our common stock which Mr. Worthington transferred to us pursuant to the terms of a repurchase agreement dated April 10, 2008. This loan repayment and share cancellation transaction was approved by the Board based on its determination that we received full and fair consideration for the cancellation of the loan and that the cancellation of the loan was in the best interests of our company and its stockholders.

Consulting Agreement with Stephen Quake

In May 2006, we entered into an agreement with Stephen Quake pursuant to which we have agreed to pay Dr. Quake $8,333 per month for providing various consulting services to us including serving on our Scientific Advisory Board. The agreement has a term of 10 years and is terminable by us only for cause. At approximately the same time, we repurchased from Dr. Quake approximately 35,421 shares of our common stock for aggregate consideration of $69,425. In 2005 and 2006, we paid Dr. Quake $45,000 and $97,000 pursuant to a consulting agreement that was entered into in 2000 and terminated in 2006. Dr. Quake served as a director of Fluidigm from its inception until December 2005 and, at the time of these transactions, was the holder of more than 5% of our outstanding common stock.

Engagement of Townsend and Townsend and Crew LLP

Since before 2005, the law firm of Townsend and Townsend and Crew LLP, or Townsend, has served as our primary outside patent counsel. William Smith, our Vice President, Legal Affairs and General Counsel as well as our Secretary since May 2000 and a director from May 2000 until April 7, 2008, was a partner at Townsend from

1985 to April 1, 2008. Amounts paid to Townsend for services and direct patent fees were $880,000, $960,000, $576,000 and $312,000 for 2005, 2006, 2007, and the six months ended June 28, 2008. Accrued amounts payable to Townsend were $174,000, $257,000, and $411,000 as of December 31, 2006, December 29, 2007 and June 28, 2008.

Registration Rights Agreement

Holders of our preferred stock and our co-founders are entitled to certain registration rights with respect to the common stock issued or issuable upon conversion of the preferred stock. See “Registration Rights” under “Description of Capital Stock” below for additional information.

Stock Option Grants

Certain stock option grants to our directors and executive officers and related option grant policies are described above in this prospectus under the caption “Management.”

Employment Arrangements and Indemnification Agreements

We have entered into employment arrangements with certain of our executive officers. See “Management — Employment Agreements and Offer Letters” above.

We have also entered into indemnification agreements with each of our directors and executive officers. The indemnification agreements and our certificate of incorporation and bylaws require us to indemnify our directors and executive officers to the fullest extent permitted by Delaware law. See “Management — Limitations on Liability and Indemnification Matters” above.

Related Party Transaction Policy

We have adopted a formal policy that our executive officers, directors, holders of more than 5% of any class of our voting securities, and any member of the immediate family of and any entity affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior consent of our audit committee, or other independent members of our Board in the case it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of their immediate family members or affiliates, in which the amount involved exceeds $120,000 must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party’s interest in the transaction. All of the transactions described above were entered into prior to the adoption of this policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock at June 28, 2008, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person who we know beneficially owns more than five percent of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

We have determined beneficial ownership in accordance with SEC rules. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership is based on 19,490,535 shares of common stock outstanding at June 28, 2008. For purposes of the table below, we have assumed that 24,790,535 shares of common stock will be outstanding upon completion of this offering, based upon an assumed initial public offering price of $15.00 per share. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to options, warrants or other convertible securities held by that person or entity that are currently exercisable or exercisable within 60 days of June 28, 2008. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Beneficial ownership representing less than one percent is denoted with an "*."

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Fluidigm Corporation, 7000 Shoreline Court, Suite 100, South San Francisco, California 94080.

	Beneficial Ownership Prior to the Offering		Beneficial Ownership After the Offering	
Name of Beneficial Owner	Shares	Percentage	Shares	Percentage
5% Stockholders:				
Entities affiliated with Alloy Funds(1)	1,066,477	5.47%	1,066,477	4.30%
Entities affiliated with EuclidSR Funds(2)	1,399,710	7.18%	1,399,710	5.65%
Entities affiliated with the Singapore government(3)	2,573,988	13.21%	2,573,988	10.38%
Entities affiliated with Fidelity Funds(4)	1,785,714	9.16%	1,785,714	7.20%
Entities affiliated with InterWest Funds(5)	1,079,107	5.54%	1,079,107	4.35%
Entities affiliated with Lehman Funds(6)	1,055,398	5.41%	1,055,398	4.26%
SMALLCAP World Fund, Inc.(7)	1,251,055	6.42%	1,251,055	5.05%
Entities affiliated with Versant Funds(8)	1,679,988	8.62%	1,679,988	6.78%
Bruce Burrows	1,042,094	5.35%	1,042,094	4.20%
Directors and Named Executive Officers:				
Gajus V. Worthington(9)	810,307	4.13%	810,307	3.25%
Richard DeLateur(10)	76,330	*	76,330	*
Robert C. Jones(11)	197,139	1.00%*	197,139	*
Michael Y. Lucero(12)	—	—	—	—
William M. Smith(13)	319,138	1.62%	319,138	1.28%
Mai Chan (Grace) Yow(14)	88,332	*	88,332	*
Vikram Jog(15)	171,427	*	171,427	*
Samuel Colella(8)	1,679,988	8.62%	1,679,988	6.78%
Michael Hunkapiller(1)	1,066,477	5.47%	1,066,477	4.30%
Elaine V. Jones(2)	1,399,710	7.18%	1,399,710	5.65%
Kenneth Nussbacher(16)	40,178	*	40,178	*
John Young(17)	—	—	—	—
All directors and executive officers as a group (12 persons)	5,849,026	28.72%	5,849,026	22.79%

(*) Less than one percent.

(1) Consists of 533,239 shares held of record by Alloy Ventures 2005, L.P., 519,220 shares held of record by Alloy Ventures 2002, L.P., and 14,018 shares held of record by Alloy Partners 2002, L.P. Michael Hunkapiller, a member of our Board of Directors, is a Managing Member

of Alloy Ventures 2005, LLC, the General Partner of Alloy Ventures 2005, L.P. Alloy Ventures 2002, LLC is the General Partner of Alloy Ventures 2002, L.P. and Alloy Partners 2002, L.P. The Managing Members of Alloy Ventures 2002, LLC are Craig C. Taylor,
John F. Shoch, Douglas E. Kelly, Daniel I. Rubin and Tony Di Bona. Each of the Managing Members of Alloy Ventures 2002, LLC is also a Managing Member of Alloy Ventures 2005, LLC. The individuals listed herein may be deemed to have shared voting and dispositive power over the shares which are or may be deemed to be beneficially owned by Alloy Ventures 2005, L.P., Alloy Ventures 2002, L.P. and Alloy Partners 2002, L.P. Each Managing Member disclaims beneficial ownership of the shares except to extent of their pecuniary interest therein. The address of the entities affiliated with Alloy Ventures is 400 Hamilton Avenue, Fourth Floor, Palo Alto, CA 94301.

(2) Consists of 699,855 shares held of record by EuclidSR Partners, L.P. and 699,855 shares held of record by EuclidSR Biotechnology Partners, L.P. Elaine V. Jones, a member of our Board of Directors shares voting and investment power with Graham D.S. Anderson, Raymond J. Whitaker, Milton J. Pappas and Stephen K. Reidy, each of whom are General Partners of EuclidSR Associates, L.P., the General Partner of EuclidSR Partners and EuclidSR Biotechnology Associates, L.P., the General Partner of EuclidSR Biotechnology Partners. Each General Partner of EuclidSR Associates, L.P. and EuclidSR Biotechnology Associates, L.P. disclaims beneficial ownership of the shares except to the extent of their pecuniary interest therein. The address of the entities affiliated with EuclidSR Associates, L.P. and EuclidSR Biotechnology Associates, L.P. is 45 Rockefeller Plaza, Suite 3240, New York, NY 10111.

(3) Consists of 2,352,504 shares held of record by Biomedical Sciences Investment Fund Pte Ltd which includes 429,698 shares issued upon conversion of a convertible promissory note, and 221,484 shares held of record by Singapore Bio-Innovations Pte Ltd, EDB Investments Pte Ltd. EDB Investments Pte Ltd, or EDB Investments, is the parent entity of Biomedical Sciences Investment Fund Pte Ltd and Singapore Bio-Innovations Pte Ltd. The Economic Development Board of Singapore, or EDB, is the parent entity of EDB Investments. EDB is a Singapore government entity. EDB Investments, EDB and the Singapore government may be deemed to have shared voting and dispositive power over the shares owned beneficially and of record by Biomedical Sciences Investment Fund Pte Ltd and Singapore Bio-Innovations Pte Ltd. The address associated with entities affiliated with EDB is 20 Biopolis Way, #09-01 Centros, Singapore 138668.

(4) Consists of 137,477 shares held of record by Fidelity Contrafund: Fidelity Advisor New Insights Fund, 1,254,247 shares held of record by Fidelity Contrafund: Fidelity Contrafund and 393,990 shares held of record by Variable Insurance Products Fund II: Contrafund Portfolio. Each of these entities is a registered investment fund (each, a "Fund") advised by Fidelity Management & Research Company ("FMR Co."), a registered investment adviser under the Investment Advisers Act of 1940, as amended. The address of FMR Co., a wholly-owned subsidiary of FMR Corp. and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 is 82 Devonshire Street, Boston Massachusetts 02109. Edward C. Johnson 3d, FMR Corp., through its control of FMR Co., and each Fund has power to dispose of the securities owned by such Fund. Neither FMR Corp. nor Edward C. Johnson 3d, Chairman of FMR Corp., has sole power to vote or direct the voting of the shares owned directly by each Fund, which power resides with each Fund's Board of Trustees. Each Fund is an affiliate of a broker-dealer. Each Fund purchased the securities in the ordinary course of business and, at the time of the purchase of the securities, no Fund had any agreements or understandings, directly or indirectly, with any person to distribute the securities. No Fund intends to sell, transfer, assign, pledge or hypothecate or otherwise enter into any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities through an affiliated broker-dealer.

(5) Consists of 49,313 shares held of record by InterWest Investors VII, L.P. and 1,029,794 shares held of record by InterWest Partners VII, L.P. InterWest Management Partners VII, L.L.C. has sole voting and investment control over the shares owned by InterWest Partners VII, L.P. and InterWest Investors VII, L.P. Harvey B. Cash, Philip T. Gianos, W. Scott Hedrick, W. Stephen Holmes, Gilbert H. Kliman, Thomas L. Rosch and Arnold L. Oronsky, each Managing Directors of InterWest Management Partners VII, LLC, have shared voting and investment control over the shares owned by InterWest Partners VII, L.P. and InterWest Investors VII, L.P. Stephen C. Bowsher, Alan W. Crites, Rodney A. Ferguson and Karen A. Wilson are Members of InterWest Management Partners VII, L.L.C. All Managing Directors and Members disclaim beneficial ownership of the shares owned by InterWest Partners VII, LP and InterWest Investor VII, LP except to the extent of their pro rata partnership interests in such shares. The address of the entities affiliated with InterWest is 2710 Sand Hill Road, Second Floor, Menlo Park, CA 94025.

(6) Consists of 263,849 shares held of record by Lehman Brothers Healthcare Venture Capital, L.P., 59,009 shares held of record by Lehman Brothers Offshore Partnership Account 2000/2001, L.P., 505,010 shares held of record by Lehman Brothers P.A., LLC and 227,530 shares held of record by Lehman Brothers Partnership Account 2000/2001, L.P. Hingge Hsu, a former member of our Board of Directors, was formerly employed by Lehman Brothers Inc., and now serves as a consultant of Lehman Brothers Inc. In each of the limited partnerships referenced above, Lehman Brothers Inc. controls the general partner of the limited partnership. In the limited liability company, Lehman Brothers Inc. controls the manager of the limited liability company. In all four entities listed above, Lehman Brothers Holdings Inc., a public reporting company under the Securities Exchange Act of 1934, as amended, ultimately controls the manager and the general partners of the entities and ultimately has voting and investment control over the shares held by such entities. The address of the entities affiliated with Lehman Brothers Inc. is 399 Park Avenue, 11th Floor, New York, NY 10022.

(7) Consists of 1,251,055 shares held of record by SMALLCAP World Fund, Inc, or SMALLCAP. SMALLCAP is an investment company registered under the Investment Company Act of 1940. Capital Research and Management Company, or CRMC, an investment adviser registered under the Investment Advisers Act of 1940, is the investment adviser to SMALLCAP and has sole dispositive power over these shares. Gordon Crawford, J. Blair Frank, Jonathan Knowles, Brady L. Enright, Mark E. Denning and Claudia P. Huntington are the primary portfolio counselors of CRMC. In such capacity, CRMC Messrs. Crawford, Frank, Knowles, Enright, Denning and Ms. Huntington may be deemed to beneficially own the shares held by SMALLCAP. CRMC, however, each disclaims such beneficial ownership. The address of the SMALLCAP is The Capital Group Companies, 333, South Hope Street, Los Angeles, California 90071.

(8) Consists of 1,536,575 shares held of record by Versant Venture Capital I, L.P., 28,188 shares held of record by Versant Affiliates Fund I-A, L.P., 83,183 shares held of record by Versant Affiliates Fund I-B, L.P. and 32,042 shares held of record by Versant Side Fund I, L.P. Voting and investment power over the shares directly held by Versant Venture Capital I, L.P., Versant Affiliates Fund I-A, L.P., Versant Affiliates Fund I-B, L.P., and Versant Side Fund I, L.P. is held by Versant Ventures I, LLC, their sole General Partner. Samuel D. Colella, a member of our Board of Directors

is a Managing Member of Versant Ventures I, LLC but he disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest in such shares. The individual Managing Members of Versant Ventures I, LLC are Brian G. Atwood, Samuel D. Colella, Ross A. Jaffe, William J. Link, Barbara N. Lubash, Donald B. Milder, and Rebecca B. Robertson, all of whom share voting and dispositive control. Each respective individual General Partner disclaims beneficial ownership of these shares, except to the extent of their pecuniary interest in such shares. The address of the entities affiliated with Versant Ventures is 3000 Sand Hill Road, Building Four, Suite 210, Menlo Park, CA 94025.

(9) Consists of 668,881 shares held of record by Gajus Worthington and Jami A. Worthington as TTEES of the Worthington Family Trust dtd 3-6-07 and options to purchase 141,426 shares of Common Stock that are exercisable within 60 days of June 28, 2008, of which 75,711 shares are vested as of August 27, 2008.

(10) Mr. DeLateur held options to purchase an additional 16,407 shares which expired on August 17, 2008.

(11) Consists of options to purchase 197,139 shares of common stock that are exercisable within 60 days of June 28, 2008 of which 97,141 shares are vested as of August 27, 2008.

(12) No options are currently outstanding or exercisable.

(13) Consists of 85,714 shares held of record by William M. Smith and options to purchase 233,424 shares of common stock that are exercisable within 60 days of June 28, 2008, of which 223,283 are vested as of August 27, 2008.

(14) Consists of options to purchase 88,332 shares of common stock that are exercisable within 60 days of June 28, 2008, of which 79,403 are vested as of August 27, 2008.

(15) Consists of options to purchase 171,427 shares of common stock that are exercisable within 60 days of June 28, 2008, none of which are vested as of August 27, 2008.

(16) Consists of options to purchase 40,178 shares of common stock that are exercisable within 60 days of June 28, 2008, all of which are vested as of August 27, 2008.

(17) Mr. Young disclaims beneficial ownership of 77,142 shares as all of the shares were subsequently transferred to his children, Diana Young, Gregory Young and John Peter Young. As of August 27, 2008 4,762 shares of common stock are subject to a right of repurchase at cost. The right of repurchase lapses at a rate of approximately 595 shares of common stock per month.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the rights of our common stock and preferred stock and of certain provisions of our restated certificate of incorporation and bylaws, as they will be in effect upon the completion of this offering. For more detailed information, please see our restated certificate of incorporation and bylaws, which are filed as exhibits to the registration statement of which this prospectus is part.

Immediately following the completion of this offering, our authorized capital stock will consist of 320,000,000 shares, all with a par value of $0.001 per share, of which:

- 300,000,000 shares are designated as common stock; and
- 20,000,000 shares are designated as preferred stock.

As of June 28, 2008, we had outstanding 19,490,535 shares of common stock held of record by 252 stockholders, assuming the automatic conversion of all outstanding shares of our preferred stock on a one-for-one basis into 16,625,970 shares of common stock. This automatic conversion of our preferred stock has been approved by the holders of our outstanding preferred stock and will be effective upon the closing of this offering. In addition, as of June 28, 2008, 2,373,978 shares of our common stock were subject to outstanding options and 216,409 shares of our capital stock were subject to outstanding warrants. No options will expire prior to the completion of this offering. For more information on our capitalization, see “Capitalization” above.

Common Stock

The holders of our common stock are entitled to one vote per share on all matters to be voted on by our stockholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by our Board of Directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after the payment of liabilities, subject to the prior distribution rights of preferred stock then outstanding. Holders of common stock have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

Immediately after the completion of this offering, no shares of preferred stock will be outstanding (assuming the automatic conversion of all outstanding shares of our preferred stock on a one-for-one basis into 16,625,970 shares of common stock immediately prior to the completion of this offering). Though we currently have no plans to issue any shares of preferred stock, upon the closing of this offering and the filing of our restated certificate of incorporation, our Board of Directors will have the authority, without further action by our stockholders, to designate and issue up to 20,000,000 shares of preferred stock in one or more series. Our Board of Directors may also designate the rights, preferences and privileges of the holders of each such series of preferred stock, any or all of which may be greater than or senior to those granted to the holders of common stock. Though the actual effect of any such issuance on the rights of the holders of common stock will not be known until our Board of Directors determines the specific rights of the holders of preferred stock, the potential effects of such an issuance include:

- diluting the voting power of the holders of common stock;
- reducing the likelihood that holders of common stock will receive dividend payments;
- reducing the likelihood that holders of common stock will receive payments in the event of our liquidation, dissolution, or winding up; and
- delaying, deterring or preventing a change-in-control or other corporate takeover.

Warrants

As of June 28, 2008, we had outstanding warrants to purchase an aggregate of 216,409 shares of our preferred stock, all of which will be converted into warrants to purchase an equal number of shares of our common stock at exercise prices ranging from $9.03 per share to $14.00 per share. These warrants will expire at various times between March 2012 and February 2015. In the event of a distribution of dividends, a stock split, a reorganization, a reclassification, a consolidation, or a similar event, each warrant provides for adjustment of the exercise price and the number of shares issuable upon exercise. In June 2008, the number of shares subject to a certain warrant to purchase Series E Preferred Stock issued to Lighthouse Capital Partners V, L.P. increased by 57,142 shares pursuant to its terms as a result of our borrowing an additional $10 million under our loan agreement with Lighthouse.

Potential Issuance of Common Stock

On March 7, 2003, we entered into a Master Closing Agreement with Oculus Pharmaceuticals, Inc. and The UAB Research Foundation, or UAB, related to certain intellectual property and technology rights licensed by us from UAB. Pursuant to the agreement, we are obligated to issue UAB shares of our common stock with a value equal to approximately $1,500,000 upon the achievement of a certain milestone and based upon the fair market value of our common stock at the time the milestone is achieved. We currently do not anticipate achieving this milestone in the foreseeable future and do not anticipate issuing these shares. The potential issuance discussed above is not reflected in the number of shares of common stock outstanding in this prospectus.

Registration Rights

As of June 28, 2008, the holders of an aggregate of 18,199,960 shares of our common stock, which includes 16,621,278 shares of common stock issued on conversion of outstanding preferred stock and 216,409 shares of common stock issuable upon the exercise of warrants and conversion of preferred stock underlying such warrants, are entitled to the following rights with respect to the registration of such shares for public resale under the Securities Act, pursuant to an investor rights agreement by and among us and certain of our stockholders. In addition, the aggregate number above includes an additional 1,362,273 shares of common stock entitled to the rights described below, in the section titled “Piggyback Registration Rights.” We refer to these shares collectively as “registrable securities.”

The registration of shares of common stock as a result of the following rights being exercised would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. Ordinarily, we will be required to pay all expenses, other than underwriting discounts and commissions, related to any registration effected pursuant to the exercise of these registration rights.

The registration rights terminate upon the earlier of five years after completion of this offering, or, with respect to the registration rights of an individual holder, when the holder of one percent or less of our outstanding common stock can sell all of such holder’s registrable securities in any three-month period without registration, in compliance with Rule 144 of the Securities Act or another similar exemption.

Demand Registration Rights

If at any time after this offering the holders of at least a majority of the registrable securities request in writing that we effect a registration that has a reasonably anticipated aggregate price to the public in excess of $20,000,000, we may be required to register their shares. At most, we are obligated to effect two registrations for the holders of registrable securities in response to these demand registration rights. Depending on certain conditions, however, we may defer such registration for up to 90 days. If the holders requesting registration intend to distribute their shares by means of an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Piggyback Registration Rights

If at any time after this offering we propose to register any shares of our common stock under the Securities Act, subject to certain exceptions, the holders of registrable securities will be entitled to notice of the registration

and to include their shares of registrable securities in the registration. If our proposed registration involves an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Form S-3 Registration Rights

If at any time after we become entitled under the Securities Act to register our shares on Form S-3 a holder of registrable securities requests in writing that we register their shares for public resale on Form S-3 and the reasonably anticipated price to the public of the offering exceeds $2,000,000, we will be required to use our best efforts to effect such registration; provided, however, that if such registration would be seriously detrimental to us or our stockholders, we may defer the registration for up to 90 days.

Voting Rights

Under the provisions of our amended and restated certificate of incorporation to become effective upon completion of this offering, holders of our common stock are entitled to one vote for each share of common stock held by such holder on any matter submitted to a vote at a meeting of stockholders. In addition, our amended and restated certificate of incorporation provides that certain corporate actions require the approval of our stockholders. These actions, and the vote required, are as follows:

- the removal of a director requires the vote of a majority of the voting power of our issued and outstanding capital stock entitled to vote in the election of directors; and
- the amendment of provisions of our amended and restated certificate of incorporation relating to blank check preferred stock, the classification of our directors, the removal of directors, the filling of vacancies on our Board of Directors, cumulative voting, annual and special meetings of our stockholders and the amendment of certain provisions of our restated certificate of incorporation require the vote of 66 2/3% of our then outstanding voting securities.

Anti Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Certain provisions of Delaware law and our restated certificate of incorporation and bylaws that will become effective upon completion of this offering contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and bylaws to become effective upon completion of this offering include provisions that:

- authorize our Board of Directors to issue, without further action by the stockholders, up to 20,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;
- provide that directors may be removed only for cause;

- provide that vacancies on our Board of Directors may be filled only by a majority of directors then in office, even though less than a quorum;
- establish that our Board of Directors is divided into three classes, Class I, Class II, and Class III, with each class serving staggered terms;
- specify that no stockholder is permitted to cumulate votes at any election of the Board of Directors; and
- require a super majority of votes to amend certain of the above-mentioned provisions.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, the Board of Directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers, and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the Board of Directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/_{3}\%$ of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our Board of Directors does not approve in advance. We also anticipate that Section 203 may discourage business combinations or other attempts that might result in a premium over the market price for the shares of common stock held by our stockholders.

The provisions of Delaware law and our restated certificate of incorporation and bylaws to become effective upon completion of this offering could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent's address is 250 Royall Street, Canton, MA 02021, and its telephone number is (781) 575-2900.

NASDAQ Global Market Listing

We have applied to have our common stock listed on the NASDAQ Global Market under the symbol "FLDM."

SHARES ELIGIBLE FOR FUTURE SALE

Before this offering, there has not been a public market for shares of our common stock. Future sales of substantial amounts of shares of our common stock, including shares issued upon the exercise of outstanding options, in the public market after this offering, or the possibility of these sales occurring, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future.

Upon the completion of this offering, a total of 24,790,535 shares of common stock will be outstanding, assuming that there are no exercises of options or warrants after June 28, 2008. Of these shares, all 5,300,000 shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' over-allotment option, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by "affiliates," as that term is defined in Rule 144 under the Securities Act.

The remaining 19,490,535 shares of common stock will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below.

Subject to the lock up agreements described below and the provisions of Rules 144 and 701 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

Date	Number of Shares
On the date of this prospectus	0
Between 90 and 180 days after the date of this prospectus	0
At various times beginning more than 180 days after the date of this prospectus	19,490,535

In addition, of the 2,373,978 shares of our common stock that were subject to stock options outstanding as of June 28, 2008, options to purchase 1,098,706 shares of common stock were vested as of June 28, 2008 and will be eligible for sale 180 days following the effective date of this offering.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person is entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell upon expiration of the lock-up agreements described above, within any three-month period beginning 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately 247,905 shares immediately after this offering; or
- the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, consultants or advisors who purchase shares from us in connection with a compensatory stock or option plan or other written agreement in a transaction before the effective date of this offering that was completed in reliance on Rule 701 and complied with the requirements of Rule 701 will, subject to the lock up restrictions described below, be eligible to resell such shares 90 days after the effective date of this offering in reliance on Rule 144, but without compliance with certain restrictions, including the holding period, contained in Rule 144.

Lock Up Agreements

We and all of our directors and officers, as well as the other holders of substantially all shares of common stock outstanding immediately prior to this offering, have agreed that, without the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock;
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of shares of our common stock or such other securities, in cash or otherwise. This agreement is subject to certain exceptions, and is also subject to extension for up to an additional days, as set forth in “Underwriters.”

Registration Rights

Upon completion of this offering, the holders of 18,199,960 shares of common stock or series of common stock issuable upon exercise of warrants or their transferees will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See “Description of Capital Stock — Registration Rights” for additional information.

Registration Statements

We intend to file a registration statement on Form S-8 under the Securities Act covering all of the shares of common stock subject to options outstanding or reserved for issuance under our stock plans. We expect to file this registration statement as soon as practicable after this offering. In addition, we intend to file a registration statement on Form S-8 under the Securities Act for the resale of shares of common stock issued upon the exercise of options that were not granted under Rule 701. We expect to file this registration statement as soon as practicable after this offering. However, none of the shares registered on Form S-8 will be eligible for resale until the expiration of the lock up agreements to which they are subject.

MATERIAL U. S. FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO NON-U. S. HOLDERS

The following is a general discussion of certain material United States federal income and estate tax considerations with respect to the acquisition, ownership and disposition of shares of our common stock applicable to non-U.S. holders. In general, a "non-U.S. holder" is any holder other than:

- an individual who is a citizen or resident of the United States for United States federal income tax purposes;
- a corporation (or other entity treated as a corporation for United States federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or
- a trust if (a) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust or (b) it has a valid election in effect under applicable Treasury regulations to be treated as a United States person.

This discussion is based on current provisions of the Internal Revenue Code, final, temporary or proposed Treasury regulations promulgated thereunder, judicial opinions, published positions of the Internal Revenue Service and all other applicable authorities, all of which are subject to change (possibly with retroactive effect). We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset (generally property held for investment).

This discussion does not address all aspects of United States federal income and estate taxation that may be important to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any aspects of United States state or local taxes or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder subject to special treatment under the United States federal income tax laws, including, without limitation:

- banks, insurance companies or other financial institutions;
- partnerships or other pass-through entities or persons that hold shares of our common stock through such entities;
- tax-exempt organizations;
- tax-qualified retirement plans;
- dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- United States expatriates; and
- persons that will hold common stock as a position in a hedging transaction, "straddle" or "conversion transaction" for tax purposes.

Accordingly, we urge prospective investors to consult with their own tax advisors regarding the United States federal, state and local income and non-U.S. income and other tax considerations of acquiring, holding and disposing of shares of our common stock.

If a partnership or other pass-through entity holds shares of our common stock, the tax treatment of a partner in such partnership or an owner of such other pass-through entity will generally depend upon the status of such partner or other owner and the activities of such partnership or other entity. Any partnership or other pass-through entity that holds shares of our common stock or any partner in such partnership or owner of such other entity should consult its own tax advisors.

Dividends

If we make cash or other property distributions on our common stock, such distributions will constitute dividends for United States federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under United States federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, such excess will constitute a return of capital and will first reduce the non-U.S. holder's adjusted tax basis in our common stock, but not below zero. Any remaining excess will be treated as gain from the sale or other disposition of shares of our common stock (as described under "— Gain on Sale or Other Disposition of Common Stock" below).

In general, dividends we pay, if any, to a non-U.S. holder will be subject to United States withholding tax at a rate of 30% of the gross amount. The withholding tax might not apply or might apply at a reduced rate under the terms of an applicable income tax treaty between the United States and the non-U.S. holder's country of residence. A non-U.S. holder must demonstrate its entitlement to treaty benefits by certifying, among other things, its nonresident status. A non-U.S. holder generally can meet this certification requirement by providing an Internal Revenue Service Form W-8BEN or appropriate substitute form to us or our paying agent. Also, special rules apply if the dividends are effectively connected with a trade or business carried on by the non-U.S. holder within the United States and, if a treaty applies, are attributable to a permanent establishment of the non-U.S. holder within the United States. Dividends effectively connected with this United States trade or business, and, if a treaty applies, attributable to such a permanent establishment of a non-U.S. holder, generally will not be subject to United States withholding tax if the non-U.S. holder files certain forms, including Internal Revenue Service Form W-8ECI (or any successor form), with the payor of the dividend, and generally will be subject to United States federal income tax on a net income basis, in the same manner as if the non-U.S. holder were a resident of the United States. A non-U.S. holder that is a corporation may be subject to an additional "branch profits tax" at a rate of 30% (or a reduced rate as may be specified by an applicable income tax treaty) on the repatriation from the United States of its "effectively connected earnings and profits," subject to certain adjustments. A non-U.S. holder of shares of our common stock eligible for a reduced rate of United States withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the Internal Revenue Service.

Gain on Sale or Other Disposition of Common Stock

In general, a non-U.S. holder will not be subject to United States federal income tax on any gain realized upon the sale or other disposition of the holder's shares of our common stock unless:

- the gain is effectively connected with a trade or business carried on by the non-U.S. holder within the United States and, if required by an applicable income tax treaty as a condition to subjecting a non-U.S. holder to United States income tax on a net basis, the gain is attributable to a permanent establishment of the non-U.S. holder maintained in the United States, in which case a non-U.S. holder will be subject to United States federal income tax on any gain realized upon the sale or other disposition on a net income basis, in the same manner as if the non-U.S. holder were a resident of the United States. Furthermore, the branch profits tax discussed above may also apply if the non-U.S. holder is a corporation;
- the non-U.S. holder is an individual and is present in the United States for 183 days or more in the taxable year of disposition and certain other tests are met, in which case a non-U.S. holder will be subject to a flat 30% tax on any gain realized upon the sale or other disposition, which tax may be offset by United States source capital losses (even though the individual is not considered a resident of the United States); or
- we are or have been a United States real property holding corporation (a USRPHC) for United States federal income tax purposes at any time within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period. We do not believe that we are or have been a USRPHC, and we do not anticipate becoming a USRPHC. If we have been in the past or were to become a USRPHC at any time during this period, generally gains realized upon a disposition of shares of our common stock by a non-U.S. holder that did not directly or indirectly own more than 5% of our common stock during this period would not be subject to United States federal income tax, provided that our common stock is "regularly traded on an established securities market" (within the meaning of Section 897(c)(3) of the Internal Revenue Code). Our common stock will be treated as regularly traded on an established securities market during any period in which it is listed on a registered national securities exchange or any over-the-counter market.

United States Federal Estate Tax

Shares of our common stock that are owned or treated as owned by an individual who is not a citizen or resident (as defined for United States federal estate tax purposes) of the United States at the time of death will be includible in the individual's gross estate for United States federal estate tax purposes, unless an applicable estate tax treaty provides otherwise, and therefore may be subject to United States federal estate tax.

Backup Withholding, Information Reporting and Other Reporting Requirements

Generally, we must report annually to the Internal Revenue Service and to each non-U.S. holder the amount of dividends paid to, and the tax withheld with respect to, each non-U.S. holder. These reporting requirements apply regardless of whether withholding was reduced or eliminated by an applicable tax treaty. Copies of this information also may be made available under the provisions of a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established.

United States backup withholding tax is imposed (at a current rate of 28%) on certain payments to persons that fail to furnish the information required under the United States information reporting requirements. A non-U.S. holder of shares of our common stock will be subject to this backup withholding tax on dividends we pay unless the holder certifies, under penalties of perjury, among other things, its status as a non-U.S. holder (and we or our paying agent do not have actual knowledge or reason to know the holder is a United States person) or otherwise establishes an exemption.

Under the Treasury regulations, the payment of proceeds from the disposition of shares of our common stock by a non-U.S. holder made to or through a United States office of a broker generally will be subject to information reporting and backup withholding unless the beneficial owner certifies, under penalties of perjury, among other things, its status as a non-U.S. holder (and we or our paying agent do not have actual knowledge or reason to know the holder is a United States person) or otherwise establishes an exemption. The payment of proceeds from the disposition of shares of our common stock by a non-U.S. holder made to or through a non-U.S. office of a broker generally will not be subject to backup withholding and information reporting, except as noted below. In the case of proceeds from a disposition of shares of our common stock by a non-U.S. holder made to or through a non-U.S. office of a broker that is:

- a United States person;
- a "controlled foreign corporation" for United States federal income tax purposes;
- a foreign person 50% or more of whose gross income from certain periods is effectively connected with a United States trade or business; or
- a foreign partnership if at any time during its tax year (a) one or more of its partners are United States persons who, in the aggregate, hold more than 50% of the income or capital interests of the partnership or (b) the foreign partnership is engaged in a United States trade or business;

information reporting (but not backup withholding) will apply unless the broker has documentary evidence in its files that the owner is a non-U.S. holder and certain other conditions are satisfied, or the beneficial owner otherwise establishes an exemption (and the broker has no actual knowledge or reason to know to the contrary).

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may generally be refunded or credited against the non-U.S. holder's United States federal income tax liability, if any, provided that the required information is furnished to the Internal Revenue Service in a timely manner.

EACH PROSPECTIVE HOLDER OF SHARES OF OUR COMMON STOCK SHOULD CONSULT HIS, HER OR ITS OWN TAX ADVISOR WITH RESPECT TO THE UNITED STATES FEDERAL, STATE AND LOCAL TAX CONSEQUENCES AND NON-U.S. TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

UNDERWRITERS

Under the terms and subject to the conditions contained in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. Incorporated is acting as the representative, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated in the table below:

Name	Number of Shares
Morgan Stanley & Co. Incorporated	
UBS Securities LLC	
Leerink Swann LLC	
Pacific Growth Equities, LLC	
Total	

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at a price that represents a concession not in excess of $ per share under the public offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representative.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to an aggregate of additional shares of common stock at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase approximately the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional 795,000 shares of common stock.

	Per Share	No exercise	Full Exercise
Public offering price	$	$	$
Underwriting discounts and commissions			
Proceeds, before expenses, to us			

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions are approximately $3.1 million.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed five percent of the total number of shares of common stock offered by them.

We have applied to have the common stock listed on the NASDAQ Global Market under the symbol "FLDM."

We and all directors, officers and substantially all of our other security holders have agreed that, without the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock; or
- in our case only, file or cause to be filed a registration statement, including any amendments with respect to the registration statement of any shares of common stock or securities convertible, exercisable or exchangeable into our common stock or any other securities of the company (other than any registration statement on Form S-8),

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, each such person agrees that, without the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the underwriters, they will not, during the period ending 180 days after the date of this prospectus, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

Subject to certain restrictions, the restrictions described in the immediately preceding paragraph do not apply to:

- the sale of shares to the underwriters;
- transactions relating to shares of common stock or other securities acquired in this offering or in open market transactions after the completion of this offering, provided that no filing under Section 16(a) of the Securities Exchange Act of 1934, as amended, shall be required or shall be voluntarily made in connection with subsequent sales of common stock or other securities acquired in such transactions;
- the exercise of any options to acquire common stock or conversion of any convertible security into common stock;
- transfers of shares of common stock or any security convertible into common stock as a bona fide gift;
- distributions of shares of common stock or any security convertible into common stock to limited partners, members or stockholders of the transferor;
- transfers of shares of common stock or any security convertible into common stock by will or intestacy to the transferor’s immediate family or to a trust, the beneficiaries of which are members of the transferor’s immediate family;
- the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that such plan does not provide for the transfer of common stock during the restricted period;
- the issuance of shares of, or options to purchase shares of, common stock to our employees, officers, directors, advisors or consultants pursuant to our employee benefit plans;
- the filing of a registration statement on Form S-8 for the registration of shares of common stock issued pursuant our employee benefit plans; or
- the issuance of shares of common stock, or any securities convertible into or exercisable or exchangeable for common stock, in an amount having an aggregate value equal to 15% of the gross proceeds from this offering in connection with a merger or acquisition transaction.

The 180-day restricted period described in the preceding paragraph will be extended if:

- during the last 17 days of the 180-day restricted period, we issue a release regarding earnings or regarding material news or events relating to us; or
- prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day period,

in which case, the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event, unless such extension is waived, in writing, by Morgan Stanley & Co. Incorporated on behalf of the underwriters.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. As an additional means of facilitating the offering, the underwriters may bid for, and purchase, shares of common stock in the open market. Finally, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the common stock in the offering, if the syndicate repurchases previously distributed common stock to cover syndicate short positions or to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters participating in this offering. Other than the prospectus in electronic format, the information on the underwriters' websites is not part of this prospectus. The underwriters may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by Morgan Stanley & Co. Incorporated to underwriters that may make Internet distributions on the same basis as other allocations.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Member State it has not made and will not make an offer of the common stock to the public in that Member State, except that it may, with effect from and including such date, make an offer of the common stock to the public in that Member State:

- at any time to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- at any time to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts; or

- at any time in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of the above, the expression an "offer of the common stock to the public" in relation to any shares of common stock in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the common stock to be offered so as to enable an investor to decide to purchase or subscribe shares of common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in that Member State.

United Kingdom

Each underwriter has represented and agreed that it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of shares of common stock in circumstances in which Section 21(1) of such Act does not apply to us and it has complied and will comply with all applicable provisions of such Act with respect to anything done by it in relation to any shares of common stock in, from or otherwise involving the United Kingdom.

Other Relationships

In October 2007, we sold shares of our Series E preferred stock in a private placement transaction. Leerink Swann LLC acted as the placement agent in the October 2007 offering and received a fee of $1,000,000 for services rendered. Entities affiliated with Leerink Swann LLC also participated in the October 2007 offering and purchased an aggregate of 40,357 shares of our Series E preferred stock for an aggregate purchase price of $565,000. One or more of the underwriters may in the future provide investment banking services to us for which they would receive customary compensation.

Pricing of the Offering

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the underwriters. Among the factors to be considered in determining the initial public offering price are:

- our future prospects and those of our industry in general;
- our sales, earnings and certain other financial and operating information in recent periods; and
- the price-earnings ratios, price-sales ratios and market prices of securities and certain financial and operating information of companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Latham & Watkins LLP, Costa Mesa, California is acting as counsel to the underwriters. Members of Wilson Sonsini Goodrich & Rosati, Professional Corporation and investment funds associated with that firm hold 45,987 shares of our common stock.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements at December 31, 2006 and December 29, 2007, and for each of the three years in the period ended December 29, 2007, as set forth in their report. We have included our consolidated financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. Upon completion of this offering, we will be required to file periodic reports, proxy statements, and other information with the SEC pursuant to the Securities Exchange Act of 1934. You may read and copy this information at the Public Reference Room of the SEC, 100 F. Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that site is www.sec.gov.

We intend to provide our stockholders with annual reports containing financial statements that have been audited by an independent registered public accounting firm, and to file with the SEC quarterly reports containing unaudited financial data for the first three quarters of each year.

FLUIDIGM CORPORATION

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Fluidigm Corporation

We have audited the accompanying consolidated balance sheets of Fluidigm Corporation as of December 31, 2006 and December 29, 2007, and the related consolidated statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the three fiscal years in the period ended December 29, 2007. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Fluidigm Corporation at December 31, 2006 and December 29, 2007, and the consolidated results of its operations and its cash flows for each of the three fiscal years in the period ended December 29, 2007, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, Fluidigm Corporation changed its method of accounting for preferred stock warrants as of July 1, 2005, its method of accounting for stock-based compensation as of January 1, 2006, and its method of accounting for uncertain tax positions as of January 1, 2007.

/s/ Ernst & Young LLP

Palo Alto, California
April 12, 2008,
except for Note 16 as to which the date is
September 16, 2008

FLUIDIGM CORPORATION

Consolidated Balance Sheets

(in thousands, except per share amounts)

	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)	Pro forma Stockholders' Equity as of June 28, 2008 (Unaudited)
Assets				
Current assets:				
Cash and cash equivalents	$ 25,018	$ 34,077	$ 28,966	
Available-for-sale securities	500	6,286	3,503	
Accounts receivable (net of allowances of $3, $0 and $0; includes accounts receivable from related parties of $272, $690 and $609, respectively)	1,765	1,900	2,495	
Inventories	3,038	5,498	6,980	
Prepaid expenses and other current assets	768	2,068	2,451	
Restricted cash	—	500	—	
Total current assets	31,089	50,329	44,395	
Restricted cash	900	381	256	
Property and equipment, net	4,068	3,378	2,757	
Other assets (includes receivables from related parties of $277, $287 and $71, respectively)	436	688	2,270	
Total assets	$ 36,493	$ 54,776	$ 49,678	
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)				
Current liabilities:				
Accounts payable (includes accounts payable to related parties of $174, $290 and $428, respectively)	$ 1,188	$ 2,725	$ 3,231	
Accrued compensation and related benefits	397	898	1,075	
Other accrued liabilities	856	998	1,591	
Deferred revenue, current portion (includes deferred revenue from related parties of $227, $276 and $253, respectively)	1,010	2,652	2,504	
Long-term debt, current portion	3,476	3,834	6,081	
Convertible preferred stock warrant liabilities	223	468	1,269	$ —
Total current liabilities	7,150	11,575	15,751	
Deferred revenue, net of current portion (includes deferred revenue from related parties of $493, $359 and $253, respectively)	786	762	602	
Long-term debt, net of current portion	9,362	5,528	10,477	
Convertible promissory notes from related parties	13,072	4,997	—	
Other liabilities	—	163	218	
Total liabilities	30,370	23,025	27,048	
Commitments and contingencies (Note 6)				
Convertible preferred stock issuable in series: $0.0035 par value, 14,501, 17,176 and 17,176 shares authorized, 12,367, 16,192 and 16,626 shares issued and outstanding as of December 31, 2006, December 29, 2007 and June 28, 2008 (unaudited), respectively; aggregate liquidation preference of $171,228 as of June 28, 2008 (unaudited); no shares authorized, issued or outstanding pro forma (unaudited)	112,295	162,082	167,538	—
Stockholders' equity (deficit):				
Common stock: $0.0035 par value, 22,244, 24,967 and 24,967 shares authorized, 2,714, 2,829 and 2,858 shares issued and outstanding as of December 31, 2006, December 29, 2007 and June 28, 2008 (unaudited), respectively; $0.0035 par value, 24,967 shares authorized, 19,484 shares issued and outstanding pro forma (unaudited)	9	10	10	68
Additional paid-in capital	2,108	3,592	4,383	173,132
Accumulated other comprehensive loss	(17)	(135)	(241)	(241)
Accumulated deficit	(108,272)	(133,798)	(149,060)	(149,060)
Total stockholders' equity (deficit)	(106,172)	(130,331)	(144,908)	$ 23,899
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 36,493	$ 54,776	$ 49,678	

See accompanying notes.

FLUIDIGM CORPORATION
Consolidated Statements of Operations
(in thousands, except per share amounts)

	Year Ended			Six Months Ended	
	December 31, 2005	December 31, 2006	December 29, 2007	June 30, 2007	June 28, 2008
				(Unaudited)	
Revenue:					
Product revenue (includes product revenue from related parties of $205, $241, $15, $0 and $96, respectively)	$ 6,076	$ 3,959	$ 4,451	$ 1,489	$ 4,382
Collaboration revenue	1,568	1,376	460	310	70
Grant revenue (includes grant revenue from related parties of $0, $879, $1,758, $843 and $810, respectively)	30	1,063	2,364	1,198	1,068
Total revenue	7,674	6,398	7,275	2,997	5,520
Costs and expenses:					
Cost of product revenue	4,764	2,773	3,514	1,490	2,988
Research and development (includes research and development expenses from related parties of $84, $128, $100, $50 and $50, respectively)	11,449	15,589	14,389	7,053	7,151
Selling, general and administrative (includes selling, general and administrative expense from related parties of $946, $809, $660, $288 and $616, respectively)	7,955	9,699	12,898	6,183	9,843
Total costs and expenses	24,168	28,061	30,801	14,726	19,982
Loss from operations	(16,494)	(21,663)	(23,526)	(11,729)	(14,462)
Interest expense (includes interest to related parties of $160, $445, $1,286, $980 and $417)	(898)	(2,261)	(2,790)	(1,790)	(1,100)
Interest income	340	565	1,140	565	557
Other income (expense), net	30	(194)	(170)	37	(214)
Loss before provision for income taxes and cumulative effect of change in accounting principle	(17,022)	(23,553)	(25,346)	(12,917)	(15,219)
Provision for income taxes	—	—	(105)	(52)	(43)
Loss before cumulative effect of change in accounting principle	(17,022)	(23,553)	(25,451)	(12,969)	(15,262)
Cumulative effect of change in accounting principle	637	—	—	—	—
Net loss	$ (16,385)	$ (23,553)	$ (25,451)	$ (12,969)	$ (15,262)
Net loss per share of common stock before cumulative effect of change in accounting principle, basic and diluted	$ (6.60)	$ (8.82)	$ (9.21)	$ (4.74)	$ (5.39)
Cumulative effect of change in accounting principle, basic and diluted	0.25	—	—	—	—
Net loss per share of common stock, basic and diluted	$ (6.35)	$ (8.82)	$ (9.21)	$ (4.74)	$ (5.39)
Shares used in computing net loss per share of common stock, basic and diluted	2,580	2,671	2,765	2,736	2,832
Pro forma net loss per share of common stock, basic and diluted (unaudited)			$ (1.52)		$ (0.78)
Shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)			16,577		19,149

See accompanying notes.

FLUIDIGM CORPORATION
Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)

(in thousands, except per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
Balance as of January 1, 2005	9,384	$ 76,596	2,551	$ 9	$ 2,870	$ (16)	$ (68,334)	$ (65,471)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early	—	—	49	—	46	—	—	46
Issuance of Series D convertible preferred stock for cash at $9.80 per share, net of issuance costs of $11	1,025	10,042	—	—	—	—	—	—
Issuance of common stock for services	—	—	23	—	34	—	—	34
Stock-based compensation expense	—	—	—	—	5	—	—	5
Issuance of convertible preferred stock warrants in connection with financing activities	—	—	—	—	54	—	—	54
Issuance of Series D convertible preferred stock upon conversion of promissory note at $9.80 per share	238	2,328	—	—	—	—	—	—
Reclassification of convertible preferred stock warrants to liabilities upon adoption of FSP 150-5	—	—	—	—	(1,473)	—	—	(1,473)
Comprehensive loss:								
Foreign currency translation adjustment	—	—	—	—	—	15	—	15
Unrealized gain on available-for-sale securities	—	—	—	—	—	21	—	21
Net loss	—	—	—	—	—	—	(16,385)	(16,385)
Total comprehensive loss								(16,349)
Balance as of December 31, 2005	10,647	88,966	2,623	9	1,536	20	(84,719)	(83,154)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early	—	—	126	—	190	—	—	190
Repurchase of common stock	—	—	(35)	—	(69)	—	—	(69)
Issuance of Series D convertible preferred stock at $9.80 per share upon exercise of warrants	77	729	—	—	—	—	—	—
Issuance of Series E convertible preferred stock for cash at $14.00 per share, net of issuance costs of $133	1,582	22,003	—	—	—	—	—	—
Issuance of Series D convertible preferred stock at $9.80 per share under license agreement, net of issuance costs of $3	61	597	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	145	—	—	145
Beneficial conversion feature for convertible promissory notes	—	—	—	—	306	—	—	306
Comprehensive loss:								
Foreign currency translation adjustment	—	—	—	—	—	(36)	—	(36)
Unrealized loss on available-for-sale securities	—	—	—	—	—	(1)	—	(1)
Net loss	—	—	—	—	—	—	(23,553)	(23,553)
Total comprehensive loss								(23,590)
Balance as of December 31, 2006	12,367	112,295	2,714	9	2,108	(17)	(108,272)	(106,172)
Cumulative effect of change in accounting principle	—	—	—	—	—	—	(75)	(75)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early	—	—	85	1	146	—	—	147
Issuance of Series E convertible preferred stock for cash at $14.00 per share, net of issuance costs of $1,189	2,650	35,911	—	—	—	—	—	—
Issuance of common stock for services	—	—	30	—	145	—	—	145
Stock-based compensation expense	—	—	—	—	708	—	—	708
Issuance of Series D convertible preferred stock upon conversion of promissory note at $9.80 per share	331	3,240	—	—	—	—	—	—
Issuance of Series E convertible preferred stock upon conversion of promissory notes at $12.60 per share	844	10,636	—	—	—	—	—	—
Beneficial conversion feature for convertible promissory notes	—	—	—	—	485	—	—	485
Comprehensive loss:								
Foreign currency translation adjustment	—	—	—	—	—	(107)	—	(107)
Unrealized loss on available-for-sale securities	—	—	—	—	—	(11)	—	(11)
Net loss	—	—	—	—	—	—	(25,451)	(25,451)
Total comprehensive loss								(25,569)
Balance as of December 29, 2007 (carried forward)	16,192	$ 162,082	2,829	$ 10	$ 3,592	$ (135)	$ (133,798)	$ (130,331)

See accompanying notes.

FLUIDIGM CORPORATION
Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit) — (Continued)

(in thousands, except per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
Balance as of December 29, 2007 (brought forward)	16,192	$ 162,082	2,829	$ 10	$ 3,592	$ (135)	$ (133,798)	$ (130,331)
Issuance of common stock upon exercise of stock options for cash and for vesting of stock options that were exercised early (unaudited)	—	—	64	—	80	—	—	80
Stock-based compensation expense (unaudited)	—	—	—	—	1,001	—	—	1,001
Repurchase of common stock (unaudited)	—	—	(35)	—	(290)	—	—	(290)
Issuance of Series E convertible preferred stock upon conversion of promissory notes at $12.60 per share (unaudited)	430	5,414	—	—	—	—	—	—
Issuance of Series C convertible preferred stock at $7.63 per share upon net-share exercise of warrants (unaudited)	4	42	—	—	—	—	—	—
Comprehensive loss:								
Foreign currency translation adjustment (unaudited)	—	—	—	—	—	(116)	—	(116)
Unrealized gain on available-for-sale securities (unaudited)	—	—	—	—	—	10	—	10
Net loss (unaudited)	—	—	—	—	—	—	(15,262)	(15,262)
Total comprehensive loss (unaudited)								(15,368)
Balance as of June 28, 2008 (unaudited)	16,626	$ 167,538	2,858	$ 10	$ 4,383	$ (241)	$ (149,060)	$ (144,908)

See accompanying notes.

FLUIDIGM CORPORATION

Consolidated Statements of Cash Flows

(in thousands)

	Year Ended			Six Months Ended	
	December 31, 2005	December 31, 2006	December 29, 2007	June 30, 2007	June 28, 2008
				(Unaudited)	
Operating activities					
Net loss	$ (16,385)	$ (23,553)	$ (25,451)	$ (12,969)	$ (15,262)
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation and amortization	1,309	1,379	1,643	832	837
Stock-based compensation expense	5	145	708	373	1,001
Foreign exchange gain	—	—	—	—	(141)
Adjustment to fair value of convertible preferred stock warrants	(72)	138	245	(25)	359
Loss on retirement of property and equipment	—	111	20	14	1
Amortization of debt discount and issuance cost	9	80	495	374	402
Issuance of common stock for services	34	—	145	136	—
Issuance of convertible preferred stock under license agreement	—	597	—	—	—
Cumulative effect of change in accounting principle	(637)	—	—	—	—
Changes in assets and liabilities:					
Accounts receivable	(287)	(400)	(135)	(470)	(560)
Inventories	152	(955)	(2,460)	(1,396)	(1,514)
Prepaid expenses and other assets	(75)	(78)	(1,552)	(847)	(2,255)
Accounts payable	773	(575)	1,537	457	506
Deferred revenue	1,202	533	1,618	1,050	(308)
Other liabilities	(320)	272	1,428	1,031	962
Net cash used in operating activities	(14,292)	(22,306)	(21,759)	(11,440)	(15,972)
Investing activities					
Purchases of available-for-sale securities	(500)	(1,990)	(6,286)	—	(4,511)
Maturities of available-for-sale securities	6,249	1,987	500	500	4,267
Sales of available-for-sale securities	2,650	—	—	—	3,013
Restricted cash	95	(8)	19	19	625
Purchase of property and equipment	(1,656)	(2,932)	(973)	(374)	(217)
Net cash provided by (used in) investing activities	6,838	(2,943)	(6,740)	145	3,177
Financing activities					
Proceeds from long-term debt	14,651	—	—	—	10,000
Repayment of long-term debt	(1,745)	(4,000)	(3,503)	(1,868)	(2,442)
Proceeds from exercise of stock options	46	190	147	29	80
Proceeds from issuance of convertible preferred stock, net of issuance costs	10,042	22,003	35,911	1,873	—
Proceeds from issuance of convertible promissory notes	—	13,000	5,000	5,000	—
Repurchase of common stock	—	(69)	—	—	—
Net cash provided by financing activities	22,994	31,124	37,555	5,034	7,638
Effect of exchange rate changes on cash and cash equivalents	(2)	(19)	3	(33)	46
Net increase (decrease) in cash and cash equivalents	15,538	5,856	9,059	(6,294)	(5,111)
Cash and cash equivalents as of beginning of period	3,624	19,162	25,018	25,018	34,077
Cash and cash equivalents as of end of period	$ 19,162	$ 25,018	$ 34,077	$ 18,724	$ 28,966
Supplemental disclosures of cash flow information					
Cash paid for interest	$ 589	$ 1,826	$ 1,523	$ 944	$ 642
Conversion of convertible promissory notes into convertible preferred stock	$ 2,328	$ —	$ 13,876	$ 13,876	$ 5,414
Cashless net exercise of convertible preferred stock warrants	$ —	$ 729	$ —	$ —	$ 42
Issuance of warrants in connection with long-term debt	$ 104	$ —	$ —	$ —	$ 484
Issuance of convertible preferred stock under license agreement	$ —	$ 597	$ —	$ —	$ —

See accompanying notes.

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements

1. Description of Business

Fluidigm Corporation (the Company) was incorporated in the state of California on May 19, 1999, to commercialize microfluidic technology initially developed at the California Institute of Technology. In July 2007, the Company was reincorporated in Delaware. The Company's headquarters are located in South San Francisco, California.

The Company develops, manufactures and markets proprietary Integrated Fluidic Circuit systems that significantly improve the productivity of life science research. The Company's Integrated Fluidic Circuits (IFCs), enable the simultaneous performance of thousands of biochemical measurements in extremely minute volumes. The Company created this "integrated circuit for biology" by miniaturizing, integrating and automating sophisticated liquid handling processes on a single microfabricated device. The Company's customers include many leading biotechnology and pharmaceutical companies, academic institutions, and life science laboratories worldwide.

The Company has incurred significant net losses since inception. As of June 28, 2008, the Company had an accumulated deficit of approximately $149.1 million and cash, cash equivalents and available-for-sale securities of approximately $32.5 million. The Company expects to incur significant expenses to fund operations to develop new products and to support existing product sales. Failure to generate sufficient revenues, achieve planned gross margins, control operating costs, or to raise sufficient additional funds may require the Company to modify, delay, or abandon some of its future expansion or expenditures, which could have a material adverse effect on the Company's business, operating results, financial condition, and ability to achieve its intended business objectives.

2. Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The consolidated financial statements of the Company have been prepared in conformity with U.S. generally accepted accounting principles and include the accounts of the Company and its wholly owned subsidiaries. The Company has wholly owned subsidiaries in Singapore, the Netherlands, Japan, France and the United Kingdom. All subsidiaries, except for Singapore, use their local currency as their functional currency. The Singapore subsidiary uses the U.S. dollar as its functional currency. All intercompany transactions and balances have been eliminated in consolidation.

Fiscal Year

During 2007, the Company adopted a 52 or 53 week year convention for its fiscal years and, therefore, the 2007 fiscal year ended on December 29, 2007 and the quarterly periods for 2007 ended on March 31, June 30 and September 29. For 2008, the quarterly periods end on March 29, June 28 and September 27. Future fiscal years will end on the last Saturday in December of each respective year. Prior to 2007, the Company used a calendar year. The fiscal years presented in these consolidated financial statements ended on December 31, 2005, December 31, 2006 and December 29, 2007.

Unaudited Interim Financial Information

The accompanying interim consolidated balance sheet as of June 28, 2008, the interim consolidated statements of operations and cash flows for the six months ended June 30, 2007 and June 28, 2008 and the interim consolidated statements of convertible preferred stock and stockholders' equity (deficit) for the six months ended June 28, 2008 are unaudited. The unaudited interim consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company's financial position as of June 28, 2008 and its results of operations and its cash flows for the six months ended June 30, 2007 and June 28, 2008. The financial data and the other financial information disclosed in these notes to the consolidated financial statements

related to the six month periods are unaudited. The results of operations for the six months ended June 28, 2008 are not necessarily indicative of the results to be expected for 2008 or any other interim period or for any other future year.

Unaudited Pro Forma Stockholders' Equity

All of the convertible preferred stock outstanding will automatically convert into shares of common stock upon completion of a qualifying initial public offering (see Note 16). In addition, the convertible preferred stock warrant liabilities will be reclassified to additional paid-in capital upon completion of an initial public offering. Unaudited pro forma stockholders' equity, as adjusted for the assumed conversion of the convertible preferred stock to common stock and warrants to purchase shares of convertible preferred stock to warrants to purchase shares of common stock, is set forth in the accompanying consolidated balance sheets.

Use of Estimates

The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company regularly assesses these estimates which affect the fair value of undelivered elements for revenue recognition purposes, the valuation of accounts receivable, the valuation of inventories, accrued liabilities, the fair value of the Company's convertible preferred stock and common stock, warrants, stock-based compensation, beneficial conversion features, and valuation allowances associated with deferred tax assets. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ materially from these estimates.

Foreign Currency

Assets and liabilities of non-U.S. subsidiaries that use the local currency as their functional currency are translated into U.S. dollars at exchange rates in effect at the balance sheet date, with the resulting translation adjustments recorded to a separate component of accumulated other comprehensive income (loss) within stockholders' equity. Income and expense accounts are translated at average exchange rates during the year. Foreign currency transaction gains and losses for non-U.S. subsidiaries that use the U.S. dollar as their functional currency are recognized in other income (expense), net. The Company had net foreign currency transaction losses of $27,000, $70,000 and $64,000 during 2005, 2006 and the six months ended June 30, 2007, respectively, and net foreign currency transaction gains of $72,000 and $141,000 during 2007 and the six months ended June 28, 2008, respectively.

Cash and Cash Equivalents

The Company considers all highly liquid financial instruments with maturities at the time of purchase of three months or less to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks, money market funds, commercial paper, corporate notes, and notes from government-sponsored agencies.

Available-for-Sale Securities

Available-for-sale securities are comprised of corporate notes and notes from government-sponsored agencies. Investments classified as "available-for-sale" and are recorded at estimated fair value, as determined by quoted market rates, on the consolidated balance sheets with any unrealized gains and losses reported in stockholders' equity as a component of accumulated other comprehensive income (loss). Realized gains and losses and declines in the fair value of available-for-sale securities below their cost that are deemed to be "other than temporary" are reflected in interest income. No "other than temporary" unrealized losses have been incurred to date and realized gains and losses were immaterial during the years presented. The cost of securities sold is based on the specific-identification method.

Restricted Cash

The Company had restricted cash balances of $900,000, $881,000 and $256,000 as of December 31, 2006, December 29, 2007 and June 28, 2008, respectively. Included in restricted cash is cash amounts that collateralize the Company's standby letters of credit issued under operating lease agreements for office facilities that it currently occupies.

Fair Value of Financial Instruments

As of December 31, 2006, December 29, 2007 and June 28, 2008, the respective carrying values of the Company's financial instruments, including accounts receivable, restricted cash, and accounts payable, approximated their fair values due to their short period of time to maturity or repayment. Based on borrowing rates currently available to the Company for loans with similar terms, the carrying value of long-term debt and convertible promissory notes approximated their fair values.

SFAS No. 157, *Fair Value Measurement* (SFAS 157), clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, SFAS 157 establishes a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than the quoted prices in active markets that are observable either directly or indirectly; and (Level III) unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions. This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. The Company's financial assets that are measured at fair value on a recurring basis consist of cash equivalents and available-for-sale securities. The Company's liabilities that are measured at fair value on a recurring basis consist of convertible preferred stock warrant liabilities.

All of the Company's cash equivalents and available-for-sale securities are classified within Level I or Level II of the fair value hierarchy because they are valued using quoted market prices, market prices for similar securities, or alternative pricing sources with reasonable levels of price transparency. Instruments valued based on quoted market prices in active markets, i.e. level I, include the Company's money market funds. Instruments valued based on other observable inputs, i.e. level II, include notes from government-sponsored agencies, corporate notes and commercial paper. The Company's convertible preferred stock warrant liabilities are classified within Level III of the fair value hierarchy.

The changes in the value of the convertible preferred stock warrant liabilities were as follows (in thousands):

Fair value as of December 29, 2007	$ 468
Issuances or settlements	442
Change in fair value	359
Fair value as of June 28, 2008	$ 1,269

The valuation of the convertible preferred stock warrants are discussed in Note 8.

Accounts Receivable

Trade accounts receivable are recorded at net invoice value. The Company considers receivables past due based on the contractual payment terms. The Company reviews its exposure to accounts receivable and reserves specific amounts if collectibility is no longer reasonably assured based on historical experience and specific customer collection issues. The Company reevaluates such reserves on a regular basis and adjusts its reserves as

needed. Write-offs of accounts receivable were insignificant during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to credit risk consist of cash, cash equivalents, available-for-sale securities, and accounts receivable. The Company maintains cash, cash equivalents, and available-for-sale securities with major financial institutions. The Company's cash, cash equivalents, and available-for-sale securities consist of deposits held with banks, commercial paper, money market funds, and other highly liquid investments that, at times, exceed federally insured limits. The Company performs periodic evaluations of its investments and the relative credit standing of these financial institutions and limits the amount of credit exposure with any one institution.

The Company does not require collateral to support credit sales. To reduce credit risk, the Company performs periodic credit evaluations of its customers. The Company has had no credit losses to date. Customers with revenues of 10% or greater of total revenues for 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008 are as follows:

	Percentage of Total Revenue				
Customers:	2005	2006	2007	Six Months Ended June 30, 2007	Six Months Ended June 28, 2008
A	*	14%	24%	28%	15%
B	16%	14%	*	*	*
C	14%	16%	*	*	*
D	*	*	*	12%	*

* Represents less than 10% of total revenues.

The Company's products include components that are currently available from a single source or a limited number of sources. The Company believes that other vendors would be able to provide similar components; however, the qualification of such vendors may require start-up time. In order to mitigate any adverse impacts from a disruption of supply, the Company attempts to maintain an adequate supply of critical limited-sourced components.

Inventories

Inventories are stated at the lower of cost (which approximates actual cost on a first-in, first-out method) or market. Inventories include raw materials, work-in-process, and finished goods that may be used in the research and development process, and such items are expensed when they are designated for use in research and development. Provisions for slow moving, excess, and obsolete inventories are recorded based on product life cycle, development plans, product expiration, and quality issues.

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost less accumulated depreciation, which is calculated using the straight-line method over the estimated useful lives of the assets, which range from three to five years. Leasehold improvements are amortized using the straight-line method over the estimated useful lives of the assets or the remaining term of the lease, whichever is shorter.

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash

flows. If impairment is indicated, the Company measures the future discounted cash flows associated with the use of the asset and adjusts the value of the asset accordingly. While the Company's current and historical operating and cash flow losses are indicators of impairment, the Company believes the future cash flows to be received from the long-lived assets recorded as of June 28, 2008 will exceed the assets' carrying value, and, accordingly, the Company has not recognized any impairment losses through June 28, 2008.

Reserve for Product Warranties

The Company generally provides a one-year warranty on instruments. The Company reviews its exposure to estimated warranty expenses associated with instrument sales and establishes an accrual based on historical product failure rates and actual warranty costs incurred. This expense is recorded as a component of cost of product revenue in the consolidated statements of operations. Warranty accruals and expenses were immaterial for all periods presented.

Revenue Recognition

The Company generates revenue from sales of its products and services. The Company's products consist of single-use IFCs, various instruments, software, and reagents. The Company's services include instrument installation, training, and customer support services. The Company has also entered into a number of research and development agreements and received government grants to conduct research and development activities.

The Company records revenue in accordance with the guidelines established by the Securities and Exchange Commission (SEC) Staff Accounting Bulletin No. 104, *Revenue Recognition* (SAB 104). In addition, the Company has concluded that pursuant to AICPA Statement of Position 97-2, *Software Revenue Recognition* (SOP 97-2), software included with certain of its instruments is more than incidental to their functionality. Accordingly, the Company applies SOP 97-2 to sales of such instruments and related deliverables. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services rendered, the seller's price to the buyer is fixed or determinable, and collectibility is reasonably assured.

Product Revenue

The Company sells instruments in arrangements that may include related installation and training, customer support services and software and may also include single-use IFCs. If the arrangement includes IFCs, the Company uses the separation criteria in EITF Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, to separate revenues related to IFCs, which are non-software related deliverables, from software related deliverables. IFC revenue is recognized upon delivery. Revenue from software related deliverables is recognized in accordance with SOP 97-2 and related pronouncements. Under SOP 97-2, the Company recognizes revenue for delivered elements only when it determines that undelivered elements are not essential to the functionality of the delivered elements and the vendor-specific objective evidence (VSOE) of fair values of undelivered elements are known. Installation is deemed essential to the functionality of certain instruments; for those instruments recognition of revenue begins after installation has been completed. Fair value of undelivered elements is established by reference to VSOE which is based on stand-alone sales of such elements. If any undelivered element does not have VSOE of fair value, revenue is deferred until all of such elements are delivered, or until VSOE of fair value can objectively be determined for any remaining undelivered elements. However, if the only undelivered element is post-contract customer support services, such as those included in the Company's maintenance agreements, revenue on the software related deliverables is recognized ratably over the service period. When revenues are deferred, the corresponding costs of products sold are also deferred in other assets in the consolidated financial statements and recognized over the same period. If VSOE of fair value exists for all undelivered elements, but does not exist for the delivered elements in the arrangement, revenue is allocated to the undelivered elements based on their VSOE of fair values, with the residual amount allocated to the delivered elements and recognized upon their delivery.

During 2005, 2006, 2007 and the six months ended June 28, 2008, the Company did not have VSOE of fair value for software support services. Therefore, revenue and the corresponding costs of software-related deliverables is deferred and recognized over the customer support period ranging from one to three years. All revenue from these arrangements has been classified as product revenue in the statements of operations, as the amount attributed to services was immaterial.

In 2007 and thereafter, no right of return has existed for the Company's products. In prior years, if there was a right of return, the entire revenue from the arrangement was deferred until the right had lapsed. The Company has not experienced any significant returns of its products. Accruals are provided for anticipated warranty expenses at the time the associated revenue is recognized. Amounts received in advance of when revenue recognition criteria are met are recorded as deferred revenue on the consolidated balance sheets.

The Company sells its products to third-party resellers located in certain international markets. From time to time, these arrangements may be subject to contingencies such as completion of the instrument delivery to or installation at the end customer. The Company recognizes revenue on sales of products to the resellers if all revenue recognition criteria have been met and any contingency provisions related to the sale have been satisfied.

Collaboration Revenue

The Company has entered into agreements with third parties, including government entities, to provide research and development services. Fixed-fee research and development agreements generally provide the Company with up-front and periodic milestone fees. Variable-fee research and development agreements generally provide the Company with fees based upon agreed upon rates for time incurred by research staff. Under EITF 00-21, the Company evaluates whether these arrangements contain multiple units of accounting by evaluating whether delivered elements have value on a stand-alone basis and whether there is objective and reliable evidence of fair value of the undelivered items. During 2005, 2006, 2007 and the six months ended June 28, 2008, the Company concluded that these arrangements consisted of a single unit of accounting, namely, research and development services. Accordingly, the Company recognizes the fees under these arrangements over the period the Company performs these services. Costs associated with the research and development agreements are included in research and development expense.

Grant Revenue

Government grants provide the Company with incentive payments for certain types of research and development activities performed over a contractually defined period. Revenue from government grants is recognized during the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and the Company has only perfunctory obligations outstanding. Amounts received in advance of when revenue recognition criteria are met are recorded as deferred revenue on the consolidated balance sheets. Costs associated with the grants are included in research and development expense.

Shipping and Handling Costs

Shipping and handling costs incurred for product shipments are included within cost of product revenue in the consolidated statements of operations.

Research and Development

The Company expenses research and development expenditures in the period incurred. Research and development expense consists of personnel costs, independent contractor costs, prototype expenses, and allocated facilities and information technology expenses. These costs include direct and research-related overhead expenses.

Advertising Costs

The Company expenses advertising costs as incurred. The Company incurred advertising costs of $237,000, $324,000, $701,000, $349,000 and $629,000 during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively.

Income Taxes

The Company uses the liability method to account for income taxes, whereby deferred income taxes reflect the impact of temporary differences for items recognized for financial reporting purposes over different periods than for income tax purposes. Valuation allowances are provided when the expected realization of deferred tax assets does not meet a "more likely than not" criterion.

The Company adopted Financial Accounting Standards Board (FASB) Interpretation No. 48, *Accounting for Uncertainties in Income Taxes — an interpretation of FASB Statement No. 109* (FIN 48), effective January 1, 2007. FIN 48 requires that the Company recognize the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination. Upon adoption, the Company recorded a charge of $75,000 as a cumulative effect of a change in accounting principle in the accumulated deficit during 2007.

Stock-Based Compensation

Prior to January 1, 2006, the Company accounted for its employee stock option plans using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25), which required the Company to recognize the difference between the exercise price of an employee option and the fair value of the underlying common stock as of the grant date. The resulting stock-based compensation expense, if any, was recorded on the date of the grant in stockholders' equity as deferred compensation and amortized to expense over the vesting period of the grant, which was generally four years.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), *Share-Based Payment* (SFAS 123(R)), that addresses the accounting for stock-based payment transactions in which a company receives services in exchange for equity instruments, including stock options. The Company adopted SFAS 123(R) beginning January 1, 2006 using the prospective-transition method, as options granted prior to January 1, 2006 were measured using the minimum value method for the pro forma disclosures previously required by SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS 123). Under the prospective-transition method, the Company continues to apply APB 25 to employee equity awards outstanding at the date of the Company's adoption of SFAS 123(R). Any compensation costs recognized from January 1, 2006 onward consists of: (a) compensation cost for all stock-based awards granted prior to, but not vested as of, December 31, 2005 based on the intrinsic value determined in accordance with the provisions of APB 25; and (b) compensation cost for all stock-based awards granted or modified subsequent to December 31, 2005, net of estimated forfeitures, based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R). The Company recognizes stock-based compensation expense on a straight-line basis over the vesting period of the respective grants. In accordance with the prospective-transition method, results for prior periods have not been restated.

The Company applies SFAS 123(R) and EITF Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services* (EITF 96-18), to options and other stock-based awards issued to nonemployees. In accordance with SFAS 123(R) and EITF 96-18, the Company uses the Black-Scholes option-pricing model to measure the fair value of the options at the measurement dates. The nonemployee options are subject to periodic reevaluation over their vesting terms.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Other comprehensive income (loss) includes unrealized holding gains and losses on the Company's available-for-sale securities and foreign currency translation adjustments. Total comprehensive loss for all periods presented has been disclosed in the consolidated statements of convertible preferred stock and stockholders' equity (deficit).

Accumulated other comprehensive income (loss) consists of the following (in thousands):

	December 31, 2005	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)
Unrealized gain (loss) on available-for-sale securities	$ —	$ (1)	$ (12)	$ (2)
Foreign currency translation adjustment	20	(16)	(123)	$ (239)
	$ 20	$ (17)	$ (135)	$ (241)

Convertible Preferred Stock Warrants

Freestanding warrants related to shares that may be redeemable are accounted for in accordance with FASB Staff Position (FSP) No. 150-5, *Issuer's Accounting Under FASB Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares That Are Redeemable* (FSP 150-5), an interpretation of SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*. Under FSP 150-5, freestanding warrants to purchase the Company's convertible preferred stock are classified as liabilities on the consolidated balance sheets and carried at fair value because the warrants may conditionally obligate the Company to transfer assets at some point in the future. The warrants are subject to remeasurement at each balance sheet date, and any change in fair value is recognized as a component of other income (expense), net in the consolidated statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of the exercise or expiration of the warrants, the completion of a deemed liquidation event, conversion of preferred stock into common stock, or until the convertible preferred stockholders can no longer trigger a deemed liquidation event. At that time, the convertible preferred stock warrant liabilities will be reclassified to convertible preferred stock or additional paid-in capital.

FSP 150-5 is effective for all periods beginning after June 30, 2005, and accordingly, it was adopted by the Company on July 1, 2005. Upon adoption, the Company reclassified the fair value of its warrants to purchase shares of its convertible preferred stock as of the adoption date from additional paid-in capital to liabilities and recorded a gain of $637,000 as the cumulative effect of a change in an accounting principle in the consolidated statement of operations during 2005.

Net Loss and Pro forma Net Loss per Share of Common Stock

The Company's basic net loss per share of common stock is calculated by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period. The weighted-average number of shares of common stock used to calculate the Company's basic net loss per share of common stock excludes those shares subject to repurchase related to stock options that were exercised prior to vesting as they are not deemed to be issued for accounting purposes until they vest. The diluted net loss per share of common stock is computed by dividing the net loss by the weighted-average number of common stock equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, convertible preferred stock, options to purchase common stock, common stock subject to repurchase, warrants to purchase convertible preferred stock, and shares of convertible preferred stock subject to conversion of the Company's convertible promissory notes are considered to be common stock equivalents but have been excluded from the calculation of diluted net loss per share of common stock as their effect is anti-dilutive.

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements — (Continued)

Pro forma basic and diluted net loss per share of common stock has been computed to give effect to the conversion of the convertible preferred stock into common stock. Also, the numerator in the pro forma basic and diluted net loss per share calculation has been adjusted to remove gains and losses resulting from remeasurements of the convertible preferred stock warrant liabilities as these warrants will become warrants to purchase shares of the Company's common stock upon a qualifying initial public offering.

The following table sets forth the computation of net loss per share of common stock (in thousands, except per share amounts):

	2005	2006	2007	Six Months Ended June 30, 2007	Six Months Ended June 28, 2008
				(Unaudited)	
Historical					
Numerator:					
Loss before cumulative effect of change in accounting principle	$ (17,022)	$ (23,553)	$ (25,451)	$ (12,969)	$ (15,262)
Cumulative effect of change in accounting principle	637	—	—	—	—
Net loss	$ (16,385)	$ (23,553)	$ (25,451)	$ (12,969)	$ (15,262)
Denominator:					
Shares used in computing net loss per share of common stock, basic and diluted	2,580	2,671	2,765	2,736	2,832
Net loss per share of common stock, basic and diluted:					
Net loss per share of common stock before cumulative effect of change in accounting principle, basic and diluted	$ (6.60)	$ (8.82)	$ (9.21)	$ (4.74)	$ (5.39)
Cumulative effect of change in accounting principle, basic and diluted	0.25	—	—	—	—
Net loss per share of common stock, basic and diluted	$ (6.35)	$ (8.82)	$ (9.21)	$ (4.74)	$ (5.39)

Pro Forma (Unaudited)

	2007	Six Months Ended June 28, 2008
Numerator:		
Net Loss	$ (25,451)	$ (15,262)
Change in fair value of convertible preferred stock warrant liabilities	245	359
Net loss used in computing pro forma net loss per share of common stock, basic and diluted	$ (25,206)	$ (14,903)
Denominator:		
Shares used in computing net loss per share of common stock above, basic and diluted	2,765	2,832
Pro forma adjustments to reflect assumed conversion of convertible preferred stock	13,812	16,317
Shares used in computing pro forma net loss per share of common stock, basic and diluted	16,577	19,149
Pro forma net loss per share of common stock, basic and diluted	$ (1.52)	$ (0.78)

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net loss per share of common stock for the periods presented because including them would have been anti-dilutive.

	2005	2006	2007	Six Months Ended June 30, 2007	June 28, 2008
				(Unaudited))	
Convertible preferred stock	10,647	12,367	16,192	13,679	16,626
Options to purchase common stock	1,728	1,708	2,124	2,100	2,374
Common stock subject to repurchase	12	19	10	14	7
Warrants to purchase convertible preferred stock	346	201	200	201	216
Convertible promissory notes convertible into shares of convertible preferred stock	—	1,129	418	403	—

Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS 157, which establishes a framework for measuring the fair value of assets and liabilities when required or permitted by other standards within generally accepted accounting principles in the United States but does not require any new fair value measurements. SFAS 157 also expands disclosures about fair value measurements. SFAS 157 is effective for all financial statements issued for fiscal years beginning after November 15, 2007. However, in February 2008 the FASB issued FSP No. 157-2 (FSP 157-2) which allows companies to delay the effective date of SFAS 157 for all nonfinancial assets and liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis, until fiscal years beginning after November 15, 2008. Generally, the provisions of this statement should be applied prospectively as of the beginning of the fiscal year in which this statement is initially applied. The Company adopted SFAS 157 in accordance with the provisions in FSP 157-2 as of December 30, 2007. The adoption of SFAS 157 did not have a significant impact on the Company's consolidated financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS 159), including an amendment of SFAS No. 115, A*ccounting for Certain Investments in Debt and*

Equity Securities, which allows an entity to choose to measure certain financial instruments and liabilities at fair value. Subsequent measurements for the financial instruments and liabilities an entity elects to measure at fair value will be recognized in earnings. SFAS 159 also establishes additional disclosure requirements. SFAS 159 is effective for fiscal years beginning after November 15, 2007. The Company adopted SFAS 159 as of December 30, 2007 but chose not to measure the financial instruments and liabilities permitted by the standard to be measured at fair value. Therefore, the adoption of SFAS 159 did not have a significant impact on the Company's consolidated financial statements.

In December 2007, the FASB ratified EITF Issue No. 07-1, *Accounting for Collaborative Agreements* (EITF 07-1), which addresses the accounting for participants in collaborative agreements, defined as contractual arrangements that involve a joint operating activity, that are conducted without the creation of a separate legal entity. EITF 07-1 requires participants in a collaborative agreement to make separate disclosures for each period a statement of operations is presented regarding the nature and purpose of the agreement, the rights and obligations under the agreement, the accounting policy for the agreement, and the classification of and amounts arising from the agreement between participants. These arrangements involve two or more parties who are both active participants in the activity and are exposed to significant risks and rewards dependent on the commercial success of the activity. EITF 07-1 provides that a company should report the effects of adoption as a change in accounting principle through retrospective application to all periods and requires specific additional disclosures. EITF 07-1 is effective for interim and annual reporting periods beginning after December 15, 2008. The Company is currently assessing the impact of the adoption of EITF 07-1 on the Company's consolidated financial statements.

In June 2007, the FASB ratified EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities* (EITF 07-3). EITF 07-3 provides clarification surrounding the accounting for nonrefundable research and development advance payments, whereby such payments should be recorded as an asset when the advance payment is made and recognized as an expense when the research and development activities are performed. EITF 07-3 is effective for interim and annual reporting periods beginning after December 15, 2007. The Company adopted EITF 07-3 as of December 30, 2007. The adoption of EITF 07-3 did not impact the Company's consolidated financial statements.

3. License, Development, Collaboration and Grant Agreements

License Agreements

In March 2003, the Company entered into a license agreement to obtain an exclusive worldwide license for certain technology regarding nanovolume crystallization arrays. The Company may, in its sole discretion, cancel the license agreement with a 30-day notice; otherwise, the license terminates at the end of the life of the last patent to expire. Under the terms of the agreement, the Company is obligated to issue up to $2,100,000 of shares of the Company's common or convertible preferred stock if the Company achieves certain milestones. As a result of achieving one of these milestones during 2006, the Company issued 61,223 shares of Series D convertible preferred stock at $9.80 per share for an aggregate value of $597,000, net of issuance costs. During 2003, the Company also entered into a separate research sponsorship agreement under which the Company agreed to pay a total of $900,000 over 5 years in 20 quarterly installments of $45,000 to sponsor certain research. As of June 28, 2008, the entire $900,000 had been paid. Following the final $45,000 payment, which was paid during the six months ended June 28, 2008, the agreement terminated.

In December 2003, the Company entered into a license agreement to obtain a nonexclusive worldwide license for certain technology regarding submicroliter protein crystallization. The Company may, in its sole discretion, cancel the agreement with a 30-day notice; otherwise, the license terminates at the end of the life of the last licensed patent to expire. Pursuant to the agreement, the Company made four payments for annual nonrefundable license fees, each in the amount of $250,000, beginning in January 2004 with subsequent payments made in January 2005, 2006 and 2007. Also pursuant to the agreement, the Company began making quarterly payments in the amount of $25,000 starting in the first quarter of 2007. These quarterly payments, which are scheduled to continue until the

agreement is terminated, could increase in future periods if the Company meets certain sales volumes. The annual nonrefundable license fee payments were recorded as expense during the year in which they were paid.

Development Agreements

In June 2004, the Company entered into a development agreement to evaluate two application areas of interest. Under the agreement, the Company performed research and development services, manufactured prototypes, and licensed certain nonexclusive rights. In addition, the Company issued a fully vested warrant to purchase 144,973 shares of Series D convertible preferred stock at $9.80 per share (see Note 8). As consideration, the Company received payments totaling $1,500,000 during 2004 and 2005. The Company determined that the license, research and development services, and prototypes should be accounted for as a combined unit of accounting and recognized the revenues ratably over the 12-month project period. The fair value of the warrant issued was estimated to be $750,000, as determined using the Black-Scholes option-pricing model, and was recognized as a reduction to the collaboration revenue. The Company recognized collaboration revenue of $366,000 and $384,000 related to this agreement during 2004 and 2005, respectively. The agreement terminated during 2005.

In June 2005, the Company entered into another development agreement to develop another application area of interest. Under the agreement, the Company performed research and development services and manufactured prototype instruments. The agreement provided for payments to the Company in the amount of $942,000, to be paid in installments over the 30-month life of the agreement. The Company determined that the research and development services and the manufacturing of prototype instruments should be accounted for as a combined unit of accounting and revenue was therefore recognized ratably over the estimated project period. The Company recognized revenue of $94,000, $377,000, $377,000, $188,000 and $89,000 related to this agreement during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively. The agreement terminated during the six months ended June 28, 2008.

Collaboration Agreement

In January 2005, the Company entered into a collaborative agreement to develop and commercialize radiopharmaceutical manufacturing products for use in the positron emission tomography field. As consideration, the Company received an up-front fee of $1,000,000, which the Company deferred and recognized over the obligation period of approximately two years, with $458,000 and $542,000 recognized as revenue during 2005 and 2006, respectively. Also, the Company recognized additional revenue of $635,000 and $500,000 during 2005 and 2006, respectively, related to payments for research and development activities under the agreement based on agreed upon rates for time incurred by the research staff. The agreement terminated on December 31, 2006.

Grants

National Institutes of Health

In June 2006, the Company was awarded a government grant from the National Institutes of Health (NIH) in the amount of $1,048,000 to be earned over a two-year period. Under the grant, the Company performs research and development activities to design a diffraction capable Topaz screening chip. The agreement provides for quarterly reimbursement of the eligible research and development expenses, including salaries, equipment, scientific consumables, and certain third-party costs. The grant revenue is recognized as the related services are performed and costs associated with this grant are reported as research and development expense in the period incurred. The Company recognized revenue of $184,000, $606,000, $355,000 and $258,000 during 2006 and 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively, under this grant. This agreement terminated in June 2008.

Singapore Economic Development Board

In October 2005, Fluidigm Singapore, a wholly owned subsidiary of the Company, entered into a letter agreement providing for up to SG$10.0 million (approximately US$7.3 million using June 28, 2008 exchange rates) in grants from the Singapore Economic Development Board (EDB). The grants are payable for the period August 1, 2005 through July 31, 2010 in connection with the establishment and operation by Fluidigm Singapore of a research, development and manufacturing center for IFCs in Singapore. Grant payments are calculated as a portion of qualifying expenses incurred in Singapore relating to salaries, overhead, outsourcing and subcontracting expenses, operating expenses and royalties paid. Fluidigm Singapore is required to submit incentive payment requests for qualifying expenditures on a quarterly basis along with reports regarding its compliance with the incentive payment conditions, as described below, through the end of the applicable quarter.

In January 2006. Fluidigm Singapore and EDB entered into a supplement to the October 2005 letter agreement. This supplement was entered into to create a process whereby Fluidigm Singapore and EDB would agree on new quarterly development targets at the start of each year, Fluidigm Singapore would submit to EDB a progress report and evidence of the achievement of targets on a quarterly basis and the parties would resolve any disagreements regarding the satisfaction of targets using an established procedure and the parties would be entitled to obtain a third party review of the incentive payment requests on a semi-annual rather than an annual basis. These agreements further provide EDB with the right to demand repayment of a portion of past grants in the event the Company does not meet its obligations under the agreements. Based on correspondance with EDB, the Company believes that it has fulfilled its obligations under the grants and it will, therefore, not have to repay any of the grant proceeds received through June 28, 2008.

Fluidigm Singapore's continued eligibility for such grants is subject to its compliance with the following conditions: increasing levels of research; its development and manufacturing activity in Singapore, including employment of specified numbers of research scientists and engineers; its incurrence of specified levels of research and development expenses in Singapore over the course of each calendar year; its use of local service providers; its manufacture in Singapore of the products developed in Singapore and its achievement of certain targets relating to new product development or completion of specific manufacturing process objectives. These required levels of research, development and manufacturing activity in Singapore and the associated increases from one year to the next are the result of negotiations between the parties and are generally consistent with Company's business strategy for its Singapore operations. All ownership rights in the intellectual property developed by Fluidigm Singapore remain with Fluidigm Singapore and no such rights are conveyed to EDB under the agreement.

In February 2007, Fluidigm Singapore entered into a second letter agreement with EDB which provided for up to an additional SG$3.7 million (approximately US$2.7 million using June 28, 2008 exchange rates) in grants. The terms and conditions of this letter agreement are substantially the same as the October 2005 letter agreement, with the exception of the size of the potential grant, the term of the agreement and the specific levels of research, development and manufacturing activities required to maintain eligibility for such grants. The primary focus of this letter agreement is the ongoing development and manufacture in Singapore of certain instrumentation. This letter agreement applies to research, development and manufacturing activity by Fluidigm Singapore in Singapore from June 1, 2006 through May 31, 2011.

The Company recognized revenue of $879,000, $1,758,000, $843,000 and $810,000 related to EDB grants during 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively. As of December 31, 2006, December 29, 2007 and June 28, 2008, the Company had deferred revenue of $720,000, $635,000 and $506,000, respectively, related to incentive payments for equipment expenditures, which is being recognized ratably over the estimated useful life of the equipment of four years. As of December 31, 2006, December 29, 2007 and June 28, 2008, the Company had accounts receivable from EDB in the amounts of $272,000, $679,000 and $349,000, respectively.

4. Balance Sheet Data

Cash Equivalents and Available-for-Sale Securities

The following are summaries of cash equivalents and available-for-sale securities (in thousands):

	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value
As of December 31, 2006:				
Money market funds	$ 95	$ —	$ —	$ 95
Commercial paper	1,997	2	—	1,999
Corporate notes	503	—	(3)	500
	$ 2,595	$ 2	$ (3)	$ 2,594
Reported as:				
Cash equivalents				$ 2,094
Available-for-sale securities				500
				$ 2,594
As of December 29, 2007:				
Money market funds	$ 2,787	$ —	$ —	$ 2,787
Commercial paper	2,287	—	—	2,287
Corporate notes	3,002	—	(3)	2,999
Notes from government-sponsored agencies	28,207	5	(14)	28,198
	$ 36,283	$ 5	$ (17)	$ 36,271
Reported as:				
Cash equivalents				$ 29,985
Available-for-sale securities				6,286
				$ 36,271
As of June 28, 2008 (unaudited):				
Money market funds	$ 11,170	$ —	$ —	$ 11,170
Notes from government-sponsored agencies	18,255	(2)	—	18,253
	$ 29,425	$ (2)	—	$ 29,423
Reported as:				
Cash equivalents				$ 25,920
Available-for-sale securities				3,503
				$ 29,423

As of December 31, 2006, December 29, 2007 and June 28, 2008, the contractual maturities of the Company's available-for-sale securities were less than one year.

Inventories

Inventories consist of the following (in thousands):

	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)
Raw materials	$ 803	$ 2,551	$ 2,942
Work-in-process	11	291	394
Finished goods and demonstration units	2,224	2,656	3,644
	$ 3,038	$ 5,498	$ 6,980

Property and Equipment

Property and equipment consists of the following (in thousands):

	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)
Computer equipment and software	$ 1,285	$ 1,328	$ 1,356
Lab and manufacturing equipment	7,707	8,207	8,403
Leasehold improvements	577	582	592
Office furniture and fixtures	347	372	371
	9,916	10,489	10,722
Less accumulated depreciation and amortization	(5,885)	(7,177)	(8,014)
Construction-in-progress	37	66	49
Property and equipment, net	$ 4,068	$ 3,378	$ 2,757

Depreciation and amortization expense was $1,309,000, $1,379,000, $1,643,000, $832,000 and $837,000 for 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively. During 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, the Company recognized a loss on retirement of property and equipment of $0, $111,000, $20,000, $14,000 and $1,000, respectively.

5. Long-Term Debt

In November 2002, the Company entered into a master security agreement with a lender. Per the terms of the agreement, the Company could draw up to $4,000,000 for purchases of capital equipment, software, and tenant improvements. A second master security agreement entered into in March 2004 increased the amount of the allowable draw for the Company to $11,000,000. The draw down period expired on December 31, 2005, at which time the Company had drawn down $3,584,000 under the agreement. The loan, which was secured by the underlying equipment and a letter of credit, carried an interest rate between 8.0% and 10.5% per annum, and each draw under the agreement was to be repaid in 42 varying monthly installments, which was originally scheduled to end on July 1, 2009. In connection with the execution of the second agreement in 2004, the Company issued a warrant to purchase 10,714 shares of Series D convertible preferred stock at $9.80 per share (see Note 8) which was recorded on the consolidated balance sheet at fair value of $90,000 as a debt discount that was amortized to interest expense over two years. As of December 31, 2006 and December 29, 2007, the outstanding principal balance of this loan was $2,267,000 and $1,130,000, respectively. In February 2008, prior to the due date, the Company paid off the outstanding principal and accrued interest balance and paid a prepayment fee in the amount of $41,000 to the lender. Accordingly, the entire outstanding principal balance for this loan as of December 29, 2007 was classified as a current liability on the consolidated balance sheet. Upon full payment of this debt, restricted cash in the amount of $500,000 was released by the lender and thus has been classified as a current asset as of December 29, 2007.

In March 2005, the Company entered into a loan and security agreement with another lender. Under this agreement the Company borrowed $13,000,000 during 2005 for general corporate purposes. This loan is secured by the Company's assets except for intellectual property; however, the security interest does include proceeds from sales of the intellectual property. The loan was originally scheduled to be repaid by 2009; however, the agreement was amended in August 2006 to extend the final repayment date to February 1, 2010. The agreement carried a variable interest rate of prime plus 2.5% through March 2006. Thereafter, the agreement carried a fixed interest rate of 10.0% through July 2006 and a fixed interest rate of 9.75% following the amendment to the agreement in August 2006. In August 2006, the Company began making monthly payments in the amount of $310,000 for principal and interest under the agreement. The agreement also requires payment of fees in March 2009 in the amount of $1,612,500. The fees are accreted as interest expense over the term of the loan. The agreement restricts the Company's ability to pay dividends. The Company is subject to a prepayment fee in the amount of 1% of the outstanding principal amount being prepaid if paid during 2008 or 2009. In connection with the execution of this

loan and security agreement, the Company issued a warrant to purchase 53,061 shares of Series D convertible preferred stock at $9.80 per share (see Note 8) which was recorded on the consolidated balance sheet at fair value of $54,000 as a debt discount. In connection with the final draw down of this loan, the Company issued another warrant to purchase 53,061 shares of Series D convertible preferred stock at $9.80 per share (see Note 8) which was recorded on the consolidated balance sheet at fair value of $50,000 as a debt discount. The debt discounts are amortized to interest expense over the life of the agreement.

In February 2008, the Company amended this loan and security agreement to provide the Company with an additional credit line in the amount of $10,000,000 that the Company could draw upon until July 1, 2008 for general corporate purposes. In connection with the amendment of this loan and security agreement, the Company issued a warrant to purchase 28,572 shares of Series E convertible preferred stock at $14.00 per share (see Note 8). The warrant was recorded on the consolidated balance sheet as a deferred charge at a fair value of $111,000 and was amortized to interest expense over the period of the availability of the funds. In June 2008, the Company drew down the $10,000,000 available. The loan will bear interest at 11.5% per annum. Interest only payments will be made monthly through the remainder of 2008 with monthly payments of principal and interest in the amount of $369,000, beginning in January 2009, to be made through June 2011. The agreement also requires a final payment in the amount of $650,000 in June 2011. In addition, the Company issued to the lender an additional warrant to purchase up to 57,142 shares of Series E convertible preferred stock at $14.00 per share in accordance with the terms of the agreement which was recorded on the consolidated balance sheet at fair value of $373,000 as a debt discount. As of December 31, 2006, December 29, 2007 and June 28, 2008, the outstanding principal balance of these loans was $10,570,000, $8,232,000 and $16,558,000, respectively, net of the unamortized debt discounts of $58,000, $31,000 and $391,000, respectively.

The amortization of the debt discounts for the Company's long-term debt agreements was recorded as interest expense in the consolidated statements of operations in the amounts of $9,000, $37,000, $27,000, $14,000 and $11,000 during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively. As of June 28, 2008, the Company was either in compliance with all loan covenants or had obtained waivers from the respective lenders.

The following table does not include principal payments for the master security agreement with a principal balance of $1,130,000 as of December 29, 2007 that was paid off in February 2008. The scheduled principal payments of the Company's other long-term debt as of December 29, 2007 are as follows (in thousands):

Years:	
2008	$ 2,724
2009	4,929
2010	610
Total principal payments due in future periods	8,263
Less: debt discounts	(31)
	$ 8,232

The scheduled principal payments of the Company's long-term debt as of June 28, 2008 are as follows (in thousands):

Years:	
Remainder of 2008	$ 1,410
2009	8,343
2010	4,453
2011	2,743
Total principal payments due in future periods	16,949
Less: debt discounts	(391)
	$ 16,558

6. Commitments and Contingencies

Operating Leases

The Company leases its headquarters in South San Francisco, California, under multiple noncancelable lease agreements that expire in February 2011. These agreements include renewal options which provide the Company with the ability to extend the lease terms for an additional three years. The Company also leases office and manufacturing space under noncancelable leases in Singapore that expire in October 2011. The Company's other operating leases are for office space in the Netherlands, Japan, and France and are on a month-to-month basis. As of December 29, 2007, future minimum lease payments under noncancelable operating leases were as follows (in thousands):

Years:	
2008	$ 1,436
2009	1,374
2010	1,408
2011	241
Total minimum payments	$ 4,459

The Singapore office and manufacturing space leases were renewed in August 2008 as they were originally scheduled to expire in September 2008. Future minimum lease payments on the new Singapore leases in the amount of SG$14,000 (approximately US$10,000 using June 28, 2008 exchange rates) per month are not included in the table above. The Company's lease payments are recognized as an expense on a straight-line basis over the life of the lease. Rental expense under operating leases for 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008 totaled $1,468,000, $1,494,000, $1,574,000, $719,000 and $730,000, respectively.

Commitments

The Company has entered into a supply agreement with a vendor to provide inventory components customized to the Company's specifications. Pursuant to this agreement, the Company has agreed to purchase from the vendor a specified minimum number of units each year in exchange for volume discounts. After April 1, 2010, either party

may terminate the supply agreement upon six months prior written notice. As of December 29, 2007, future minimum payments under the supply agreement were as follows (in thousands):

Years:	
2008	$ 435
2009	435
2010	135
Total minimum payments	$ 1,005

Contingencies

In June 2008, the Company received a letter from a competitor asserting that the Company had infringed upon a patent currently held by the competitor. In response, the Company filed a suit against the competitor seeking declaratory judgments of non-infringement and invalidity of the patent. Subsequent to the filing of the suit, the Company and this competitor entered into an agreement that provides for a stay of the proceedings and provides further that neither party may initiate any further patent litigation proceedings against the other during the term of the agreement. The Company is party to other various claims arising in the ordinary course of business. These claims relate to intellectual property rights and employment matters. While there is no assurance that an adverse determination of any of such matters will not occur, management does not believe, based upon information known to it, that a potential resolution of any of these matters will have a material adverse effect upon the Company's financial position, results of operations, or cash flows.

Indemnifications

From time to time, the Company has entered into indemnification provisions under certain of its agreements with other companies in the ordinary course of business, typically with business partners, customers, and suppliers. Pursuant to these agreements, the Company may indemnify, hold harmless, and agree to reimburse the indemnified parties on a case by case basis for losses suffered or incurred by the indemnified parties in connection with any patent or other intellectual property infringement claim by any third-party with respect to its products. The term of these indemnification provisions is generally perpetual from the time of the execution of the agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification provisions is typically not limited to a specific amount. In addition, the Company has entered into indemnification agreements with its officers and directors. The Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As of June 28, 2008, the Company had not accrued a liability for these indemnification provisions because the likelihood of incurring a payment obligation was remote.

7. Convertible Promissory Notes

In December 2003, the Company entered into a convertible note purchase agreement with the Biomedical Sciences Investment Fund Pte Ltd (BMSIF). BMSIF is wholly-owned by EDB Investments Pte. Ltd., whose parent entity is EDB. Ultimately, each of these entities is controlled by the government of Singapore. Under this agreement BMSIF agreed to provide a $2,000,000 credit facility to be used for general corporate purposes. In December 2003, the Company issued a $2,000,000 convertible promissory note to BMSIF. The note, which was unsecured, carried an interest rate of 8% per year. Per the agreement, principal and interest were convertible into the Company's Series D convertible preferred stock at $9.80 per share at the lender's election, at any time, or upon the election of the Company upon the achievement of certain milestones by the Company. In June 2005, the agreement was amended to allow the Company to issue additional convertible promissory notes in the amount of $3,000,000 if the Company achieved certain milestones. In December 2005, upon the successful completion of specified milestones, the $2,000,000 convertible promissory note and interest of $331,000 converted into 237,895 shares of Series D convertible preferred stock at $9.80 per share as settlement of the outstanding balance on the date of the conversion.

In June 2006, the Company issued a $3,000,000 convertible promissory note, which was also unsecured, that carried an interest rate of 8% per year. Principal and interest were also convertible into the Company's Series D convertible preferred stock at $9.80 per share at the lender's election, at any time, or upon the election of the Company upon the achievement of certain milestones by the Company or upon the completion of an initial public offering in which the convertible preferred stock has converted into common stock. As of December 31, 2006, the outstanding principal and accrued interest balance for the convertible promissory note was $3,128,000. In June 2007, upon the successful completion of specified milestones, the principal balance in the amount of $3,000,000 for the convertible promissory note and accrued interest of $240,000 converted into 330,612 shares of Series D convertible preferred stock at $9.80 per share.

In August 2006, the Company entered into another convertible note purchase agreement with BMSIF. Under this agreement, BMSIF agreed to provide a $15,000,000 credit facility, to be issued in three separate $5,000,000 tranches, and to be used for general corporate purposes. The Company issued two $5,000,000 convertible promissory notes against equal amounts of borrowings under this facility, each unsecured and carrying an interest rate of 8% per year, in August and November 2006. In March 2007, BMSIF exercised the conversion provision of the convertible note purchase agreement and the Company issued 844,095 shares of Series E convertible preferred stock at $12.60 per share as settlement of the outstanding principal and accrued interest balance on the date of the conversion in the amount of $10,636,000. Upon conversion of these convertible promissory notes, the Company issued the third and final $5,000,000 convertible promissory note against an equal amount of borrowing under this facility with an interest rate of 8% per year in April 2007. BMSIF exercised the conversion provision for the third and final convertible promissory note in May 2008, and the Company issued 429,698 shares of Series E convertible preferred stock at $12.60 per share as settlement of the outstanding principal and accrued interest balance on the date of the conversion in the amount of $5,414,000.

For these convertible note purchase agreements in which the repayment was in the form of Series E convertible preferred stock, the conversion price of $12.60 per share was a discount to the estimated fair values of $12.98 and $14.00 per share for the Series E convertible preferred stock at the times of the borrowings. The intrinsic value of the embedded beneficial conversion option associated with each borrowing of convertible promissory notes under the arrangement was measured as the difference between the conversion price and the fair value of Series E convertible preferred stock on the commitment date and the resulting debt discount is being amortized to interest expense over the two year contractual term of the debt. Upon conversion of the notes to convertible preferred stock, any remaining unamortized debt discount was immediately recognized as interest expense.

During 2006 and 2007, the Company recognized debt discounts of $306,000 and $485,000, respectively, related to the beneficial conversion feature of the notes. Amortization of the debt discounts for the convertible note purchase agreements was recorded as interest expense in the consolidated statements of operations in the amount of $43,000, $468,000, $360,000 and $280,000 during 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively.

As of December 31, 2006 and December 29, 2007, the outstanding principal and accrued interest balance for the convertible note purchase agreements with BMSIF was $9,944,000 and $4,997,000 net of the unamortized debt discounts of $263,000 and $280,000, respectively. As of June 28, 2008, there were no remaining amounts outstanding related to the convertible note purchase agreements with BMSIF.

8. Convertible Preferred Stock Warrant Liabilities

The Company issued warrants to purchase 346,055 shares of the Company's convertible preferred stock at various times between 2001 and 2005 and warrants to purchase 85,714 shares during the six months ended June 28, 2008. The Company did not issue any warrants to purchase convertible preferred stock during 2006 or 2007. The convertible preferred stock warrants are generally exercisable immediately and can only be exercised for cash or net share settled. Changes in the fair value of the underlying stock do not affect the settlement amounts of the warrants, therefore, the maximum amount of shares to be issued upon the settlement of these warrants is noted in the table below. As of December 29, 2007, the following warrants were issued and outstanding:

Issue Date	Reason for Grant	Warrant to Purchase Convertible Preferred Stock	Shares	Exercise Price per Share	Expiration
May 2001	Debt financing	Series C	11,795	$ 7.63	Earlier of (i) the closing of an acquisition of the Company or (ii) May 14, 2008
March 2002	Debt financing	Series C	5,000	$ 9.03	Earlier of (i) the closing of an acquisition of the Company or (ii) March 27, 2012
November 2002	Debt financing	Series C	8,859	$ 9.03	Earlier of (i) the closing of an acquisition of the Company or (ii) December 16, 2012
September 2003	Collaboration agreement	Series C	57,142	$ 9.03	December 31, 2007
March 2004	Debt financing	Series D	10,714	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 18, 2012
March 2005	Debt financing	Series D	53,061	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 29, 2012
December 2005	Debt financing	Series D	53,061	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 29, 2012
			199,632		

During 2007, warrants to purchase 1,450 shares of Series C convertible preferred stock expired. Upon expiration, the related warrant liability was eliminated and reflected as other income (expense), net. During 2006, warrants, issued in connection with a collaboration agreement (see Note 3), to purchase 144,973 shares of the Series D convertible preferred stock were exercised utilizing a cashless exercise option that allowed the holder to receive 76,530 shares of convertible preferred stock. The fair value of the warrants and the shares of convertible preferred stock issued upon the cashless exercise was $729,000 on the exercise date, calculated as the fair value of the shares of convertible preferred stock issued.

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements — (Continued)

As of June 28, 2008, the following warrants were issued and outstanding (unaudited):

Issue Date	Reason for Grant	Warrant to Purchase Convertible Preferred Stock	Shares	Exercise Price per Share	Expiration
March 2002	Debt Financing	Series C	5,000	$ 9.03	Earlier of (i) the closing of an acquisition of the Company or (ii) March 27, 2012
November 2002	Debt Financing	Series C	8,859	$ 9.03	Earlier of (i) the closing of an acquisition of the Company or (ii) December 16, 2012
March 2004	Debt Financing	Series D	10,714	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 18, 2012
March 2005	Debt Financing	Series D	53,061	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 29, 2012
December 2005	Debt Financing	Series D	53,061	$ 9.80	Earlier of (i) the closing of an acquisition of the Company or (ii) March 29, 2012
February 2008	Debt Financing	Series E	28,572	$ 14.00	Earlier of (i) the closing of an acquisition of the Company or (ii) February 15, 2015
June 2008	Debt Financing	Series E	57,142	$ 14.00	Earlier of (i) the closing of an acquisition of the Company or (ii) February 15, 2015
			216,409		

During the six months ended June 28, 2008, the Company issued warrants to purchase 85,714 shares of Series E convertible preferred stock in connection with the amendment of a loan and security agreement and the subsequent draw down on the agreement (see Note 5). Warrants to purchase 57,142 shares of the Company's Series C convertible preferred stock expired unexercised on December 31, 2007 and warrants to purchase 11,795 shares of the Company's Series C convertible preferred stock were exercised in May 2008 utilizing a cashless exercise option that allowed the holder to receive 4,692 shares of convertible preferred stock.

The following is a summary of the warrants to purchase convertible preferred stock outstanding and their fair values as of December 31, 2006, December 29, 2007 and June 28, 2008:

Outstanding Warrants to Purchase	Shares as of			Fair Value as of		
	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)
Series C	84,246	82,796	13,859	$ 29,000	$ 61,000	$ 85,000
Series D	116,836	116,836	116,836	194,000	407,000	632,000
Series E	—	—	85,714	—	—	552,000
	201,082	199,632	216,409	$ 223,000	$ 468,000	$ 1,269,000

The fair values of the outstanding convertible preferred stock warrants were measured using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)
Expected volatility	63.6%	49.7%	49.2%
Expected life (equals the remaining contractual term)	3.7 years	2.8 years	5.0 years
Risk-free interest rate	4.8%	3.2%	3.3%
Dividend yield	0%	0%	0%

A decrease in fair value of the convertible preferred stock warrant liabilities in the amount of $72,000 and $26,000 during 2005 and the six months ended June 30, 2007, and increases in fair value in the amounts of $138,000, $245,000 and $359,000 during 2006, 2007 and the six months ended June 28, 2008, respectively, were recognized as other income (expense), net in the consolidated statements of operations. Upon adoption of FSP 150-5 on July 1, 2005, the Company recorded a gain of $637,000 as a cumulative effect of a change in accounting principle in the consolidated statement of operations during 2005.

9. Convertible Preferred Stock

As of December 31, 2006, December 29, 2007, and June 28, 2008 (unaudited) convertible preferred stock was comprised of the following (in thousands):

	December 31, 2006			December 29, 2007		
	Shares Designated	Shares Issued and Outstanding	Net Proceeds	Shares Designated	Shares Issued and Outstanding	Net Proceeds
Series A	779	779	$ 2,989	779	779	$ 2,989
Series B	1,846	1,846	11,479	1,846	1,846	11,479
Series C	4,816	4,676	42,030	4,816	4,676	42,030
Series D	3,989	3,485	33,794	3,989	3,815	37,034
Series E	3,071	1,581	22,003	5,746	5,076	68,550
	14,501	12,367	$ 112,295	17,176	16,192	$ 162,082

	June 28, 2008			
	Shares Designated	Shares Issued and Outstanding	Net Proceeds	Aggregate Liquidation Value
Series A	779	779	$ 2,989	$ 3,000
Series B	1,846	1,846	11,479	11,501
Series C	4,816	4,680	42,072	42,263
Series D	3,989	3,815	37,034	37,388
Series E	5,746	5,506	73,964	77,076
	17,176	16,626	$ 167,538	$ 171,228

The Company's convertible preferred stock had been classified as temporary equity on the consolidated balance sheet instead of in stockholders' equity (deficit) in accordance with EITF Abstracts Topic No. D-98, *Classification and Measurement of Redeemable Securities*. Upon certain change in control events that are outside of the control of the Company, including liquidation, sale or transfer of control of the Company, holders of the convertible preferred stock can cause its redemption. Accordingly, these shares are considered contingently redeemable. The Company has not adjusted the carrying values of the convertible preferred stock to their

redemption values since it is uncertain whether or when a redemption event will occur. Subsequent adjustments to increase the carrying values to the redemption values would be made if it becomes probable that such redemption will occur. The significant rights, privileges, and preferences of the convertible preferred stock are as follows:

Conversion

Each share of convertible preferred stock is convertible, at any time at the option of the holder, into common stock based upon a conversion rate of one share of common stock for each share of convertible preferred stock regardless of the series.

Conversion is automatic upon: (i) the closing of an underwritten initial public offering of the Company's common stock at an offering price of not less that $19.91 per share (appropriately adjusted for any stock splits, stock dividends, recapitalization, or similar events) and with aggregate gross proceeds of not less than $25,000,000, (ii) the closing of an underwritten initial public offering of the Company's common stock at an offering price of less than $19.91 per share (appropriately adjusted for any stock splits, stock dividends, recapitalization, or similar events) or with aggregate gross proceeds of less than $25,000,000 and written consent of the holders of two-thirds of all shares of convertible preferred stock voting together for such automatic conversion, or (iii) the written consent of the holders of two-thirds of all shares of convertible preferred stock voting together, except that the written consent of the holders of greater than two-thirds of all shares of Series E convertible preferred stock voting separately is required for Series E convertible preferred stock to convert if such conversion is not in connection with the closing of an underwritten initial public offering of the Company's common stock.

Dividends

Holders of Series A, B, C, D, and E convertible preferred stock are entitled to noncumulative dividends of $0.38, $0.63, $0.91, $1.05, and $1.50 per share, respectively, if and when declared by the Board of Directors (adjusted for any stock splits, stock dividends, recapitalization, or similar events) and subject to the preferences described below. Holders of Series D and E convertible preferred stock shall be entitled to receive dividends, when and if declared, in preference and priority to any declaration or payment of dividends to holders of Series A, B, or C convertible preferred stock or common stock, other than for dividends payable in only common stock. Payments of any dividends to the holders of Series D and E convertible preferred stock shall be on a pro rata, pari passu basis in proportion to the entitled dividend rates for these respective series, as applicable. Holders of Series C convertible preferred stock shall be entitled to receive dividends, when and if declared, in preference and priority to any declaration or payment of dividends to holders of Series A and B convertible preferred stock or common stock, other than for dividends payable in only common stock. Holders of Series A and B convertible preferred stock shall be entitled to receive dividends, when and if declared, in preference and priority to any declaration or payment of dividends to holders of common stock, other than for dividends payable in only common stock. Payments of any dividends to the holders of Series A and B convertible preferred stock shall be on a pro rata, pari passu basis in proportion to the entitled dividend rates for these respective series, as applicable. No dividends have been declared or paid through June 28, 2008.

Liquidation Preferences

In the event of a liquidation, dissolution, or winding up of the Company, holders of Series E convertible preferred stock shall be entitled to receive a liquidation preference of $14.00 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A, B, C, or D convertible preferred stock or common stock.

After payment to the holders of Series E convertible preferred stock, holders of Series D convertible preferred stock shall be entitled to receive a liquidation preference of $9.80 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A, B, or C convertible preferred stock or common stock.

After payment to the holders of Series D convertible preferred stock, holders of Series C convertible preferred stock shall be entitled to receive a liquidation preference of $9.03 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A or B convertible preferred stock or common stock.

After payment to the holders of Series C convertible preferred stock, holders of Series B convertible preferred stock shall be entitled to receive a liquidation preference of $6.23 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of Series A convertible preferred stock or common stock.

After payment to the holders of Series B convertible preferred stock, holders of Series A convertible preferred stock shall be entitled to receive a liquidation preference of $3.85 per share, together with any declared but unpaid dividends, prior to any payment or distribution to holders of common stock.

After the payment to the holders of convertible preferred stock or their respective liquidation preferences, the entire remaining assets of the Company shall be distributed on a pro rata basis to the holders of common stock. A change of control or a sale, transfer, or lease of all or substantially all of the assets of the Company is considered to be a liquidation event.

Voting Rights

Holders of convertible preferred stock are entitled to the number of votes they would have upon conversion of their convertible preferred stock into common stock on the applicable record date. So long as 571,428 shares of Series D convertible preferred stock remain outstanding, the holders of Series D convertible preferred stock are entitled to elect two members to the Company's Board of Directors, and so long as 571,428 shares of Series C convertible preferred stock remain outstanding, the holders of Series C convertible preferred stock are entitled to elect three members to the Board of Directors. The holders of Series A, B, and E convertible preferred stock and the holders of common stock, voting together as a single class, are entitled to elect any additional members to the Board of Directors.

10. Stock Option Activity

1999 Stock Option Plan

On May 12, 1999, the Board of Directors adopted the 1999 Stock Option Plan (the Stock Plan) under which incentive stock options and nonstatutory stock options may be granted to employees, officers, and directors of, or consultants to, the Company.

Options granted under the Stock Plan expire no later than ten years from the date of grant. The exercise price of each incentive stock option granted to an employee shall be at least 110% of the fair market value of the underlying common stock on the date of grant if, on the grant date, the employee owns stock representing more than 10% of the voting power of all classes of the Company's capital stock; otherwise, the exercise price shall be at least 100% of the fair market value of the underlying common stock on the date of grant. The exercise price for each nonstatutory stock option granted to a service provider shall be at least 110% of the fair market value of the underlying common stock on the date of grant if, on the grant date, the service provider owns stock representing more than 10% of the voting power of all classes of the Company's capital stock; otherwise, the exercise price shall be at least 85% of the fair market value of the underlying common stock on the date of grant. The fair market value of the underlying common stock shall be determined by the Board of Directors until such time as the Company's common stock is listed on any established stock exchange or national market system. Options may be granted with different vesting terms from time to time, but the vesting terms may not exceed five years from the date of grant. Generally, outstanding options are immediately exercisable and vest at a rate of 25% on the first anniversary of the option grant date and $^{1}/_{48}$ of the total grant each month thereafter.

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements — (Continued)

As of December 29, 2007, the Stock Plan is the Company's only stock-based compensation plan and a total of 3,657,142 shares of common stock have been authorized for issuance under the Stock Plan.

Activity under the Stock Plan is as follows (in thousands, except per share amounts):

		Outstanding Options	
	Shares Available for Grant	Number of Shares	Weighted-Average Exercise Price per Share
Balance as of January 1, 2005	338	1,102	$ 1.30
Additional shares authorized	714	—	
Options granted	(731)	731	1.96
Options exercised	—	(49)	1.09
Options canceled	44	(44)	1.65
Balance as of December 31, 2005	365	1,740	1.58
Options granted	(347)	347	2.91
Options exercised	—	(127)	1.44
Options canceled	233	(233)	1.82
Balance as of December 31, 2006	251	1,727	1.82
Additional shares authorized	571	—	
Options granted	(584)	584	5.36
Options exercised	—	(73)	1.72
Options canceled	104	(104)	2.31
Balance as of December 29, 2007	342	2,134	2.77
Additional shares authorized (unaudited)	571	—	
Options granted (unaudited)	(778)	778	10.47
Options exercised (unaudited)	—	(64)	1.72
Options canceled (unaudited)	467	(467)	2.07
Balance as of June 28, 2008 (unaudited)	602	2,381	5.46

Options exercised during 2005, 2006, 2007 and the six months ended June 28, 2008 exclude options that are exercised prior to vesting. These shares generally vest over a four-year period. Unvested shares, which amount to 18,571, 9,524 and 6,785 as of December 31, 2006, December 29, 2007 and June 28, 2008, respectively, are subject to a repurchase option held by the Company at the original exercise price and are not deemed to be issued for accounting purposes until those shares vest.

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements — (Continued)

Effective January 1, 2006, the Company adopted the provisions of SFAS 123(R). The fair value of each new employee option awarded was estimated on the grant date using the Black-Scholes option-pricing model using the following weighted-average assumptions.

	2006	2007	Six Months Ended June 30, 2007 (Unaudited)	Six Months Ended June 28, 2008 (Unaudited)
Expected volatility	72.8%	63.0%	63.0%	53.8%
Expected life	6.1 years	6.0 years	6.0 years	6.0 years
Risk-free interest rate	4.8%	4.4%	4.6%	3.2%
Dividend yield	0%	0%	0%	0%
Weighted-average fair value of options granted	$1.92	$3.22	$2.96	$5.65

Expected volatility is derived from historical volatilities of several unrelated public companies within the biomedical instrument and system industry. Each company's historical volatility is weighted based on certain qualitative factors and combined to produce a single volatility factor used by the Company. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the option's expected life. Given the limited history to accurately estimate expected lives of options granted to the various employee groups, the Company used the "simplified" method as provided by the SEC Staff Accounting Bulletin No. 107, *Share Based Payment* (SAB 107). The "simplified" method is calculated as the average of the time-to-vesting and the contractual life of the options. The Company estimates its forfeiture rate based on an analysis of its actual forfeitures and will continue to evaluate the adequacy of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior, and other factors. The impact from a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from that estimated by the Company, the Company may be required to record adjustments to stock-based compensation expense in future periods. Adjustments to the forfeiture rates have not had a significant impact on any of the periods presented. Each of these inputs is subjective and generally requires significant judgment to determine.

The absence of an active market for the Company's common stock required the Company's Board of Directors, with input from management, to estimate the fair value of the common stock for purposes of granting options and for determining stock-based compensation expense for the periods presented. In response to these requirements, the Company's Board of Directors estimated the fair value of the common stock at each meeting at which options were granted based on factors such as the price of the most recent convertible preferred stock sales to investors, the preferences held by the convertible preferred stock classes in favor of common stock, the valuations of comparable companies, the hiring of key personnel, the status of the Company's development and sales efforts, revenue growth and additional objective, and subjective factors relating to the Company's business. The Company has historically granted stock options at not less than the fair value of the underlying common stock as determined at the time of grant by the Company's Board of Directors.

Information regarding the Company's stock option grants during 2007 and the six months ended June 28, 2008, including the grant date; the number of stock options issued with each grant; and the exercise price, which equals the

grant date fair value of the underlying common stock for each grant of stock options, is summarized as follows (in thousands, except per share amounts):

Grant Date	Number of Options Granted	Exercise Price and Fair Value per Share of Common Stock
May 8, 2007	461	$ 4.76
September 20, 2007	29	$ 4.83
December 28, 2007	94	$ 8.40
February 7, 2008 (unaudited)	207	$ 8.40
April 24, 2008 (unaudited)	547	$ 11.16
June 26, 2008 (unaudited)	24	$ 11.97

Additional information regarding the Company's stock options outstanding and exercisable as of December 29, 2007 is summarized in the following table:

	Options Outstanding		Options Exercisable(1)
Exercise Price	Number of Shares (in thousands)	Weighted-Average Remaining Contractual Life (in years)	Shares Subject to Options (in thousands)
$0.52	21	2.5	21
$1.05	491	4.8	472
$1.40	98	6.2	98
$1.96	656	7.4	588
$2.90	293	8.5	261
$4.76	453	9.4	354
$4.83	28	9.7	13
$8.40	94	10.0	62
	2,134	7.4	1,868

(1) Certain options under the Stock Plan may be exercised prior to vesting but are subject to repurchase at the original exercise price in the event the optionees' employment is terminated.

Options exercisable as of December 29, 2007 had a weighted-average remaining contractual life of 7.4 years, a weighted-average exercise price per share of $2.59, and an aggregate intrinsic value of $3,662,000.

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements — (Continued)

Additional information regarding the Company's stock options outstanding and exercisable as of June 28, 2008 is summarized in the following table (unaudited):

	Options Outstanding		Options Exercisable(1)
Exercise Price	Number of Shares (in thousands)	Weighted-Average Remaining Contractual Life (in years)	Shares Subject to Options (in thousands)
$0.52	21	2.0	21
$1.05	232	4.6	232
$1.40	45	5.7	45
$1.96	541	6.8	540
$2.90	249	8.2	223
$4.76	409	8.9	341
$4.83	26	9.2	14
$8.40	296	9.6	269
$11.16	538	9.8	457
$11.97	25	10.0	3
	2,381	8.1	2,144

(1) Certain options under the Stock Plan may be exercised prior to vesting but are subject to repurchase at the original exercise price in the event the optionees' employment is terminated.

Options exercisable as of June 28, 2008 had a weighted-average remaining contractual life of 8.0 years, a weighted-average exercise price per share of $5.18, and an aggregate intrinsic value of $14,561,000.

Options outstanding that have vested and are expected to vest as of December 29, 2007 are summarized as follows:

	Number of Shares (in thousands)	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value(1) (in thousands)
Vested	1,231	$ 1.82	6.4	$ 8,097
Expected to vest	871	$ 4.06	8.9	3,781
Total vested and expected to vest	2,102	$ 2.76	7.4	$ 11,878

(1) The aggregate intrinsic value was calculated as the difference between the exercise price of the underlying options and the fair value of the Company's common stock in the amount of $8.40 per share as of December 29, 2007.

Options outstanding that have vested and are expected to vest as of June 28, 2008 are summarized as follows (unaudited):

	Number of Shares (in thousands)	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value(1) (in thousands)
Vested	1,099	$ 2.84	6.8	$ 10,031
Expected to vest	1,200	$ 7.70	9.2	5,140
Total vested and expected to vest	2,299	$ 5.39	8.1	$ 15,171

(1) The aggregate intrinsic value was calculated as the difference between the exercise price of the options and the fair value of the Company's common stock in the amount of $11.97 per share as of June 28, 2008.

The total intrinsic value of options exercised during 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008 was $167,000, $259,000, $40,000 and $420,000, respectively.

There were no stock-based compensation tax benefits during 2005, 2006, 2007 or the six months ended June 28, 2008. Capitalized stock-based compensation costs were insignificant during 2005, 2006, 2007 and the six months ended June 28, 2008.

The Company recognized stock-based compensation expense of $5,000, $145,000, $708,000, $374,000 and $1,001,000 during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008. Included in these amounts was employee stock-based compensation expense of $0, $86,000, $526,000, $232,000 and $936,000 and nonemployee stock-based compensation expense of $5,000, $59,000, $182,000, $142,000 and $65,000 during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively. As of December 29, 2007 and June 28, 2008, there was $1,698,000 and $5,051,000 of total unrecognized compensation costs related to stock-based compensation arrangements granted under the Stock Plan, which is expected to be recognized over an average period of 2.9 years for both periods.

Certain of our stock options are granted to officers with vesting acceleration features based upon the achievement of certain performance milestones.

Stock Options Granted to Nonemployees

The Company accounts for options granted to nonemployees under the fair value method in accordance with SFAS 123(R) and EITF 96-18. The fair value of these options was estimated using the Black-Scholes option-pricing model with the following assumptions for 2005, 2006 and 2007 and the six months ended June 30, 2007 and June 28, 2008: risk-free interest rates of 3.5% to 5.0%, dividend yield of 0%, expected volatility of 53.5% to 82.9%, and an expected life of the options equal to the remaining contractual terms of one to ten years. In accordance with EITF 96-18, options granted to nonemployees are remeasured at each accounting period-end until the award is vested.

The Company granted options to nonemployees to purchase 4,871, 25,214, 67,429, 22,286 and 5,714 shares of common stock during 2005, 2006 and 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively. As of December 29, 2007 and June 28, 2008, there were 36,310 and 41,429 shares, respectively, subject to unvested options held by nonemployees with a weighted-average exercise price of $5.70 and $8.12, respectively, and an average remaining vesting period of 2.7 and 3.0 years, respectively.

11. Shares Reserved for Issuance

As of December 29, 2007 and June 28, 2008, the Company has reserved shares of common stock for future issuance as follows (in thousands):

	December 29, 2007	June 28, 2008 (unaudited)
Options outstanding	2,134	2,381
Options available for grant	342	602
Conversion of outstanding convertible preferred stock	16,192	16,626
Conversion of convertible preferred stock upon exercise of warrants	200	216
	18,868	19,825

The above table does not include shares of common stock reserved for potential conversions of the convertible promissory notes (see Note 7) into shares of convertible preferred stock. The only outstanding convertible promissory note as of December 29, 2007 was converted in April 2008, at which time the Company issued 429,698 shares of Series E convertible preferred stock. There were no outstanding convertible promissory notes as of June 28, 2008.

12. Income Taxes

The Company's net loss before the provision for income taxes is as follows (in thousands):

	2005	2006	2007
Domestic	$ (15,181)	$ (21,816)	$ (23,372)
International	(1,204)	(1,737)	(2,079)
Net loss before provision for income taxes	$ (16,385)	$ (23,553)	$ (25,451)

Significant components of the Company's provision for income taxes are as follows (in thousands):

	2005	2006	2007
Current:			
Federal	$ —	$ —	$ —
State	—	—	—
Foreign	—	—	105
Total current provision	$ —	$ —	$ 105
Deferred:			
Federal	$ —	$ —	$ —
State	—	—	—
Foreign	—	—	—
Total deferred provision	—	—	—
Total provision for income taxes	$ —	$ —	$ 105

FLUIDIGM CORPORATION

Notes to Consolidated Financial Statements — (Continued)

Reconciliation of the benefits for income taxes at the statutory rate to the provision for income taxes is as follows:

	2005	2006	2007
Tax benefit at federal statutory rate	34.0%	34.0%	34.0%
State income taxes (net of federal benefit)	0.0	0.0	0.0
Foreign	0.0	0.0	(3.0)
Change in valuation allowance	(34.0)	(34.0)	(31.4)
Effective tax rate	0.0%	0.0%	(0.4)%

Significant components of the Company's deferred tax assets and liabilities are as follows (in thousands):

	December 31, 2006	December 29, 2007
Deferred tax assets:		
Reserves and accruals	$ 485	$ 866
Depreciation and amortization	1,685	478
Tax credit carryforwards	3,450	3,936
Net operating loss carryforwards	37,557	47,467
Total deferred tax assets	43,177	52,747
Valuation allowance	(43,177)	(52,747)
Net deferred tax assets	$ —	$ —

Recognition of deferred tax assets is appropriate when realization of these assets is more likely than not. The Company has incurred losses since its inception; accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by $5,954,000, $8,534,000 and $9,570,000 during 2005, 2006 and 2007, respectively.

As of December 29, 2007, the Company had net operating loss carryforwards for federal income tax purposes of $121,531,000 which expire in the years 2019 through 2026 and federal research and development tax credits of $2,749,000 which expire in the years 2008 through 2016. As of December 29, 2007, the Company had net operating loss carryforwards for state income tax purposes of $119,340,000 which expire in the years 2012 through 2016 and state research and development tax credits of $2,722,000 which do not expire. As of December 29, 2007, the Company had foreign net operating loss carryforwards of $4,768,000. A significant portion of the foreign net operating losses relate to activity in Singapore that has an indefinite carryforward period.

Utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. If an ownership change has occurred at different dates or in addition to the dates preliminarily identified, the utilization of net operation loss and credit carryforwards could be significantly reduced.

The Company has not provided for U.S. federal and state income taxes on all of the non U.S. subsidiaries' undistributed earnings as of December 29, 2007, because such earnings are intended to be indefinitely reinvested under APB 23. Upon distribution of those earnings in the form of dividends or otherwise, the Company would be subject to applicable U.S. federal and state income taxes.

Uncertain Tax Positions

Effective January 1, 2007, the Company adopted the provisions of FIN 48. As a result, the Company recorded a liability for net unrecognized tax benefits of $75,000, and recognized a cumulative effect of a change in accounting principle that resulted in a charge to the accumulated deficit. The liability for unrecognized tax benefits is classified as non-current.

The aggregate changes in the balance of the Company's gross unrecognized tax benefits during 2007 were as follows (in thousands):

January 1, 2007	$ 1,157
Increases in balances related to tax provisions taken during current periods	765
December 29, 2007	$ 1,922

Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. As of December 29, 2007, unrecognized tax benefits of $162,000, if recognized, would affect the Company's effective tax rate. The remaining unrecognized tax benefits were netted against deferred tax assets with a full valuation allowance, and if recognized, would not affect the Company's effective tax rate. The Company does not anticipate that the amount of existing unrecognized tax benefits will significantly increase or decrease within the next 12 months. The Company files income tax returns in the United States, various states and certain foreign jurisdictions. The tax years 1999 through 2007 remain open in most jurisdictions.

13. Employee Benefit Plans

The Company sponsors a 401(k) plan that stipulates that eligible employees can elect to contribute to the plan, subject to certain limitations, up to the lesser of 60% of eligible compensation or the maximum amount allowed by the IRS on a pretax basis annually. The Company has not made contributions to this plan since its inception.

14. Related-Party Transactions

As discussed further in Note 7, the Company has entered into multiple Convertible Note Purchase Agreements with BMSIF pursuant to which the Company issued convertible notes and received proceeds in the amount of $20.0 million. Principal and interest on the notes was convertible into shares of Series E convertible preferred stock at the lender's election, at any time, and automatically converted upon the achievement of certain targets or upon the completion of an initial public offering in which the convertible preferred stock was converted into common stock. Through June 28, 2008, all $20.0 million of these notes had been converted to shares of Series E convertible preferred stock.

BMSIF and its related companies held 2,573,988 shares of the Company's convertible preferred stock as of June 28, 2008, which constitutes 11.3% of the outstanding shares on a fully diluted basis. In addition, the Company's manufacturing operations in Singapore, which commenced operations in October 2005, have been supported by grants from EDB which provide incentive payments for research, development and manufacturing activity in Singapore by the Company. These agreements are discussed further in Note 3.

In January 2004, the Company loaned an officer of the Company $250,000 in connection with the purchase of a new home, which was secured by 238,095 shares of the Company's common stock held by the officer. The loan carried an interest rate of 3.52% per annum. The outstanding balance of this loan, including accrued interest, was $277,000 and $287,000 as of December 31, 2006 and December 29, 2007, respectively. On April 10, 2008, the principal amount of this note and all accrued interest was settled with 25,975 shares held by the officer at fair value of the common stock, which was determined by the Board of Directors to be $11.16 per share.

Dr. Stephen Quake, who is a professor of bioengineering at Stanford University, is one of the Company's founding stockholders and as such held 664,821 shares of common stock as of December 31, 2006, December 29,

2007 and June 28, 2008. In June 2006, the Company repurchased 35,421 shares of the Company's common stock held by Dr. Quake for $1.96 per share.

Dr. Quake also serves as a consultant to the Company and is a member of the Company's Scientific Advisory Board. The Company paid consulting fees of $45,000, $97,000, $67,000, $50,000 and $58,000 to Dr. Quake during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively, and accrued amounts payable to Dr. Quake related to these payments were $0, $33,000 and $17,000 as of December 31, 2006, December 29, 2007 and June 28, 2008, respectively. The Company recognized $205,000, $241,000, $15,000, $0 and $96,000 in revenue related to products and services sold to Stanford University during 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively, and had accounts receivable balances related to these sales of $0, $11,000 and $260,000 as of December 31, 2006, December 29, 2007 and June 28, 2008, respectively.

The Company's general counsel was also a member of a law firm whose services are utilized by the Company. On April 1, 2008, the Company's general counsel resigned his position from such law firm. Amounts paid to the law firm for services and direct patent fees were $880,000, $960,000, $576,000, $352,000 and $312,000 for 2005, 2006, 2007 and the six months ended June 30, 2007 and June 28, 2008, respectively, and accrued amounts payable to the law firm were $174,000, $257,000 and $411,000 as of December 31, 2006, December 29, 2007 and June 28, 2008, respectively.

15. Information about Geographic Areas

SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by a company's chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. The chief operating decision maker for the Company is the Chief Executive Officer. The Chief Executive Officer reviews financial information presented on a consolidated basis, accompanied by information about revenue by geographic region, for purposes of allocating resources and evaluating financial performance. The Company has one business activity and there are no segment managers who are held accountable for operations, operating results or plans for levels or components below the consolidated unit level. Accordingly, the Company has determined that it has a single reporting segment and operating unit structure which is the development, manufacturing and commercialization of IFCs and complementary laboratory instruments.

Revenue by geography is based on the billing address of the customer. The following tables set forth revenue and long-lived assets by geographic area (in thousands):

Revenue

				Six Months Ended	
	2005	2006	2007	June 30, 2007	June 28, 2008
				(Unaudited)	
United States	$ 5,557	$ 3,807	$ 3,492	$ 1,231	$ 2,530
Singapore	—	879	1,972	889	1,027
Japan	1,274	1,492	732	162	543
Europe	545	189	735	631	953
Other	298	31	344	84	467
Total	$ 7,674	$ 6,398	$ 7,275	$ 2,997	$ 5,520

Long-lived Assets

	December 31, 2006	December 29, 2007	June 28, 2008 (Unaudited)
United States	$ 1,818	$ 1,361	$ 1,154
Singapore	2,240	2,009	1,596
Japan	10	8	7
Total	$ 4,068	$ 3,378	$ 2,757

16. Subsequent Events

In August 2008, the Board of Directors approved a 1-for-3.5 reverse stock split of the Company's convertible preferred stock and common stock. The reverse split became effective on September 16, 2008. All share and per share amounts have been retroactively restated in the accompanying financial statements and notes for all periods presented.

The Board of Directors authorized 2,000,000 shares of common stock reserved for issuance under the 2008 Equity Incentive Plan, which is subject to shareholder approval.

The Board of Directors increased the authorized capital stock of the Company to consist of 300,000,000 shares of common stock and 20,000,000 shares of preferred stock effective upon the completion of the Company's initial public offering.

The Company obtained approval from the convertible preferred stockholders to update the automatic conversion feature to require the outstanding shares of the convertible preferred stock to convert to shares of the Company's common stock upon the closing of the Company's initial public offering.

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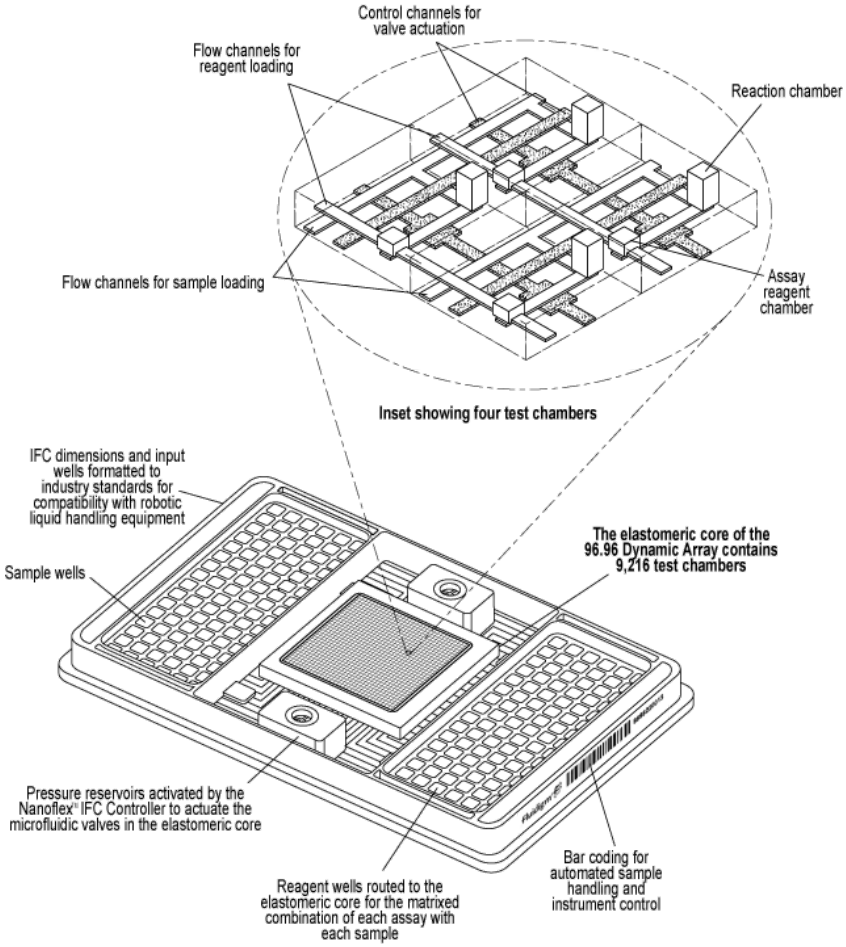

Dynamic Array Schematic

Fluidigm®

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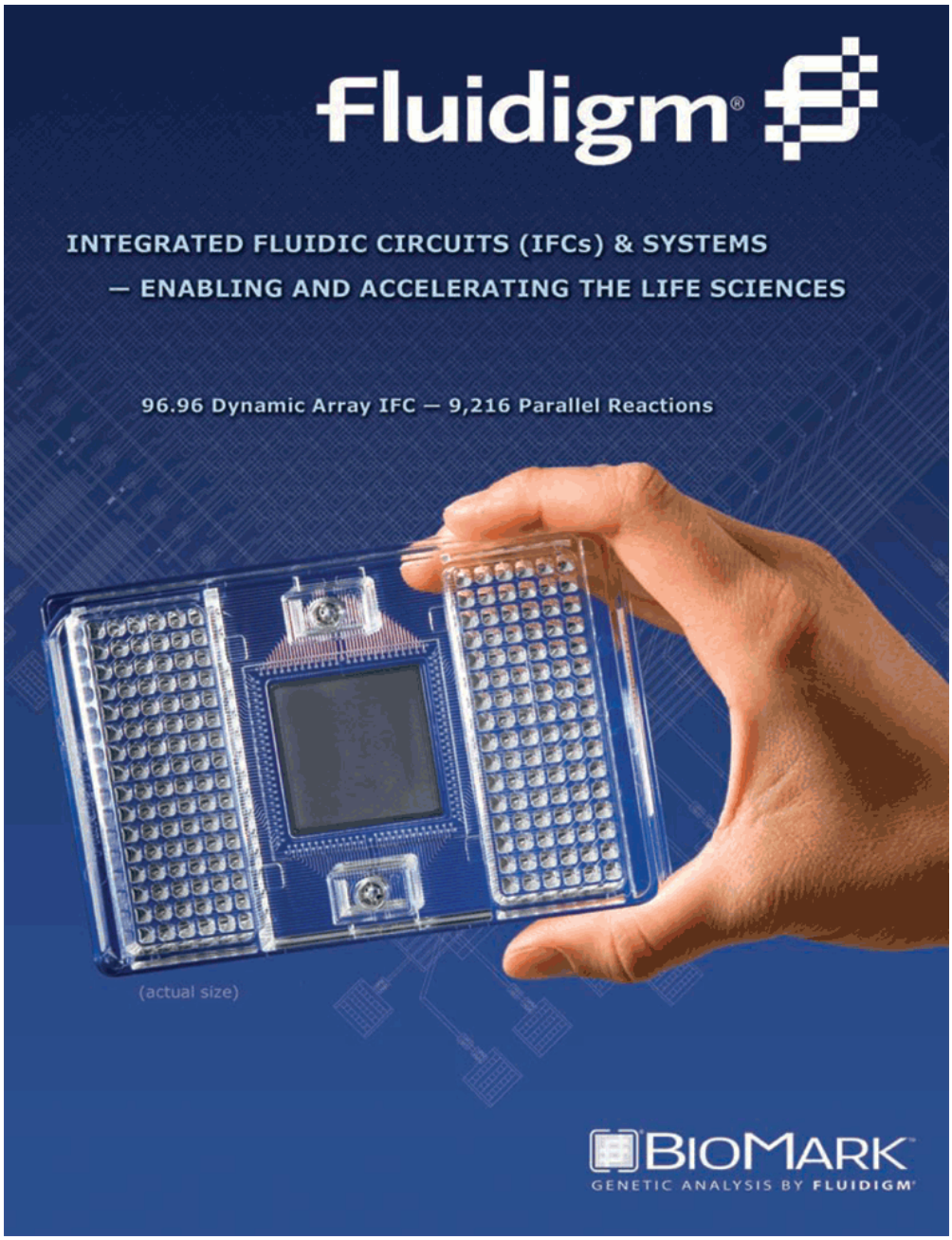


Fluidigm®

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. ***Other Expenses of Issuance and Distribution.***

The following table sets forth all expenses to be paid by the registrant, other than estimated underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the SEC registration fee, the NASD filing fee and the NASDAQ Global Market listing fee.

SEC registration fee	$	3,833
NASD filing fee		9,700
NASDAQ Global Market listing fee		105,000
Printing and engraving		390,000
Legal fees and expenses		1,700,000
Accounting fees and expenses		850,000
Blue sky fees and expenses (including legal fees)		10,000
Transfer agent and registrar fees		2,500
Miscellaneous		28,967
Total	$	3,100,000

Item 14. ***Indemnification of Directors and Officers.***

Section 145 of the Delaware General Corporation Law authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors and other corporate agents.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the registrant's certificate of incorporation includes provisions that eliminate the personal liability of its directors and officers for monetary damages for breach of their fiduciary duty as directors and officers.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, the bylaws of the registrant provide that:

- The registrant shall indemnify its directors and officers for serving the registrant in those capacities or for serving other business enterprises at the registrant's request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- The registrant may, in its discretion, indemnify employees and agents in those circumstances where indemnification is not required by law.
- The registrant is required to advance expenses, as incurred, to its directors and officers in connection with defending a proceeding, except that such director or officer shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- The registrant will not be obligated pursuant to the bylaws to indemnify a person with respect to proceedings initiated by that person, except with respect to proceedings authorized by the registrant's Board of Directors or brought to enforce a right to indemnification.
- The rights conferred in the bylaws are not exclusive, and the registrant is authorized to enter into indemnification agreements with its directors, officers, employees and agents and to obtain insurance to indemnify such persons.
- The registrant may not retroactively amend the bylaw provisions to reduce its indemnification obligations to directors, officers, employees and agents.

The registrant's policy is to enter into separate indemnification agreements with each of its directors and officers that provide the maximum indemnity allowed to directors and executive officers by Section 145 of the Delaware General Corporation Law and also provides for certain additional procedural protections. The registrant also maintains directors and officers insurance to insure such persons against certain liabilities.

These indemnification provisions and the indemnification agreements entered into between the registrant and its officers and directors may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification by the underwriters of the registrant and its officers and directors for certain liabilities arising under the Securities Act and otherwise.

Item 15. ***Recent Sales of Unregistered Securities.***

In the three years prior to the filing of this registration statement, the registrant has issued the following unregistered securities:

(a) From March 2005 through July 17, 2007, Fluidigm Corporation, a California corporation, issued and sold an aggregate of 134,561 shares of its common stock upon the exercise of options issued to certain employees, directors and consultants under the registrant's 1999 Stock Option Plan, as amended, at exercise prices ranging from $1.05 to $2.90, for aggregate consideration of $188,442. From July 18, 2007 through May 22, 2008, the registrant issued and sold an aggregate of 71,634 shares of its common stock upon the exercise of options issued to certain employees, directors and consultants under the registrant's 1999 Stock Option Plan, as amended, at exercise prices ranging from $1.05 to $4.76 per share, for aggregate consideration of $123,346.

(b) From March 2005 through July 17, 2007, Fluidigm Corporation, a California corporation, granted to certain of its employees, directors and consultants under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 1,138,869 shares of its common stock at exercise prices ranging from $1.05 to $4.76 per share. From July 18, 2007 through May 22, 2008, the registrant granted to certain of its employees, directors and consultants under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 129,200 shares of the registrant's common stock at exercise prices ranging from $4.83 to $8.40 per share.

(c) In March and December 2005, Fluidigm Corporation, a California corporation, pursuant to a loan and security agreement, issued and sold warrants to purchase 106,122 shares of its Series D Preferred Stock to one accredited investor at an exercise price of $9.80 per share. In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the warrant was converted into a warrant to purchase an equal number of shares of the registrant's Series D Preferred Stock.

(d) In November 2005, Fluidigm Corporation, a California corporation, issued and sold 20,000 shares of its common stock to one accredited investor at an issuance price of $1.96 per share for aggregate monetary consideration of $39,200, which amount was deemed paid by the transfer of certain rights granted to registrant pursuant to the terms of a licensing agreement.

(e) In December 2005, Fluidigm Corporation, a California corporation, issued 237,895 shares of its Series D Preferred Stock to one accredited investor in connection with the conversion of a convertible promissory note at a conversion price per share of $9.80.

(f) In June 2006, Fluidigm Corporation, a California corporation, issued to one accredited investor a convertible promissory notes in an aggregate principal amount of $3,000,000 convertible into shares of its Series D Preferred Stock. In July 2007, the notes were converted into 330,612 shares of Series D Preferred Stock at a conversion price per share of $9.80.

(g) In April 2006, Fluidigm Corporation, a California corporation, issued an aggregate of 61,223 shares of its Series D Preferred Stock to UAB Research Foundation pursuant to the terms of a Master Closing Agreement by and among UAB Research Foundation, Oculus Pharmaceuticals, Inc. and Fluidigm Corporation, at an issuance price of $9.80 per share, for aggregate monetary consideration of $599,998, which

amount was deemed paid by the transfer of certain rights granted to registrant pursuant to the terms of such agreement and the achievement of certain milestones thereunder; at the request of UAB, 26,530 of such shares were issued to Oculus Pharmaceuticals, Inc., 10,204 of such shares were issued to Athersys, Inc. and 24,489 of such shares were issued to UAB Research Foundation.

(h) In June 2006, Fluidigm Corporation, a California corporation, issued 76,530 shares of its Series D Preferred Stock to one accredited investor in connection with the exercise of a warrant to purchase shares of its Series D Preferred Stock at an exercise price per share of $9.80.

(i) From August 2006 through April 2007, Fluidigm Corporation, a California corporation, issued three convertible promissory notes to one accredited investor in an aggregate principal amount of $15,000,000, all of which were convertible into shares of its Series E Preferred Stock. In March 2007, two of the notes were converted into an aggregate of 844,095 shares of the Series E Preferred Stock of Fluidigm Corporation, a California corporation. In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the remaining outstanding convertible promissory note was made convertible into shares of the registrant's Series E Preferred Stock.

(j) In March 2007, Fluidigm Corporation, a California corporation, issued 28,571 shares of its common stock to one accredited investor at an issuance price of $2.90 per share, for aggregate monetary consideration of $83,000, which amount was deemed paid by the transfer of certain rights granted to registrant pursuant to the terms of a licensing agreement.

(k) In May 2007, Fluidigm Corporation, a California corporation, granted to seven of its employees and directors under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 219,142 shares of its common stock at an exercise price of $4.76 per share.

(l) In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the registrant issued an aggregate of 2,770,285 shares of common stock to a total of 128 stockholders in exchange for the outstanding shares of common stock Fluidigm Corporation, a California corporation.

(m) In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the registrant issued an aggregate of 779,220 shares of the registrant's Series A Preferred Stock to a total of 41 investors in exchange for the outstanding shares of Series A Preferred Stock of Fluidigm Corporation, a California corporation.

(n) In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the registrant issued an aggregate of 1,845,907 shares of the registrant's Series B Preferred Stock to a total of 35 investors in exchange for the outstanding shares of Series B Preferred Stock of Fluidigm Corporation, a California corporation.

(o) In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the registrant issued an aggregate of 4,675,666 shares of the registrant's Series C Preferred Stock to a total of 62 investors in exchange for the outstanding shares of Series C Preferred Stock of Fluidigm Corporation, a California corporation.

(p) In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the registrant issued an aggregate of 3,484,626 shares of the registrant's Series D Preferred Stock to a total of 52 investors in exchange for the outstanding shares of Series D Preferred Stock of Fluidigm Corporation, a California corporation.

(q) In connection with the registrant's reincorporation into the State of Delaware on July 18, 2007, the registrant issued an aggregate of 2,562,810 shares of the registrant's Series E Preferred Stock to a total of 35 investors in exchange for the outstanding shares of Series E Preferred Stock of Fluidigm Corporation, a California corporation.

(r) From October 2007 through December 2007, the registrant issued and sold an aggregate of 2,512,841 shares of Series E Preferred Stock to a total of seven investors at $14.00 per share, for aggregate proceeds of $35,179,780.

(s) In December 2007, the registrant issued 1,714 shares of its common stock to one accredited investor at an issuance price of $4.76 per share for aggregate monetary consideration of $8,160, which amount was deemed paid by the transfer of certain rights granted to registrant pursuant to the terms of a licensing agreement.

(t) In December 2007, the registrant granted to one of its directors under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 28,571 shares of the registrant's common stock at an exercise price of $8.40 per share.

(u) In February and June 2008, the registrant issued a warrant to purchase 28,572 and 57,142 shares of the registrant's Series E Preferred Stock to one accredited investor at an exercise price of $14.00 per share.

(v) In February 2008, the registrant granted to one of its executive officers under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 171,427 shares of the registrant's common stock at an exercise price of $8.40 per share.

(w) In April 2008, the registrant granted to 110 of its employees, consultants and directors under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 546,711 shares of its common stock at an exercise price of $11.16 per share.

(x) On May 12, 2008, the registrant issued 4,692 shares of its Series C Preferred Stock to Imperial Bank pursuant to Imperial Bank's net exercise of its warrant to purchase up to 11,795 shares of Series C Preferred Stock. The remainder of the warrant was cancelled pursuant to the terms of the net exercise.

(y) In June 2008, the registrant granted to seven of its employees and consultants under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 24,426 shares of its common stock at an exercise price of $11.97 per share.

(z) In August 2008, the registrant granted to eight of its employees under the registrant's 1999 Stock Option Plan, as amended, options to purchase an aggregate of 18,426 shares of its common stock at an exercise price of $12.71 per share.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering, and the registrant believes that each transaction was exempt from the registration requirements of the Securities Act in reliance on the following exemptions:

- with respect to the transactions described in paragraphs (a) and (b), Rule 701 promulgated under the Securities Act as transactions pursuant to a compensatory benefit plan approved by the registrant's Board of Directors;
- with respect to the transactions described in paragraphs (1) through (q), Rule 145(a)(2) promulgated under the Securities Act as transactions pursuant to a plan or agreement for statutory merger or similar plan or acquisition in which securities of the registrant were exchanged for the securities of Fluidigm Corporation, a California corporation, the sole purpose of which was to change the registrant's domicile solely within the United States, and a Permit granted pursuant to Section 25121 of the California Corporations Code; and
- with respect to the transactions described in paragraphs (c) through (k) and paragraphs (r) through (z), Section 4(2) of the Securities Act, or Rule 506 of Regulation D promulgated thereunder, as transactions by an issuer not involving a public offering. Each recipient of the securities in this transaction represented his or her intention to acquire the securities for investment only and not with a view to, or for resale in connection with, any distribution thereof, and appropriate legends were affixed to the share certificates issued in each such transaction. In each case, the recipient received adequate information about the registrant or had adequate access, through his or her relationship with the registrant, to information about the registrant.

Item 16. ***Exhibits and Financial Statement Schedules.***

(a) *Exhibits.* The following exhibits are included herein or incorporated herein by reference:

Exhibit Number	Description
1.1	Form of Underwriting Agreement.
3.1	Certificate of Incorporation of the Registrant, as currently in effect.

Exhibit Number	Description
3.2(3)	Form of Restated Certificate of Incorporation of the Registrant, to be in effect upon the completion of this offering.
3.3(3)	Bylaws of the Registrant.
3.4	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon completion of this offering.
4.1(3)	Specimen Common Stock Certificate of the Registrant.
4.2(3)	Series E Preferred Stock Purchase Agreement dated June 13, 2006 through December 31, 2007 between the Registrant and the Purchasers set forth therein, as amended.
4.3(3)	Eighth Amended and Restated Investor Rights Agreement between the Registrant and certain holders of the Registrant's common stock named therein, including amendments No. 1 and No. 2.
4.4(2)	Loan and Security Agreement No. 4561 between the Registrant and Lighthouse Capital Partners V, L.P. dated March 29, 2005, including amendments Nos. 1 through 4.
4.4A(3)	Preferred Stock Purchase Warrant issued to Lighthouse Capital Partners V, L.P. effective March 29, 2005.
4.4B(3)	Negative Pledge Agreement by and between the Registrant and Lighthouse Capital Partners V, L.P. dated March 29, 2005.
4.5	Convertible Note Purchase Agreement by and between Biomedical Sciences Investment Fund Pte Ltd and the Registrant dated August 7, 2006.
4.5A(3)	Convertible Promissory Note issued to Biomedical Sciences Investment Fund Pte Ltd dated April 19, 2007, as amended.
4.6	Action By Written Consent of the holders of Preferred Stock of the Registrant effective as of August 25, 2008 consenting to the Conversion of all Preferred Stock.
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1(3)	Form of Indemnification Agreement between the Registrant and its directors and officers.
10.2(3)	1999 Stock Plan of the Registrant, as amended April 24, 2008.
10.2A(3)	Forms of agreements under the 1999 Stock Plan.
10.3(3)	2008 Equity Incentive Plan.
10.3A(3)	Forms of agreements under the 2008 Equity Incentive Plan.
10.4(2)(3)	Second Amended and Restated License Agreement by and between California Institute of Technology and the Registrant effective as of May 1, 2004.
10.4A(2)(3)	First Addendum, effective as of March 29, 2007, to Second Amended and Restated License Agreement by and between California Institute of Technology and the Registrant effective as of May 1, 2004.
10.5(2)(3)	Co-Exclusive License Agreement between President and Fellows of Harvard College and the Registrant effective as of October 15, 2000.
10.5A(2)(3)	First Amendment to Co-Exclusive License Agreement between President and Fellows of Harvard College and the Registrant effective as of October 15, 2000.
10.6(2)(3)	Co-Exclusive License Agreement between President and Fellows of Harvard College and the Registrant effective as of October 15, 2000.
10.7(2)(3)	Co-Exclusive License Agreement between President and Fellows of Harvard College and the Registrant effective as of October 15, 2000.
10.8(2)(3)	Patent License Agreement by and between Gyros AB and the Registrant dated January 9, 2003.
10.8A(2)(3)	Amendment No. 1 dated January 9, 2005 to Patent License Agreement by and between Gyros AB and the Registrant dated January 9, 2003.
10.9(2)	Master Closing Agreement by and between UAB Research Foundation, Oculus Pharmaceuticals, Inc. and the Registrant dated March 7, 2003.
10.9A(2)(3)	License Agreement by and between UAB Research Foundation and the Registrant dated March 7, 2003.

Exhibit Number	Description
10.10(2)(3)	Amended and Restated Letter Agreement Regarding Application for Incentives Under the Research Incentive Scheme for Companies (RISC) dated March 27, 2008 (originally dated October 7, 2005), by and between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.10A(2)(3)	Supplement Dated January 11, 2006 to Letter Agreement Relating to Application for Incentives under the Research Incentive Scheme for Companies (RISC), dated October 7, 2005 between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.11(2)(3)	Amended and Restated Letter Agreement Regarding Application for Incentives Under the Research Incentive Scheme for Companies (RISC) dated March 27, 2008 (originally dated February 12, 2007), by and between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.12(2)(3)	Distribution Agreement by and between Eppendorf AG and the Registrant effective as of April 1, 2005.
10.12A(3)	First Amendment, effective as of December 1, 2007, to the Distribution Agreement by and between Eppendorf AG and the Registrant effective as of April 1, 2005.
10.13(3)	Form of Employment and Severance Agreement between the Registrant and each of its executive officers.
10.14(3)	Consulting Agreement by and between the Registrant and Richard DeLateur dated February 29, 2008.
10.15(3)	Employee Loan Agreement with Gajus Worthington dated January 20, 2004.
10.15A(3)	Stock Repurchase Agreement between the Registrant and Gajus V. Worthington dated April 10, 2008.
10.16(3)	Offer Letter to Vikram Jog dated January 29, 2008.
10.17(3)	Settlement Agreement and General Release of all Claims by and between Michael Ybarra Lucero and the Registrant dated March 20, 2008.
10.18(2)(3)	Letter Agreement between President and Fellows of Harvard College and the Registrant dated December 22, 2004.
10.19	Sublease, dated March 25, 2004, between Genome Therapeutics Corporation as Sublessor and Fluidigm Corporation as Sublessee and amendment thereto, and related master lease agreements and amendments thereto.
10.20	Tenancy for Flatted Factory Space in Singapore between JTC Corporation and the Registrant dated July 27, 2005 and August 12, 2008.
21.1(3)	List of subsidiaries of Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1(3)	Power of Attorney.

(1) To be filed by amendment.
(2) Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
(3) Previously filed.

(b) *Financial Statement Schedules.*

All schedules have been omitted because the information required to be presented in them is not applicable or is shown in the consolidated financial statements or related notes.

Item 17. ***Undertakings.***

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) For the purpose of determining liability under the Securities Act of 1933 to any purchaser, if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(4) For the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser to the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchasers and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Amendment No. 9 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on the 17th day of September 2008.

FLUIDIGM CORPORATION

By: /s/ Gajus V. Worthington
Gajus V. Worthington
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 9 to the registration statement has been signed by the following persons in the capacities indicated on the 17th day of September 2008.

Signature	Title	Date
/s/ Gajus V. Worthington Gajus V. Worthington	President, Chief Executive Officer and Director (Principal Executive Officer)	September 17, 2008
/s/ Vikram Jog Vikram Jog	Chief Financial Officer (Principal Accounting and Financial Officer)	September 17, 2008
* Samuel Colella	Director	September 17, 2008
* Michael W. Hunkapiller	Director	September 17, 2008
* Elaine V. Jones	Director	September 17, 2008
* Kenneth Nussbacher	Director	September 17, 2008
* John A. Young	Director	September 17, 2008

*By: /s/ Gajus V. Worthington
Gajus V. Worthington
Attorney-in-Fact

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Exhibit Number	Description
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10.9A(2)(3)	License Agreement by and between UAB Research Foundation and the Registrant dated March 7, 2003.
10.10(2)(3)	Amended and Restated Letter Agreement Regarding Application for Incentives Under the Research Incentive Scheme for Companies (RISC) dated March 27, 2008 (originally dated October 7, 2005), by and between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.10A(2)(3)	Supplement Dated January 11, 2006 to Letter Agreement Relating to Application for Incentives under the Research Incentive Scheme for Companies (RISC), dated October 7, 2005 between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
10.11(2)(3)	Amended and Restated Letter Agreement Regarding Application for Incentives Under the Research Incentive Scheme for Companies (RISC) dated March 27, 2008 (originally dated February 12, 2007), by and between Singapore Economic Development Board and Fluidigm Singapore Pte. Ltd.
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10.14(3)	Consulting Agreement by and between the Registrant and Richard DeLateur dated February 29, 2008.
10.15(3)	Employee Loan Agreement with Gajus Worthington dated January 20, 2004.
10.15A(3)	Stock Repurchase Agreement between the Registrant and Gajus V. Worthington dated April 10, 2008.
10.16(3)	Offer Letter to Vikram Jog dated January 29, 2008.
10.17(3)	Settlement Agreement and General Release of all Claims by and between Michael Ybarra Lucero and the Registrant dated March 20, 2008.
10.18(2)(3)	Letter Agreement between President and Fellows of Harvard College and the Registrant dated December 22, 2004.
10.19	Sublease, dated March 25, 2004, between Genome Therapeutics Corporation as Sublessor and Fluidigm Corporation as Sublessee and amendment thereto, and related master lease agreements and amendments thereto.
10.20	Tenancy for Flatted Factory Space in Singapore between JTC Corporation and the Registrant dated July 27, 2005 and August 12, 2008.
21.1(3)	List of subsidiaries of Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1(3)	Power of Attorney.

(1) To be filed by amendment.
(2) Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.
(3) Previously filed.

5,300,000 SHARES

FLUIDIGM CORPORATION

COMMON STOCK, PAR VALUE $0.001 PER SHARE

UNDERWRITING AGREEMENT

September [__], 2008

September [__], 2008

Morgan Stanley & Co. Incorporated
UBS Securities LLC
Leerink Swan LLC
Pacific Growth Equities LLC

c/o Morgan Stanley & Co. Incorporated
1585 Broadway
New York, New York 10036

Ladies and Gentlemen:

Fluidigm Corporation, a Delaware corporation (the "**Company**"), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the "**Underwriters**") 5,300,000 shares of its common stock, par value $0.001 per share (the "**Firm Shares**"). The Company also proposes to issue and sell to the several Underwriters not more than an additional 795,000 shares of its common stock, par value $0.001 per share (the "**Additional Shares**") if and to the extent that you, as Manager of the offering, shall have determined to exercise, on behalf of the Underwriters, the right to purchase such shares of common stock granted to the Underwriters in Section 2 hereof. The Firm Shares and the Additional Shares are hereinafter collectively referred to as the "**Shares**." The shares of common stock, par value $0.001 per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the "**Common Stock**."

The Company has filed with the Securities and Exchange Commission (the "**Commission**") a registration statement, including a prospectus, relating to the Shares. The registration statement as amended at the time it becomes effective, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act of 1933, as amended (the "**Securities Act**"), is hereinafter referred to as the "**Registration Statement**"; the prospectus in the form first used to confirm sales of Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the "**Prospectus**." If the Company has filed an abbreviated registration statement to register additional shares of Common Stock pursuant to Rule 462(b) under the Securities Act (the "**Rule 462 Registration Statement**"), then any reference herein to the term "**Registration Statement**" shall be deemed to include such Rule 462 Registration Statement.

For purposes of this Agreement, "**free writing prospectus**" has the meaning set forth in Rule 405 under the Securities Act, "**Time of Sale Prospectus**" means the preliminary prospectus together with the free writing prospectuses, if any, each identified in Schedule II hereto, and "**broadly available road show**" means a "bona fide electronic road show" as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms "Registration Statement," "preliminary prospectus," "Time of Sale

Prospectus" and "Prospectus" shall include the documents, if any, incorporated by reference therein.

1. *Representations and Warranties*. The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the Company's knowledge, threatened by the Commission.

(b) (i) The Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (iii) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 4), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (iv) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (v) the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(c) Any statistical and market-related data included in the Registration Statement, the Time of Sale Prospectus and the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate, and is consistent with the sources from which they are derived.

(d) The Company is not an "ineligible issuer" in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing

prospectuses, if any, identified in Schedule II hereto, and electronic road shows, if any, furnished to you before first use, the Company has not prepared, used or referred to, and will not, without your prior consent, prepare, use or refer to, any free writing prospectus.

(e) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own its property and to conduct its business as described in the Time of Sale Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(f) Each subsidiary of the Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own its property and to conduct its business as described in the Time of Sale Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction, to the extent that the concept of "good standing" is applicable under the laws of such jurisdiction, in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company and its subsidiaries, taken as a whole; all of the issued shares of capital stock of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly by the Company, free and clear of all liens, encumbrances, equities or claims.

(g) This Agreement has been duly authorized, executed and delivered by the Company.

(h) The authorized capital stock of the Company conforms as to legal matters to the description thereof contained in the Section entitled "Description of Capital Stock" in each of the Time of Sale Prospectus and the Prospectus.

(i) The shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and non-assessable.

(j) The Shares have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable, and the issuance of such Shares will not be subject to any preemptive or similar rights which have not otherwise been waived.

(k) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene any provision of (i) applicable law; (ii) the certificate of incorporation or bylaws of the Company; (iii) any agreement or other instrument binding upon the Company or any of its subsidiaries that is material to the Company and its subsidiaries, taken as a whole; or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary, except that in the case of clause (iii) as would not have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its

obligations under this Agreement, and no consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the performance by the Company of its obligations under this Agreement, except such as may be required by the securities or Blue Sky laws of the various states or the rules and regulations of the Financial Industry Regulatory Authority ("**FINRA**") in connection with the offer and sale of the Shares.

(l) There has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus.

(m) There are no legal or governmental proceedings pending or to the Company's knowledge threatened to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject (i) other than proceedings accurately described in all material respects in the Time of Sale Prospectus and proceedings that would not have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by the Time of Sale Prospectus or (ii) that are required to be described in the Registration Statement or the Prospectus and are not so described; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required.

(n) Each preliminary prospectus filed as part of the registration statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied as to form when so filed in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder.

(o) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Prospectus will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(p) The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, be reasonably likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(q) There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any

related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, be reasonably likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(r) The accountants who certified the financial statements and supporting schedules included in the Registration Statement are independent public accountants with respect to the Company as required by the Securities Act and the applicable rules and regulations of the Commission thereunder.

(s) The financial statements of the Company filed with the Commission as a part of the Registration Statement and included in each of the Time of Sale Prospectus and the Prospectus present fairly in all material respects the consolidated financial position of the Company and its subsidiaries as of the dates indicated and the results of their statement of operations, stockholders' equity and cash flows for the periods specified. Such financial statements have been prepared in conformity with generally accepted accounting principles as applied in the United States ("**GAAP**") applied on a consistent basis throughout the periods involved. The financial data set forth in the Prospectus under the captions "Prospectus Summary — Summary Consolidated Financial Data," "Selected Consolidated Financial Data" and "Capitalization" present fairly in all material respects the information set forth therein on a basis consistent with that of the audited financial statements contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(t) Except as described in the Time of Sale Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement, except as otherwise have been waived in connection with the issuance and sale of the Shares contemplated hereby.

(u) Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, representative, employee or affiliate of the Company or of any of its subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "**FCPA**"), including, without limitation, taking any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment or giving of money, property, gift or anything else of value, directly or indirectly, to any "foreign official" (as such term is defined in the FCPA) or to any foreign political party or official thereof or any candidate for foreign political office in contravention of the FCPA.

(v) The operations of the Company and those of its subsidiaries are, and have been conducted, in compliance with (i) all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act of 1970 and Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act) except where noncompliance would not, singly or in the aggregate, be reasonably likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole, and (ii) to the best of the Company's knowledge, all other applicable anti-money laundering statutes of all jurisdictions, the rules and regulations

thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (the "**Anti-Money Laundering Laws**"). No action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to (i) the Bank Secrecy Act of 1970 and Title III of the USA PATRIOT Act or (ii) the Anti-Money Laundering Laws is pending or, to the best of the Company's knowledge, threatened.

(w) None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries is an individual or entity ("**Person**") that is currently the subject of any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("**OFAC-administered sanctions**"); and the Company will not directly or indirectly use the proceeds of the offering of Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person, to fund activities of or business with any Person, or in any country or territory, that is the subject of OFAC-administered sanctions, or in a manner that would otherwise cause any Person (including any Person involved in or facilitating the offering of the Shares, whether as underwriter, advisor, or otherwise) to violate any OFAC-administered sanctions.

(x) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its subsidiaries have not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock other than capital stock from its employees or other service providers in connection with the termination of their service pursuant to employee benefit plans disclosed in the Registration Statement or agreements to provide employment or consulting services to the Company, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company and its subsidiaries, except in each case as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, respectively.

(y) Neither the Company nor its subsidiaries own any real property. The Company and its subsidiaries have good and marketable title to all personal property owned by them which is material to the business of the Company and its subsidiaries taken as a whole, in each case free and clear of all liens, encumbrances and defects of title except such as are described in the Time of Sale Prospectus or do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries, in each case except as described in the Time of Sale Prospectus.

(z) Except as described in the Registration Statement, Time of Sale Prospectus, and the Prospectus: (i) the Company owns, or possesses, or has rights to, or can acquire on reasonable terms all Intellectual Property reasonably necessary to conduct the business of the

Company as described in the Registration Statement, Time of Sale Prospectus, and the Prospectus ("**Company Intellectual Property**"), except where the failure to own or possess or the inability to acquire on reasonable terms any of the foregoing would not, individually or in the aggregate, have a material adverse effect on the Company and its susidiaries taken as a whole; (ii) to the Company's knowledge, there is no infringement, misappropriation, or violation by third parties of any Company Intellectual Property, which individually or in the aggregate would have a material adverse effect of the Company and its subsidiaries taken as a whole; (iii) neither the Company nor any of its subsidiaries has received any written threat or notice of action, suit, proceeding, or claim by others challenging the Company's rights in or to the Company Intellectual Property, nor is there any such action or proceeding currently pending; (iv) neither the Company nor any of its subsidiaries have received any written threat or notice of action, suit, proceeding, or claim by others claiming the invalidity or unenforceability of the Company Intellectual Property, nor is there any such action or proceeding currently pending and (v) neither the Company nor any of its subsidiaries has received any written threat or notice of infringement of or conflict with asserted rights of others with respect to any Intellectual Property which, with respect to (iii) through (v), individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a material adverse effect on the Company and its subsidiaries taken as a whole. The term "**Intellectual Property"** as used in this section means all material, valid, and enforceable patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, and know-how.

(aa) No material labor dispute with the employees of the Company or any of its subsidiaries exists, except as described in the Time of Sale Prospectus, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would be reasonably likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(bb) The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not be reasonably likely to have a material adverse effect on the Company and its subsidiaries, taken as a whole, except as described in the Time of Sale Prospectus.

(cc) The Company and its subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, except where the failure to obtain such certificates, authorizations, or permits would not, individually or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole, and neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a material adverse effect on

the Company and its subsidiaries, taken as a whole, except as described in the Time of Sale Prospectus.

(dd) All United States federal income tax returns of the Company and its subsidiaries required by law to be filed have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The Company and its subsidiaries have filed all other tax returns that are required to have been filed by them pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not, singly or in the aggregate, result in a material adverse effect on the Company and its subsidiaries taken as a whole, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been provided.

(ee) The Company and each of its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Time of Sale Prospectus, since the end of the Company's most recent audited fiscal year, there has been (i) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (ii) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(ff) The Company has taken all necessary actions to ensure that, upon the effectiveness of the Registration Statement, it will be in compliance in all material respects with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "**Sarbanes-Oxley Act**") that are then in effect and which the Company is required to comply with as of the effectiveness of the Registration Statement, and is actively taking steps to ensure that it will be in compliance with other provisions of the Sarbanes-Oxley Act which the Company is not required to comply with, upon the applicability of such provisions to the Company, at all times after the effectiveness of the Registration Statement.

(gg) Except with respect to any such failure to comply that has been corrected by the date of this Agreement, or would not, individually or in the aggregate, have a material adverse effect on the Company, (i) all stock option awards granted by the Company have been duly authorized by all necessary corporate action, including, as applicable, approval by the board of directors of the Company or a duly authorized committee thereof, including approval of the exercise or purchase price or the methodology for determining the exercise or purchase price and the substantive terms of the stock options awards, and any required stockholder approval by the necessary number of votes or written consents; and (ii) no stock option awards granted by the

Company have been retroactively granted, or the exercise or purchase price of any stock option award determined retroactively; there is no action, suit, proceeding, formal inquiry or formal investigation before or brought by any court or governmental agency or body, domestic or foreign, or the Nasdaq Global Market or any self regulatory organization, now pending, or, to the knowledge of the Company, threatened, against or affecting the Company in connection with any stock option awards granted by the Company.

(hh) Except as described in the Time of Sale Prospectus, the Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

2. *Agreements to Sell and Purchase.* The Company hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the conditions hereinafter stated, agrees, severally and not jointly, to purchase from the Company the respective numbers of Firm Shares set forth in Schedule I hereto opposite its name at $ a share (the "**Purchase Price**").

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, the Company agrees to sell to the Underwriters the Additional Shares, and the Underwriters shall have the right to purchase, severally and not jointly, up to 795,000 Additional Shares at the Purchase Price. You may exercise this right on behalf of the Underwriters in whole or from time to time in part by giving written notice not later than 30 days after the date of this Agreement. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least one business day after the written notice is given and may not be earlier than the closing date for the Firm Shares nor later than ten business days after the date of such notice. Additional Shares may be purchased as provided in Section 4 hereof solely for the purpose of covering over-allotments made in connection with the offering of the Firm Shares. On each day, if any, that Additional Shares are to be purchased (an "**Option Closing Date**"), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares (subject to such adjustments to eliminate fractional shares as you may determine) that bears the same proportion to the total number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

3. *Terms of Public Offering*. The Company is advised by you that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in your judgment is advisable. The Company is further advised by you that the Shares are to be offered to the public initially at $ a share (the "**Public Offering Price**") and to certain dealers selected by you at a price that represents a concession not in excess of $ a share under the Public Offering Price, and that any Underwriter may allow, and such dealers may reallow, a concession, not in excess of $ a share, to any Underwriter or to certain other dealers.

4. *Payment and Delivery.* Payment for the Firm Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on _____, 2008, or at such other time on the same or such other date, not later than _____, 2008, as shall be designated in writing by you. The time and date of such payment are hereinafter referred to as the "**Closing Date**."

Payment for any Additional Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 2 or at such other time on the same or on such other date, in any event not later than _____, 2008, as shall be designated in writing by you.

The Firm Shares and Additional Shares shall be registered in such names and in such denominations as you shall request in writing not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and Additional Shares shall be delivered to you on the Closing Date or an Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Purchase Price therefor.

5. *Conditions to the Underwriters' Obligations*. The obligations of the Company to sell the Shares to the Underwriters and the several obligations of the Underwriters to purchase and pay for the Shares on the Closing Date are subject to the condition that the Registration Statement shall have become effective not later than (New York City time) on the date hereof.

The several obligations of the Underwriters are subject to the following further conditions:

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:

(i) there shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any of the securities of the Company or any of its subsidiaries by any "nationally recognized statistical rating organization," as such term is defined for purposes of Rule 436(g)(2) under the Securities Act; and

(ii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus as of the date of this Agreement that, in your judgment, is material and adverse and that makes it, in your judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.

(b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by an executive officer of the Company, to the effect set forth in Section 5(a)(i) above and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon the best of his or her knowledge as to proceedings threatened.

(c) The Underwriters shall have received on the Closing Date an opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation, outside counsel for the Company, dated the Closing Date, substantially in the form attached hereto as Exhibit A, which shall be rendered to the Underwriters at the request of the Company and shall so state therein.

(d) The Underwriters shall have received on the Closing Date an opinion of Townsend and Townsend and Crew LLP, outside intellectual property counsel for the Company, dated the Closing Date, substantially in the form attached hereto as Exhibit B.

(e) The Underwriters shall have received on the Closing Date an opinion of Latham & Watkins LLP, counsel for the Underwriters, dated the Closing Date, with respect to such matters as the Underwriters may reasonably request.

(f) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from Ernst & Young LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.

(g) The "lock-up" agreements, each substantially in the form of Exhibit C hereto, between you and all stockholders, optionholders, officers and directors of the Company other than those persons listed on Schedule III attached hereto relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to you on or before the date hereof, shall be in full force and effect on the Closing Date.

The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to you on the applicable Option Closing Date of such documents as you may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance of such Additional Shares.

6. *Covenants of the Company*. The Company covenants with each Underwriter as follows:

(a) To furnish to you, without charge, five signed copies of the Registration Statement (including exhibits thereto) and for delivery to each other Underwriter a conformed copy of the Registration Statement (without exhibits thereto) and to furnish to you in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period mentioned in Section 6(e) or 6(f) below, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.

(b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to you a copy of each such proposed amendment or supplement and not to file any such proposed amendment or supplement to which you reasonably object, and to file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) To furnish to you a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which you reasonably object.

(d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances under which they were made when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act) is delivered to a purchaser, not misleading, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to

comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses you will furnish to the Company) to which Shares may have been sold by you on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(g) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as you shall reasonably request, other than in jurisdictions which would require the Company as a condition thereto to qualify to do business or to file a general consent to service of process in any such jurisdiction.

(h) To make generally available to the Company's security holders and to you as soon as practicable an earning statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(i) Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum, (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and qualification of the offering of the Shares by the FINRA, (v) all fees and expenses in connection with the preparation and filing of the registration statement on Form 8-A relating to the Common Stock and all costs and expenses incident to listing the Shares on the NASDAQ Global Market, (vi) the cost of printing certificates representing the Shares, (vii) the costs and charges of any transfer agent, registrar or depositary, (viii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any

consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and one-half of the cost of any aircraft chartered in connection with the road show, (ix) the document production charges and expenses associated with printing this Agreement and (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section, Section 8 entitled "Indemnity and Contribution" and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them and one-half of the cost of chartering any aircraft in connection with any road show presentation.

The Company also covenants with each Underwriter that, without the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the Underwriters, it will not, during the period ending 180 days after the date of the Prospectus, (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (3) file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (a) the Shares to be sold hereunder, (b) the issuance of shares of, or options to purchase shares of, Common Stock to employees, officers, directors, advisors or consultants of the Company pursuant to employee benefit plans disclosed in the Prospectus or an employee benefit plan assumed by the Company in a merger or acquisition transaction, (c) the filing of a registration statement on Form S-8 for the registration of shares of Common Stock issued pursuant to employee benefit plans disclosed in the Prospectus or an employee benefit plan assumed by the Company in a merger or acquisition transaction, or (d) the issuance of shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock in an amount having an aggregate value (determined as of the date of issuance) equal to $ in connection with a merger or acquisition transaction; provided prior to any issuance pursuant to clauses (b) or (d), the Company shall cause each recipient of such shares or options to execute and deliver to you a "lock-up" agreement substantially in the form of Exhibit C hereto.

Notwithstanding the foregoing, if (1) during the last 17 days of the 180-day restricted period the Company issues an earnings release or material news or a material event relating to the Company occurs; or (2) prior to the expiration of the 180-day restricted period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the 180-day period, the restrictions imposed by this agreement shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. The Company shall promptly notify Morgan Stanley & Co.

Incorporated of any earnings release, news or event that may give rise to an extension of the initial 180-day restricted period.

7. *Covenants of the Underwriters*. Each Underwriter severally covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.

8. *Indemnity and Contribution.* (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) caused by any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, or the Prospectus or any amendment or supplement thereto, or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities are caused by any such untrue statement or omission or alleged untrue statement or omission based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through you expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus or the Prospectus or any amendment or supplement thereto.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 8(a) or 8(b), such person (the "**indemnified party**") shall promptly notify the person against whom such indemnity may be sought (the "**indemnifying party**") in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonably incurred fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed in writing to the retention of such counsel or

(ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by Morgan Stanley & Co. Incorporated, in the case of parties indemnified pursuant to Section 8(a), and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into, and (iii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding.

(d) To the extent the indemnification provided for in Section 8(a) or 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 8(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or

alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

(e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(f) The indemnity and contribution provisions contained in this Section 8 and the representations, warranties and other statements of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

9. *Termination.* The Underwriters may terminate this Agreement by notice given by you to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the American Stock Exchange, the NASDAQ Global Market, the Chicago Board of Options Exchange, the Chicago Mercantile Exchange or the Chicago Board of Trade (ii) trading of any securities of the Company shall have been suspended on any exchange or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and which, singly or together with any other event specified in this clause (v), makes it, in your judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the

Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.

10. *Effectiveness; Defaulting Underwriters*. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as you may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; *provided* that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to you and the Company for the purchase of such Firm Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter or the Company. In any such case either you or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, the non-defaulting Underwriters shall have the option to (i) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (ii) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement, the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder.

11. *Entire Agreement*. (a) This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arms length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement and prior written agreements (to the extent not superseded by this Agreement), if any, and (iii) the Underwriters may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

12. *Counterparts*. This Agreement may be signed in two or more counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

13. *Applicable Law*. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.

14. *Headings*. The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

15. *Notices*. All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to you in care of Morgan Stanley & Co. Incorporated, 1585 Broadway, New York, New York 10036, Attention: Equity Syndicate Desk, with a copy to the Legal Department and Latham & Watkins LLP, 650 Town Center Drive 20th Floor, Costa Mesa, California 92626, Attention: Charles K. Ruck; and if to the Company shall be delivered, mailed or sent to 7000 Shoreline Court, Suite 100, South San Francisco, California 94080, Attention: Chief Executive Officer with a copy to Wilson Sonsini Goodrich & Rosati, P.C., 950 Page Mill Road, Palo Alto, California 94304, Attention: David J. Segre and Robert F. Kornegay.

Very truly yours,

FLUIDIGM CORPORATION

By: _____
Name:
Title:

Accepted as of the date hereof

Morgan Stanley & Co. Incorporated
UBS Securities LLC
Leerink Swan LLC
Pacific Growth Equities, LLC

Acting severally on behalf of themselves
and the several Underwriters named
in Schedule I hereto.

By: Morgan Stanley & Co. Incorporated

By: _____
Name:
Title:

SCHEDULE I

Underwriter	Number of Firm Shares To Be Purchased
Morgan Stanley & Co. Incorporated	
UBS Securities LLC	
Leerink Swan LLC	
Pacific Growth Equities, LLC	
Total:	

SCHEDULE II

Time of Sale Prospectus

1. Preliminary Prospectus issued September 5, 2008.

1. Allen May, Trustee, Intervivos Trust Dated 5/14/91
2. Bobey, Lynn
3. Chu, Stephen
4. Collier, Matthew
5. Ferguson/Egan Family Trust Dated 6/28/99
6. Fernandes, Dave
7. Garcia, Greg
8. Godley, Shelley
9. Hao, Casey
10. Jacobson, Joseph M.
11. Javadi, Shervin
12. Lei, Hao
13. Liau, Yish hann
14. Lucas, Jeffrey
15. Lynch, Timothy P.
16. Manger, Ian
17. McBride, Lincoln
18. Moore, Charles C.
19. Pat and Betsy Collins Revocable Trust
20. Relova, Anna
21. Taylor, Colin

EXHIBIT A

FORM OF OPINION OF WILSON SONSINI GOODRICH & ROSATI, P.C.

EXHIBIT A

FORM OF OPINION OF WILSON SONSINI GOODRICH & ROSATI, P.C.

1. The Company is a corporation duly incorporated and validly existing under, and by virtue of, the laws of the State of Delaware, and is in good standing under such laws. The Company has the corporate power and authority to own or lease its properties and assets and to carry on its business as described in the Time of Sale Prospectus. The Company is qualified to do business and is in good standing as a foreign corporation in the State of California.
2. The authorized capital stock of the Company conforms in all material respects as to legal matters to the description thereof contained in each of the Time of Sale Prospectus and the Prospectus.
3. The shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and nonassessable.
4. The Shares have been duly authorized and, when issued and delivered and paid for in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid and nonassessable, and the issuance of such Shares will not be subject to any preemptive or similar rights arising from or pursuant to the Certificate of Incorporation or Bylaws of the Company, or to our knowledge, any other written agreement or instrument to which the Company or any subsidiary of the Company is a party, other than such rights as have been duly and properly waived.
5. The Underwriting Agreement has been duly authorized, executed and delivered by the Company.
6. The execution and delivery by the Company of, and the performance by the Company of its obligations under, the Underwriting Agreement do not violate any provision of (i) applicable U.S. federal or California state law, rule or regulation known to us to be customarily applicable to transactions of the nature contemplated by the Underwriting Agreement; (ii) the Delaware General Corporation Law; (iii) the Certificate of Incorporation or Bylaws; (iv) any Reviewed Agreements; or (v) to our knowledge, any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company. No consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the valid execution and delivery of the Underwriting Agreement or the performance by the Company of its obligations thereunder, or the offer, sale, or issuance of the Shares, except such as have been obtained or made under the Securities Act or the Securities Exchange Act of 1934, as amended.
7. The statements included in the Time of Sale Prospectus and the Prospectus under the captions “Description Capital Stock,” “Material U.S. Federal Income and Estate Tax Consequences to Non-U.S. Holders” and “Underwriters” (to the extent of the description of the Underwriting Agreement), in each case insofar as such statements constitute summaries of legal matters, documents or proceedings referred to therein, fairly summarize in all material respects such legal matters, documents or proceedings.
8. We do not know of any (i) legal or governmental proceeding; (ii) U.S. federal or California state statute or regulation; or (iii) provision of the Delaware General Corporation Law required to be described in the Registration Statement or the Prospectus which is not described in all material respects therein as required nor of any contracts or documents of a character required to be filed with the Registration Statement that are not filed as required.
9. The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Prospectus will not be, an “investment company” as such term is defined in the Investment Company Act.
10. The Registration Statement was declared effective under the Securities Act on September [ ], 2008, and the Prospectus was filed with the Commission pursuant to Rule 424(b) under the Securities Act on September [ ], 2008. To our knowledge, no stop order suspending the effectiveness of the Registration Statement or any part thereof has been issued, and, to our knowledge, no proceedings for that purpose have been instituted or are pending or threatened by the Commission.

EXHIBIT B

FORM OF OPINION OF

TOWNSEND AND TOWNSEND AND CREW LLP

EXHIBIT B

FORM OF OPINION OF TOWNSEND AND TOWNSEND AND CREW LLP

Based upon and subject to the foregoing, we are of the opinion that:

1. To our knowledge, (a) the Company is the exclusive owner of all right, title and interest in the Fluidigm Patent Rights and CIT is the exclusive owner of all right, title and interest in the Fluidigm/CIT Patent Rights, with the following exceptions: five U.S. patents and seven U.S. patent applications, and foreign equivalents thereof, are coassigned to the Company and the Regents of the University of California ("UC"), and one U.S. patent application and foreign equivalents are coassigned to the Company, CIT, UC and Siemens Medical Solutions USA, Inc.; (c) the patent applications within the Company Patent Rights are valid and have been recorded in the U.S. Patent and Trademark Office (assignments in three pending patent applications have not yet been obtained or recorded); (e) the patent applications within the Company Patent Rights are pending and being prosecuted so as to avoid abandonment thereof.

2. Except as noted in the Prospectus, to our knowledge, no actions, suits, claims or proceedings have been asserted or threatened in writing against the Company alleging that the operation of the Company's business conflicts with or infringes the patent rights of any third party.

3. To our knowledge, no court has issued any order, judgment, decree or injunction restricting the operation of the Company's business on the basis of a conflict with or infringement of the patent rights of any third party.

4. To our knowledge, and without having conducted a freedom to operate analysis, we are not aware of any third party patents that would be infringed by the Company's manufacture, use or sale of products described in the Prospectus.

5. To our knowledge, and without having done any investigation beyond review of our files in the normal course of prosecution, we are unaware of any facts that lead us to believe that any U.S. patents in the Company Patent Rights were not prosecuted, or any U.S. patent applications in the Company Patent Rights are not being prosecuted, in compliance with the duty of disclosure under 37 C.F.R.§1.56.

EXHIBIT C

FORM OF LOCK-UP LETTER

Fluidigm Corporation

Lock-Up Agreement

_____, 2008

Morgan Stanley & Co. Incorporated
UBS Securities LLC
Leerink Swan LLC
Pacific Growth Equities, LLC

c/o Morgan Stanley & Co. Incorporated
1585 Broadway
New York, NY 10036

Ladies and Gentlemen:

The undersigned understands that Morgan Stanley & Co. Incorporated ("**Morgan Stanley**") proposes to enter into an Underwriting Agreement (the "**Underwriting Agreement**") with Fluidigm Corporation, a Delaware corporation (the "**Company**"), providing for the public offering (the "**Public Offering**") by the several Underwriters named in Schedule I to the Underwriting Agreement, including Morgan Stanley (the "**Underwriters**"), of shares (the "**Shares**") of the Common Stock, par value $0.001 per share, of the Company (the "**Common Stock**").

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of Morgan Stanley on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 180 days after the date of the final prospectus relating to the Public Offering (the "**Prospectus**"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing sentence shall not apply to (a) transactions relating to shares of Common Stock or other securities acquired in open market transactions after the completion of the Public Offering, *provided* that no filing under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), shall be required or shall be voluntarily made in connection with subsequent sales of Common Stock or other securities acquired in such open market transactions, (b) transfers of shares of Common Stock or any security convertible into Common Stock as a

bona fide gift, (c) distributions of shares of Common Stock or any security convertible into Common Stock to limited partners, members or stockholders of the undersigned, (d) transfers of shares of Common Stock or any security convertible into Common Stock by will or intestacy to the undersigned's immediate family or to a trust, the beneficiaries of which are the undersigned and a member or members of the undersigned's immediate family (for purposes of this agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin) or (e) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that such plan does not provide for the transfer of Common Stock during the restricted period; *provided further*, that in the case of any transfer or distribution pursuant to clause (b) — (d), (i) each donee or distributee shall sign and deliver a lock-up letter substantially in the form of this letter and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of Common Stock, shall be required or shall be voluntarily made during the restricted period referred to in the foregoing sentence

In addition, the undersigned agrees that, without the prior written consent of Morgan Stanley on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 180 days after the date of the Prospectus, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

If:

(1) during the last 17 days of the restricted period the Company issues an earnings release or material news or a material event relating to the Company occurs; or

(2) prior to the expiration of the restricted period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the restricted period;

the restrictions imposed by this agreement shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

The undersigned shall not engage in any transaction that may be restricted by this agreement during the 34-day period beginning on the last day of the initial restricted period unless the undersigned requests and receives prior written

confirmation from the Company or Morgan Stanley that the restrictions imposed by this agreement have expired.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this agreement. The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

This agreement will terminate and the undersigned will be released from all of its obligations hereunder if (a) the closing of the Public Offering shall not have occurred on or before the one year anniversary of the date of this agreement first set forth above, or (b) (i) if the Company withdraws the registration statement registering the Shares or (ii) the Underwriting Agreement is executed but is terminated prior to payment for and delivery of any Shares.

This agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof.

Very truly yours,

_____

(List names of all individuals and entities
that hold shares of Fluidigm stock)

_____

(Signature)

_____

(Name of Authorized Signatory)

_____

(Address)

Exhibit 3.1

SECOND AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION OF

FLUIDIGM CORPORATION

Fluidigm Corporation, a corporation organized and existing under the laws of the State of Delaware (the "**Corporation**"), certifies that:

A. The name of the corporation is Fluidigm Corporation. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on March 29, 2007.

B. This Second Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware and restates, integrates and further amends the provisions of the Corporation's Certificate of Incorporation.

C. The text of the Amended and Restated Certificate of Incorporation is amended and restated to read as set forth in EXHIBIT A attached hereto.

IN WITNESS WHEREOF, Fluidigm Corporation has caused this Second Amended and Restated Certificate of Incorporation to be signed by Gajus V. Worthington, a duly authorized officer of the Corporation, on September 16, 2008.

/s/ Gajus V. Worthington
Gajus V. Worthington
President and Chief Executive Officer

EXHIBIT A

ARTICLE I

The name of the corporation is Fluidigm Corporation (the "Corporation").

ARTICLE II

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of Delaware.

ARTICLE III

The address of the Corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE IV

1. Reverse Stock Split. Immediately upon the filing of this Second Amended and Restated Certificate of Incorporation, each three and one-half (3½) outstanding shares of Common Stock and each three and one-half (3½) outstanding shares of Preferred Stock will be exchanged and combined, automatically and without further action, into one (1) share of Common Stock and one (1) share of Preferred Stock, respectively (the "Reverse Split"). The Reverse Split shall be effected on a certificate-by-certificate basis and no fractional shares shall be issued upon the exchange and combination. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay an amount of cash equal to the product of (i) the fractional share to which the holder would otherwise be entitled and (ii) the then fair value of a share as determined in good faith by the Board of Directors. All share and per share amounts set forth in this Second Amended and Restated Certificate of Incorporation, including such amounts set forth elsewhere in this Article IV, have been revised to reflect the Reverse Split, and, accordingly, no further adjustment in accordance with the terms of this Second Amended and Restated Certificate of Incorporation is necessary.

The Reverse Split shall occur automatically without any further action by the holders of the shares affected thereby, and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent. The Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock or Preferred Stock, as the case may be, resulting from the Reverse Split unless the certificates evidencing such shares of Common Stock or Preferred Stock are either delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen, or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. The Corporation shall, as soon as practicable after such delivery, or such agreement and indemnification in the case of a lost, stolen or destroyed

certificate, issue and deliver at such office to such holder of Common Stock or Preferred Stock, as the case may be, a certificate or certificates for the number of shares of Common Stock or Preferred Stock and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion of fractional shares into cash to which he or she shall be entitled as aforesaid.

2. Classes of Stock. The total number of shares of stock that the Corporation shall have authority to issue is 42,143,033, consisting of 24,967,382 shares of Common Stock, $0.0035 par value per share ("Common Stock") and 17,175,651 shares of Preferred Stock, $0.0035 par value per share ("Preferred Stock"). The Preferred shall be divided into series. The first series shall consist of 779,220 shares and shall be designated Series A Preferred Stock ("Series A Preferred Stock"). The second series shall consist of 1,845,907 shares and shall be designated Series B Preferred Stock ("Series B Preferred Stock"). The third series shall consist of 4,815,606 shares and shall be designated Series C Preferred Stock ("Series C Preferred Stock"). The fourth series shall consist of 3,989,217 shares and shall be designated Series D Preferred Stock ("Series D Preferred Stock"). The fifth series shall consist of 5,745,699 shares and shall be designated Series E Preferred Stock ("Series E Preferred Stock").

The terms and provisions of the Common Stock and Preferred Stock are as follows:

3. Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) "Conversion Price" shall mean $3.85 per share for the Series A Preferred Stock, $6.23 per share for the Series B Preferred Stock, $9.03 per share for the Series C Preferred Stock, $9.80 per share for the Series D Preferred Stock, and $14.00 for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Common Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.385 per share for the Series A Preferred Stock, an annual rate of $0.63 for the Series B Preferred Stock, an annual rate of $0.91 per share for the Series C Preferred Stock, an annual rate of $1.05 per share for the Series D Preferred Stock, and an annual rate of $1.505 per share for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $3.85 per share for the Series A Preferred Stock, $6.23 per share for the Series B Preferred Stock, $9.03 per share for the Series C Preferred Stock, $9.80 per share for the Series D Preferred Stock, and $14.00 per share for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $3.85 per share for the Series A Preferred Stock, $6.23 for the Series B Preferred Stock, $9.03 per share for the Series C Preferred Stock, $9.80

per share for the Series D Preferred Stock, and $14.00 per share for the Series E Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock, and the Series E Preferred Stock.

4. Dividends.

(a) Series D and Series E Preferred Stock. The holders of outstanding shares of Series D Preferred Stock and the holders of outstanding shares of Series E Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rates specified for such shares of Preferred Stock, payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Common Stock (collectively, the "Junior Stock") of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Junior Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Series E Preferred Stock and Series D Preferred Stock have been declared and paid or set apart for payment to the holders of Series E Preferred Stock and the holders of Series D Preferred Stock. Payment of any dividends to the holders of the Series E Preferred Stock and the Series D Preferred Stock shall be on a pro rata, pari passu basis in proportion to the Dividend Rates for the Series E Preferred Stock and Series D Preferred Stock, as applicable. The right to receive dividends on shares of Series E Preferred Stock and Series D Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series E Preferred Stock and Series D Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(b) Series C Preferred Stock. The holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Series A Preferred Stock, Series B Preferred Stock or Common Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Series C Preferred Stock have been declared and paid or set apart for payment to the holders of Series C Preferred Stock. The right to receive dividends on shares of Series C Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and the holders of outstanding shares of Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of

any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Common Stock, other than dividends payable solely in Common Stock, until all dividends at the applicable Dividend Rate on the Preferred Stock have been declared and paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro rata, pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(d) Distribution. For purposes of this Section 4, unless the context otherwise requires, a "distribution" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

(e) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Section 8 below.

(f) Non-Cash Distributions. Whenever a distribution provided for in this Section 4 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(g) Consent to Certain Repurchases. If Sections 502 and 503 of the California Corporations Code are determined to apply to the Corporation, as authorized by Section 402.5(c) of the California Corporations Code, Sections 502 and 503 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors and consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of Common Stock unanimously approved by the Board of Directors and approved by the

holders of more than two-thirds (2/3) of the outstanding shares of Preferred Stock voting together as a single class.

5. Liquidation Rights.

In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, distribution of the assets of the Corporation legally available for distribution to the Corporation's stockholders shall be made in the following manner:

(a) Series E Liquidation Preference. The holders of the Series E Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, or the Series D Preferred Stock, by reason of their ownership of such stock, an amount per share for each share of Series E Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series E Preferred Stock. If the assets of the Corporation legally available for distribution to the holders of the Series E Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 5(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series E Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 5(a).

(b) Series D Liquidation Preference. After payment to the holders of Series E Preferred Stock of the full amounts specified in Section 5(a) above, the holders of the Series D Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series D Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series D Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of Series D Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 5(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series D Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 5(b).

(c) Series C Liquidation Preference. After payment to the holders of Series E Preferred Stock and to the holders of Series D Preferred Stock of the full amounts specified in Sections 5(a) and 5(b) above, the holders of the Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock or the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series C Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 5(c), then the entire remaining assets of the Corporation legally available for distribution shall be

distributed with equal priority and pro rata among the holders of the Series C Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 5(c).

(d) Series B Liquidation Preference. After the payment to the holders of Series E Preferred Stock, the holders of Series D Preferred Stock, and the holders of Series C Preferred Stock of the full amounts specified in Sections 5(a), 5(b), and 5(c) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock or Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 5(d), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 5(d).

(e) Series A Liquidation Preference. After the payment to the holders of Series E Preferred Stock, the holders of Series D Preferred Stock, the holders of Series C Preferred Stock, and the holders of Series B Preferred Stock of the full amounts specified in Sections 5(a), 5(b), 5(c) and 5(d) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 5(e), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 5(e).

(f) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 5(a), 5(b), 5(c), 5(d) and 5(e) above, the entire remaining assets of the Corporation legally available for distribution shall be distributed pro rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(g) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(h) Reorganization. For purposes of this Section 5, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(i) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to stockholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to stockholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this Section 5(i), "trading day" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market

price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

6. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) Right to Convert. Subject to Section 6(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the "Conversion Rate" for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 6, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the "Securities Act"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $19.915 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 6(e) and 6(g)) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written consent or request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an "Automatic Conversion Event"). Notwithstanding the foregoing, the Series E Preferred Stock shall not be subject to an Automatic Conversion Event unless either (x) such Automatic Conversion Event is approved by the written consent of holders of more than two-thirds of the shares of Series E Preferred Stock then outstanding, or (y) such Automatic Conversion Event is the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act and the requirements of Section 6(b)(i) or 6(b)(ii) are met.

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall either surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, or notify the Corporation or its transfer agent that such certificate or certificates have been lost, stolen or destroyed and execute an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificate or certificates, and shall give written notice to the Corporation at such office that he elects to convert the same; provided, however, that on

the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 6(d), "Additional Shares of Common" shall mean all shares of Common Stock issued (or, pursuant to Section 6(d)(iii), deemed to be issued) by the Corporation after the filing of this Certificate of Incorporation, other than:

(1) [omitted];

(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of this Certificate of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Section 6(e), 6(f) or 6(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors;

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors;

(8) shares of Common Stock issued or issuable in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements, or strategic partnerships or relationships, if the issuance is approved by the Board of Directors; and

(9) shares of Common Stock issued or issuable upon conversion of convertible promissory notes issued or issuable to Biomedical Sciences Investment Fund Pte Ltd. or its affiliates ("BMSIF") pursuant to that certain Convertible Note Purchase Agreement, dated as of August 7, 2006, between the Company and BMSIF, as amended by the Letter Agreement dated November 15, 2006 (as amended, the "Note Purchase Agreement") (as such Note Purchase Agreement may be further amended from time to time after the date hereof) or upon any failure of the milestones to be satisfied under such convertible promissory notes; and shares of Common Stock issued or issuable upon conversion of up to $3 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to BMSIF pursuant to that certain Convertible Note Purchase Agreement, dated as of December 18, 2003, between the Company and BMSIF.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to Section 6(d)(vii)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of this Certificate of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the

determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities pursuant to the terms of such Options or Convertible Securities;

(2) if no adjustment in the Conversion Price of the Preferred Stock was made upon the original issue of (or upon the occurrence of a record date with respect to) such Options or Convertible Securities and such Options or Convertible Securities are revised to provide, or by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or any increase or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, then such Options or Convertible Securities as so revised (and the Additional Shares of Common subject thereto) shall be deemed to have been issued effective upon such increase or decrease becoming effective;

(3) if such Options or Convertible Securities are revised to provide, or by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or any increase or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(4) no readjustment pursuant to clause (3) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(5) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if

any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 6(d)(vii)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(6) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 6(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price of Series E Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series E Preferred Stock is greater than $9.03 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 6(e) and 6(g)) (the "Series D/E Ratchet Amount"), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) for a consideration per share less than the applicable Conversion Price of the Series E Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D/E Ratchet Amount, then the Conversion Price of the Series E Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) without consideration or for a consideration per share less than the Series D/E Ratchet Amount, then the Conversion Price of the Series E Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D/E Ratchet Amount (the "Series E Adjusted Conversion Price"), and such Series E Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Series E Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately

prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 6(d)(iv)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 6(d)(iii) hereof, shall be deemed to be outstanding. Section 6(d)(iv)(3) shall govern adjustments to the Conversion Price of the Series E Preferred Stock after the first adjustment to the Conversion Price of the Series E Preferred Stock pursuant to this Section 6(d)(iv)(2).

(3) After any adjustment to the Conversion Price of the Series E Preferred Stock pursuant to Section 6(d)(iv)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series E Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series E Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 6(d)(iv)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 6(d)(iii) hereof, shall be deemed to be outstanding.

(v) Adjustment of Conversion Price of Series D Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series D Preferred Stock is greater than the Series D/E Ratchet Amount, in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) for a consideration per share less than the applicable Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D/E Ratchet Amount, then the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) without consideration or for a consideration per share less than the Series D/E Ratchet Amount, then the Conversion Price of the Series D Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D/E Ratchet Amount (the "Series D Adjusted Conversion Price"), and such Series D Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Series D Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of

Additional Shares of Common so issued would purchase at such Series D Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 6(d)(v)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 6(d)(iii) hereof, shall be deemed to be outstanding. Section 6(d)(v)(3) shall govern adjustments to the Conversion Price of the Series D Preferred Stock after the first adjustment to the Conversion Price of the Series D Preferred Stock pursuant to this Section 6(d)(v)(2).

(3) After any adjustment to the Conversion Price of the Series D Preferred Stock pursuant to Section 6(d)(v)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 6(d)(v)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 6(d)(iii) hereof, shall be deemed to be outstanding.

(vi) Adjustment of Conversion Price of Series A, B and C Preferred Stock. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 6(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (if affected) shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 6(d)(vi), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 6(d)(iii) hereof, shall be deemed to be outstanding.

(vii) Determination of Consideration. For purposes of this Section 6(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation before deducting reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with such issue (or deemed issue);

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 6(d)(iii) shall be determined by dividing

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 5 above ("Liquidation Rights"), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 6 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 6(h) shall prohibit the Corporation from amending its Certificate of Incorporation with the requisite consent of its stockholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 6, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 5(h);

then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend or distribution (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of this Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class. Notwithstanding the foregoing, no waiver of notice under this Section 6(j) shall constitute a waiver of notice with respect to the Series E Preferred Stock unless such waiver shall have been approved by the written consent of holders of more than two-thirds (2/3) of the shares of Series E Preferred Stock then outstanding.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

7. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Adjustment in Authorized Common Stock. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by an affirmative vote of the holders of a majority of the outstanding Common Stock and Preferred Stock, voting together as a single class.

(f) Election of Directors. So long as at least 571,428 shares of Series D Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of the Series D Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. So long as at least 571,428 shares of Series C Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A Preferred Stock, Series B Preferred Stock, and Series E Preferred Stock, voting together as a single class.

8. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Certificate of Incorporation or By-laws of the Corporation (including pursuant to a merger) if such action would adversely alter the

rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 5(h) above;

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 4(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party (other than directors' qualifying shares in the case of subsidiaries outside the United States);

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification, merger or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 8.

9. Amendments and Changes Requiring the Approval of the Series E Preferred Stock.

(a) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 60% of the outstanding shares of the Series E Preferred Stock:

(i) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation (including pursuant to a merger) if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series E Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 9(a).

(b) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Series E Preferred Stock:

(i) declare or pay any distribution (as defined in Section 4(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation; or

(ii) amend this Section 9(b).

(c) As long as any of the Series E Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 66 2/3% of the outstanding shares of the Series D Preferred Stock and Series E Preferred Stock voting together as a single class on an as converted to Common Stock basis:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series E Preferred Stock;

(ii) authorize or create (by reclassification, merger or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series E Preferred Stock or with respect to voting senior to the Series E Preferred Stock; or

(iii) amend this Section 9(c).

10. Amendments and Changes Requiring the Approval of the Series D Preferred Stock.

(a) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least 60% of the outstanding shares of the Series D Preferred Stock:

(i) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series D Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 10(a).

(b) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Series D Preferred Stock:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series D Preferred Stock;

(ii) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series D Preferred Stock or with respect to voting senior to the Series D Preferred Stock;

(iii) declare or pay any distribution (as defined in Section 4(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation;

(iv) increase the authorized number of directors of the Corporation above eleven (11); or

(v) amend this Section 10(b).

11. Amendments and Changes Requiring the Approval of the Series C Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds (2/3) of the outstanding shares of the Series C Preferred Stock:

(a) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 4(d) except for distributions upon a liquidation or dissolution) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above eleven (11); or

(f) amend this Section 11.

12. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least two-thirds of the outstanding shares of the Series B Preferred Stock:

(a) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 12.

13. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Article 4 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Certificate of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

14. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE V

The Corporation reserves the right to amend, alter, change, or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon the stockholders herein are granted subject to this right.

ARTICLE VI

The Corporation is to have perpetual existence.

ARTICLE VII

Elections of directors need not be by written ballot unless a stockholder demands election by written ballot at the meeting and before voting begins or unless the Bylaws of the Corporation shall so provide.

ARTICLE VIII

Unless otherwise set forth herein, the number of directors which constitute the Board of Directors of the Corporation shall be designated in the Bylaws of the Corporation .

ARTICLE IX

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, alter, amend or repeal the Bylaws of the Corporation.

ARTICLE X

1. Limitation of Directors' Liability. To the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists or as may hereafter be amended, a

director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

2. Indemnification. The Corporation may indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that such person or his or her testator or intestate is or was a director, officer or employee of the Corporation, or any predecessor of the Corporation, or serves or served at any other enterprise as a director, officer or employee at the request of the Corporation or any predecessor to the Corporation.

3. Amendments. Neither any amendment nor repeal of this Article VII, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article VII, shall eliminate or reduce the effect of this Article VII, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article VII, would accrue or arise, prior to such amendment, repeal, or adoption of an inconsistent provision.

ARTICLE XI

Meetings of the stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside of the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

* * * * *

Exhibit 3.4

AMENDED AND RESTATED BYLAWS

OF

FLUIDIGM CORPORATION

(amended and restated on _____)

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AMENDED AND RESTATED BYLAWS
OF
FLUIDIGM CORPORATION

ARTICLE I — CORPORATE OFFICES

1.1 REGISTERED OFFICE.

The registered office of Fluidigm Corporation shall be fixed in the corporation's certificate of incorporation, as the same may be amended and/or restated from time to time (as so amended and/or restated, the "Certificate").

1.2 OTHER OFFICES.

The corporation's Board of Directors (the "Board") may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II — MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS.

Meetings of stockholders shall be held at any place within or outside the State of Delaware as designated by the Board. The Board may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law (the "DGCL"). In the absence of any such designation or determination, stockholders' meetings shall be held at the corporation's principal executive office.

2.2 ANNUAL MEETING.

The annual meeting of stockholders shall be held each year on a date and at a time designated by the Board. At the annual meeting, directors shall be elected and any other proper business may be transacted.

2.3 SPECIAL MEETING.

Unless otherwise required by law or the Certificate, special meetings of the stockholders may be called at any time, for any purpose or purposes, only by (a) the Board, (b) the Chairperson of the Board, (c) the chief executive officer or (d) the president of the corporation.

No business may be transacted at such special meeting other than the business specified in the notice to stockholders of such meeting.

2.4 NOTICE OF STOCKHOLDERS' MEETINGS.

All notices of meetings of stockholders shall be sent or otherwise given in accordance with either Section 2.5 or Section 8.1 of these bylaws not less than ten (10) nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting, except as otherwise required by applicable law. The notice shall specify the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Any previously scheduled meeting of stockholders may be postponed, and, unless the Certificate provides otherwise, any special meeting of the stockholders may be cancelled by resolution duly adopted by a majority of the Board members then in office upon public notice given prior to the date previously scheduled for such meeting of stockholders.

Whenever notice is required to be given, under the DGCL, the Certificate or these bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate with the Secretary of State of Delaware, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

Whenever notice is required to be given, under any provision of the DGCL, the Certificate or these bylaws, to any stockholder to whom (A) notice of two (2) consecutive annual meetings, or (B) all, and at least two (2), payments (if sent by first-class mail) of dividends or interest on securities during a 12 month period, have been mailed addressed to such person at such person's address as shown on the records of the corporation and have been returned undeliverable, the giving of such notice to such person shall not be required. Any action or meeting which shall be taken or held without notice to such person shall have the same force and effect as if such notice had been duly given. If any such person shall deliver to the corporation a written notice setting forth such person's then current address, the requirement that notice be given to such person shall be reinstated. In the event that the action taken by the corporation is such as to require the filing of a certificate with the Secretary of State of Delaware, the certificate need not state that notice was not given to persons to whom notice was not required to be given pursuant to Section 230(b) of the DGCL.

The exception in subsection (A) of the above paragraph to the requirement that notice be given shall not be applicable to any notice returned as undeliverable if the notice was given by electronic transmission.

2.5 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE.

Notice of any meeting of stockholders shall be given:

(a) if mailed, when deposited in the United States mail, postage prepaid, directed to the stockholder at his or her address as it appears on the corporation's records;

(b) if electronically transmitted, as provided in Section 8.1 of these bylaws; or

(c) otherwise, when delivered.

An affidavit of the secretary or an assistant secretary of the corporation or of the transfer agent or any other agent of the corporation that the notice has been given shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

Notice may be waived in accordance with Section 7.12 of these bylaws.

2.6 QUORUM.

Unless otherwise provided in the Certificate or required by law, stockholders representing a majority of the voting power of the issued and outstanding capital stock of the corporation, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. If such quorum is not present or represented at any meeting of the stockholders, then the chairperson of the meeting, or the stockholders representing a majority of the voting power of the capital stock at the meeting, present in person or represented by proxy, shall have power to adjourn the meeting from time to time until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed. The stockholders present at a duly called meeting at which a quorum is present may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum unless the number of stockholders who withdrew does not permit action to be taken by the stockholders in accordance with the DGCL.

2.7 ADJOURNED MEETING; NOTICE.

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time, place if any thereof, and the means of remote communications if any by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the continuation of the adjourned meeting, the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting in accordance with the provisions of Section 2.4 and Section 2.5 of these bylaws.

2.8 ADMINISTRATION OF THE MEETING.

Meetings of stockholders shall be presided over by the chief executive officer of the corporation. If the chief executive officer will not be present at a meeting of stockholders, such meeting shall be presided over by such chairperson as the Board shall appoint, or, in the event that the Board shall fail to make such appointment, any officer of the corporation elected by the Board. The secretary of the meeting shall be the secretary of the corporation, or, in the absence of the secretary of the corporation, such person as the chairperson of the meeting appoints.

The Board shall, in advance of any meeting of stockholders, appoint one (1) or more inspector(s), who may include individual(s) who serve the corporation in other capacities, including without limitation as officers, employees or agents, to act at the meeting of stockholders and make a written report thereof. The Board may designate one (1) or more persons as alternate inspector(s) to replace any inspector, who fails to act. If no inspector or alternate has been appointed or is able to act at a meeting of stockholders, the chairperson of the meeting shall appoint one (1) or more inspector(s) to act at the meeting. Each inspector, before discharging his or her duties, shall take and sign an oath to faithfully execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspector(s) or alternate(s) shall have the duties prescribed pursuant to Section 231 of the DGCL or other applicable law.

The Board shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations, if any, the chairperson of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all acts as, in the judgment of such chairperson, are necessary, appropriate or convenient for the proper conduct of the meeting, including without limitation establishing an agenda of business of the meeting, rules or regulations to maintain order, restrictions on entry to the meeting after the time fixed for commencement thereof and the fixing of the date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at a meeting (and shall announce such at the meeting).

2.9 VOTING.

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as otherwise provided in the provisions of Section 213 of the DGCL (relating to the fixing of a date for determination of stockholders of record), each stockholder shall be entitled to that number of votes for each share of capital stock held by such stockholder as set forth in the Certificate.

In all matters, other than the election of directors and except as otherwise required by law, the Certificate or these bylaws, the affirmative vote of a majority of the voting power of the shares present or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Directors shall be elected by a plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

The stockholders of the corporation shall not have the right to cumulate their votes for the election of directors of the corporation.

2.10 NO STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING.

Any action required or permitted to be taken by the stockholders of the corporation (if the corporation has more than one stockholder at such time) must be effected at a duly called annual or

special meeting of stockholders of the corporation and may not be effected by any consent in writing by such stockholders.

2.11 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING; GIVING CONSENTS.

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted and which shall not be more than 60 nor less than ten (10) days before the date of such meeting, nor more than 60 days prior to any other such action.

If the Board does not fix a record date in accordance with these bylaws and applicable law:

(a) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) The record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board is necessary, shall be the first day on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation.

(c) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting.

2.12 PROXIES.

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law and filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A stockholder may also authorize another person or persons to act for him, her or it as proxy in the manner(s) provided under Section 212(c) of the DGCL or as otherwise provided under Delaware law. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL.

2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE.

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least ten (10) days prior to the meeting: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the corporation's principal place of business.

In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

2.14 ADVANCE NOTICE OF STOCKHOLDER BUSINESS.

Only such business shall be conducted as shall have been properly brought before a meeting of the stockholders of the corporation. To be properly brought before an annual meeting, business must be (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board, (b) otherwise properly brought before the meeting by or at the direction of the Board, or (c) a proper matter for stockholder action under the DGCL that has been properly brought before the meeting by a stockholder (i) who is a stockholder of record on the date of the giving of the notice provided for in this Section 2.14 and on the record date for the determination of stockholders entitled to vote at such annual meeting and (ii) who complies with the notice procedures set forth in this Section 2.14. For such business to be considered properly brought before the meeting by a stockholder such stockholder must, in addition to any other applicable requirements, have given timely notice in proper form of such stockholder's intent to bring such business before such meeting. To be timely, such stockholder's notice must be delivered to or mailed and received by the secretary of the corporation at the principal executive offices of the corporation not later than the close of business on the ninetieth (90th) day, nor earlier than the close of business on the one hundred twentieth (120th) day, prior to the anniversary date on which the corporation first mailed its proxy statement to stockholders in connection with the immediately preceding annual meeting; provided, however, that in the event that no annual meeting was held in the previous year or the annual meeting is called for a date that is not within thirty (30) days before or after such anniversary date, notice by the stockholder to be timely must be so received not later than the close of business the tenth (10th) day following the day on which such notice of the date of the meeting was mailed or public disclosure of the date of the meeting was made, whichever occurs first.

To be in proper form, a stockholder's notice to the secretary shall be in writing and shall set forth:

(a) the name and record address of the stockholder who intends to propose the business and the class or series and number of shares of capital stock of the corporation which are owned beneficially or of record by such stockholder;

(b) a representation that the stockholder is a holder of record of stock of the corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to introduce the business specified in the notice;

(c) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting;

(d) any material interest of the stockholder in such business; and

(e) any other information that is required to be provided by the stockholder pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Notwithstanding the foregoing, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholder's meeting, stockholders must provide notice as required by, and otherwise comply with the requirements of, the Exchange Act and the regulations promulgated thereunder.

No business shall be conducted at the annual meeting of stockholders except business brought before the annual meeting in accordance with the procedures set forth in this Section 2.14. The chairperson of the meeting may refuse to acknowledge the proposal of any business not made in compliance with the foregoing procedure.

2.15 ADVANCE NOTICE OF DIRECTOR NOMINATIONS.

Only persons who are nominated in accordance with the following procedures shall be eligible for election as directors of the corporation, except as may be otherwise provided in the Certificate with respect to the right of holders of Preferred Stock of the corporation to nominate and elect a specified number of directors, if any. To be properly brought before an annual meeting of stockholders, or any special meeting of stockholders called for the purpose of electing directors, nominations for the election of director must be (a) specified in the notice of meeting (or any supplement thereto), (b) made by or at the direction of the Board (or any duly authorized committee thereof) or (c) made by any stockholder of the corporation (i) who is a stockholder of record on the date of the giving of the notice provided for in this Section 2.15 and on the record date for the determination of stockholders entitled to vote at such meeting and (ii) who complies with the notice procedures set forth in this Section 2.15.

In addition to any other applicable requirements, for a nomination to be made by a stockholder, such stockholder must have given timely notice thereof in proper written form to the secretary of the corporation. To be timely, a stockholder's notice to the secretary must be delivered to or mailed and

received at the principal executive offices of the corporation, in the case of an annual meeting, in accordance with the provisions set forth in Section 2.14 of these bylaws, and, in the case of a special meeting of stockholders called for the purpose of electing directors, not later than the close of business on the tenth (10th) day following the day on which notice of the date of the special meeting was mailed or public disclosure of the date of the special meeting was made, whichever first occurs.

To be in proper written form, a stockholder's notice to the secretary must set forth:

(a) as to each person whom the stockholder proposes to nominate for election as a director (i) the name, age, business address and residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class or series and number of shares of capital stock of the corporation which are owned beneficially or of record by the person, (iv) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, and (v) any other information relating to such person that is required to be disclosed in solicitations of proxies for elections of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including without limitation such person's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected); and

(b) as to such stockholder giving notice, the information required to be provided pursuant to Section 2.14 of these bylaws.

Subject to the rights of any holders of Preferred Stock of the corporation, if any, no person shall be eligible for election as a director of the corporation unless nominated in accordance with the procedures set forth in this Section 2.15. If the chairperson of the meeting properly determines that a nomination was not made in accordance with the foregoing procedures, the chairperson shall declare to the meeting that the nomination was defective and such defective nomination shall be disregarded.

ARTICLE III — DIRECTORS

3.1 POWERS.

Subject to the provisions of the DGCL and any limitations in the Certificate, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the Board.

3.2 NUMBER OF DIRECTORS.

The authorized number of directors shall be determined from time to time by resolution of the Board, provided the Board shall consist of at least one member. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS.

Except as provided in Section 3.4 and Section 3.13 of these bylaws, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Directors need not be

stockholders unless so required by the Certificate or these bylaws. The Certificate or these bylaws may prescribe other qualifications for directors. Each director, including a director elected to fill a vacancy, shall hold office until such director's successor is elected and qualified or until such director's earlier death, resignation or removal.

Except as provided in the Certificate or Section 3.4 of these bylaws, directors shall be classified, with respect to the time for which they severally hold office, into three (3) classes, as nearly equal in number as possible, one (1) class to be originally elected for a term expiring at the annual meeting of stockholders to be held in 2008, another class to be originally elected for a term expiring at the annual meeting of stockholders to be held in 2009, and another class to be originally elected for a term expiring at the annual meeting of stockholders to be held in 2010, with each class to hold office until its successor is duly elected and qualified. At each succeeding annual meeting of stockholders, commencing with the first annual meeting (a) directors elected to succeed those directors whose terms then expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election, with each director to hold office until his or her successor shall have been duly elected and qualified, and (b) if authorized by a resolution of the Board, directors may be elected to fill any vacancy on the Board, regardless of how such vacancy shall have been created (as set forth in Section 3.4 below).

3.4 RESIGNATION AND VACANCIES.

Any director may resign at any time upon written notice or by electronic transmission to the corporation.

Subject to the rights of the holders of any series of Preferred Stock of the corporation then outstanding, if any, and unless the Board otherwise determines, newly created directorships resulting from any increase in the authorized number of directors, or any vacancies on the Board resulting from the death, resignation, retirement, disqualification, removal from office or other cause shall, unless otherwise required by law, be filled by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board, or by a sole remaining director. A person so elected by the directors then in office to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified. When one or more directors resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this Section 3.4 in the filling of other vacancies.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE.

The Board may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the Certificate or these bylaws, members of the Board, or any committee designated by the Board, may participate in a meeting of the Board, or any committee, by means of conference telephone or other communications equipment by means of which all persons

participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 REGULAR MEETINGS.

Regular meetings of the Board may be held without notice at such time and at such place as shall from time to time be determined by the Board.

3.7 SPECIAL MEETINGS; NOTICE.

Special meetings of the Board for any purpose or purposes may be called at any time by the chairperson of the Board, the chief executive officer, the president, the secretary or a majority of the authorized number of directors. The person(s) authorized to call special meetings of the Board may fix the place and time of the meeting.

Notice of the time and place of special meetings shall be:

(a) delivered personally by hand, by courier or by telephone;

(b) sent by United States first-class mail, postage prepaid;

(c) sent by facsimile; or

(d) sent by electronic mail,

directed to each director at that director's address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the corporation's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated either to the director or to a person at the office of the director who the person giving notice has reason to believe will promptly communicate such notice to the director. The notice need not specify the place of the meeting if the meeting is to be held at the corporation's principal executive office nor the purpose of the meeting.

3.8 QUORUM.

Except as otherwise required by law or the Certificate, at all meetings of the Board, a majority of the authorized number of directors (as determined pursuant to Section 3.2 of these bylaws) shall constitute a quorum for the transaction of business, except to adjourn as provided in Section 3.11 of these bylaws. The vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the Board, except as may be otherwise specifically provided by statute, the Certificate or these bylaws.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the directors present at that meeting.

3.9 WAIVER OF NOTICE.

Whenever notice is required to be given under any provisions of the DGCL, the Certificate or these bylaws, a written waiver thereof, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice .. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting solely for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors, or members of a committee of directors, need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the Certificate or these bylaws.

3.10 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING.

Unless otherwise restricted by the Certificate or these bylaws, any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

3.11 ADJOURNED MEETING; NOTICE.

If a quorum is not present at any meeting of the Board, then a majority of the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

3.12 FEES AND COMPENSATION OF DIRECTORS.

Unless otherwise restricted by the Certificate or these bylaws, the Board shall have the authority to fix the compensation of directors.

3.13 REMOVAL OF DIRECTORS.

Unless otherwise restricted by statute, the Certificate or these bylaws, any director, or all of the directors, may be removed from the Board, but only for cause, and only by the affirmative vote of the holders of at least a majority of the voting power of all the then outstanding shares of capital stock of the corporation then entitled to vote at the election of directors, voting together as a single class.

ARTICLE IV — COMMITTEES

4.1 COMMITTEES OF DIRECTORS.

The Board may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board or in these bylaws, shall have and may exercise such lawfully delegable powers and duties as the Board may confer.

4.2 COMMITTEE MINUTES.

Each committee shall keep regular minutes of its meetings and report to the Board when required.

4.3 MEETINGS AND ACTION OF COMMITTEES.

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

(a) Section 3.5 (relating to place of meetings and meetings by telephone);

(b) Section 3.6 (relating to regular meetings);

(c) Section 3.7 (relating to special meetings and notice);

(d) Section 3.8 (relating to quorum);

(e) Section 3.9 (relating to waiver of notice);

(f) Section 3.10 (relating to action without a meeting); and

(g) Section 3.11 (relating to adjournment and notice of adjournment)

of these bylaws, with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the Board and its members.

Notwithstanding the foregoing:

(i) the time of regular meetings of committees may be determined either by resolution of the Board or by resolution of the committee;

(ii) special meetings of committees may also be called by resolution of the Board; and

(iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

ARTICLE V — OFFICERS

5.1 OFFICERS.

The officers of the corporation shall be a president and a secretary. The corporation may also have, at the discretion of the Board, a chairperson of the Board, a vice chairperson of the Board, a chief executive officer, a chief financial officer or treasurer, one or more vice presidents, one or more assistant vice presidents, one or more assistant treasurers, one or more assistant secretaries, and any such other officers as may be appointed in accordance with the provisions of these bylaws.

Any number of offices may be held by the same person.

5.2 APPOINTMENT OF OFFICERS.

The Board shall appoint the officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws, subject to the rights, if any, of an officer under any contract of employment. Each officer shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. A failure to elect officers shall not dissolve or otherwise affect the corporation.

5.3 SUBORDINATE OFFICERS.

The Board may appoint, or empower the chief executive officer or, in the absence of a chief executive officer, the president of the corporation to appoint, such other officers and agents as the business of the corporation may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the Board may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS.

Any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board at any regular or special meeting of the Board or, except in the case of an officer appointed by the Board, by any officer upon whom such power of removal may be conferred by the Board.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

5.5 VACANCIES IN OFFICES.

Any vacancy occurring in any office of the corporation may only be filled by the Board or as provided in Section 5.3 of these bylaws.

5.6 REPRESENTATION OF SHARES OF OTHER CORPORATIONS.

The chairperson of the Board, the chief executive officer, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other person authorized by the Board, the chief executive officer, the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares or other equity interests of any other corporation or entity standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

5.7 AUTHORITY AND DUTIES OF OFFICERS.

In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the Board.

ARTICLE VI — RECORDS AND REPORTS

6.1 MAINTENANCE AND INSPECTION OF RECORDS.

The corporation shall, either at its principal executive office or at such place or places as designated by the Board, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws, as may be amended to date, minute books, accounting books and other records.

Any such records maintained by the corporation may be kept on, or by means of, or be in the form of, any information storage device or method, provided that the records so kept can be converted into clearly legible paper form within a reasonable time. The corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to the provisions of the DGCL. When records are kept in such manner, a clearly legible paper form produced from or by means of the information storage device or method shall be admissible in evidence, and accepted for all other purposes, to the same extent as an original paper form accurately portrays the record.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation’s stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person’s interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the

stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal executive office.

6.2 INSPECTION BY DIRECTORS.

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director.

ARTICLE VII — GENERAL MATTERS

7.1 CHECKS; DRAFTS; EVIDENCES OF INDEBTEDNESS.

From time to time, the Board shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

7.2 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS.

Except as otherwise provided in these bylaws, the Board, or any officers of the corporation authorized thereby, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances.

7.3 STOCK CERTIFICATES; PARTLY PAID SHARES.

The shares of the corporation shall be represented by certificates, provided that the Board may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairperson or vice-chairperson of the Board, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, and upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the

corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

7.4 SPECIAL DESIGNATION ON CERTIFICATES.

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, designations, preferences, and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences, and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

7.5 LOST CERTIFICATES.

Except as provided in this Section 7.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

7.6 DIVIDENDS.

The Board, subject to any restrictions contained in either (a) the DGCL or (b) the Certificate, may declare and pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock.

The Board may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve.

7.7 FISCAL YEAR.

The fiscal year of the corporation shall be fixed by resolution of the Board and may be changed by the Board.

7.8 SEAL.

The corporation may adopt a corporate seal, which shall be adopted and which may be altered by the Board. The corporation may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

7.9 TRANSFER OF STOCK.

Transfers of stock shall be made only upon the transfer books of the corporation kept at an office of the corporation or by transfer agents designated to transfer shares of the stock of the corporation. Except where a certificate is issued in accordance with Section 7.5 of these bylaws, an outstanding certificate for the number of shares involved shall be surrendered for cancellation before a new certificate is issued therefore. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate, and record the transaction in its books.

7.10 STOCK TRANSFER AGREEMENTS.

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes or series of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes or series owned by such stockholders in any manner not prohibited by the DGCL.

7.11 REGISTERED STOCKHOLDERS.

The corporation:

(a) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner;

(b) shall be entitled to hold liable for calls and assessments on partly paid shares the person registered on its books as the owner of shares; and

(c) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

7.12 WAIVER OF NOTICE.

Whenever notice is required to be given under any provision of the DGCL, the Certificate or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting solely for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose

of, any regular or special meeting of the stockholders need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the Certificate or these bylaws.

ARTICLE VIII — NOTICE BY ELECTRONIC TRANSMISSION

8.1 NOTICE BY ELECTRONIC TRANSMISSION.

Without limiting the manner by which notice otherwise may be given effectively to stockholders pursuant to the DGCL, the Certificate or these bylaws, any notice to stockholders given by the corporation under any provision of the DGCL, the Certificate or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if:

(a) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent; and

(b) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice.

However, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Any notice given pursuant to the preceding paragraph shall be deemed given:

(i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice;

(ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice;

(iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and

(iv) if by any other form of electronic transmission, when directed to the stockholder.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

8.2 DEFINITION OF ELECTRONIC TRANSMISSION.

An “electronic transmission” means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a

recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

8.3 INAPPLICABILITY.

Notice by a form of electronic transmission shall not apply to Section 164 (relating to failure to pay for stock; remedies), Section 296 (relating to adjudication of claims; appeal), Section 311 (relating to revocation of voluntary dissolution), Section 312 (relating to renewal, revival, extension and restoration of certificate of incorporation) or Section 324 (relating to attachment of shares of stock or any option, right or interest therein) of the DGCL.

ARTICLE IX — INDEMNIFICATION OF DIRECTORS AND OFFICERS

9.1 POWER TO INDEMNIFY IN ACTIONS, SUITS OR PROCEEDINGS OTHER THAN THOSE BY OR IN THE RIGHT OF THE CORPORATION.

Subject to Section 9.3 of these bylaws, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person (or the legal representative of such person) is or was a director or officer of the corporation or any predecessor of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director or officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

9.2 POWER TO INDEMNIFY IN ACTIONS, SUITS OR PROCEEDINGS BY OR IN THE RIGHT OF THE CORPORATION.

Subject to Section 9.3 of these bylaws, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person (or the legal representative of such person) is or was a director or officer of the corporation or any predecessor of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust,

employee benefit plan or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

9.3 AUTHORIZATION OF INDEMNIFICATION.

Any indemnification under this Article IX (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 9.1 or Section 9.2 of these bylaws, as the case may be. Such determination shall be made, with respect to a person who is either a director or officer at the time of such determination or a former director or officer, (i) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion or (iv) by the stockholders (but only if a majority of the directors who are not parties to such action, suit or proceeding, if they constitute a quorum of the board of directors, presents the issue of entitlement to indemnification to the stockholders for their determination). To the extent, however, that a present or former director or officer of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described above, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith, without the necessity of authorization in the specific case.

9.4 GOOD FAITH DEFINED.

For purposes of any determination under Section 9.3 of these bylaws, to the fullest extent permitted by applicable law, a person shall be deemed to have acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, or, with respect to any criminal action or proceeding, to have had no reasonable cause to believe such person's conduct was unlawful, if such person's action is based on the records or books of account of the corporation or another enterprise, or on information supplied to such person by the officers of the corporation or another enterprise in the course of their duties, or on the advice of legal counsel for the corporation or another enterprise or on information or records given or reports made to the corporation or another enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the corporation or another enterprise. The term "another enterprise" as used in this Section 9.4 shall mean any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise of which such person is or was serving at the request of the corporation as a director, officer, employee or agent. The provisions of this Section 9.4 shall not be

deemed to be exclusive or to limit in any way the circumstances in which a person may be deemed to have met the applicable standard of conduct set forth in Section 9.1 or 9.2 of these bylaws, as the case may be.

9.5 INDEMNIFICATION BY A COURT.

Notwithstanding any contrary determination in the specific case under Section 9.3 of this Article IX, and notwithstanding the absence of any determination thereunder, any director or officer may apply to the Court of Chancery in the State of Delaware for indemnification to the extent otherwise permissible under Section 9.1 and Section 9.2 of these bylaws. The basis of such indemnification by a court shall be a determination by such court that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standards of conduct set forth in Section 9.1 or Section 9.2 of these bylaws, as the case may be. Neither a contrary determination in the specific case under Section 9.3 of these bylaws nor the absence of any determination thereunder shall be a defense to such application or create a presumption that the director or officer seeking indemnification has not met any applicable standard of conduct. Notice of any application for indemnification pursuant to this Section 9.5 shall be given to the corporation promptly upon the filing of such application. If successful, in whole or in part, the director or officer seeking indemnification shall also be entitled to be paid the expense of prosecuting such application.

9.6 EXPENSES PAYABLE IN ADVANCE.

To the fullest extent not prohibited by the DGCL, or by any other applicable law, expenses incurred by a person who is or was a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding shall be paid by the corporation in advance of the final disposition of such action, suit or proceeding; provided, however, that if the DGCL requires, an advance of expenses incurred by any person in his or her capacity as a director or officer (and not in any other capacity) shall be made only upon receipt of an undertaking by or on behalf of such person to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this Article IX.

9.7 NONEXCLUSIVITY OF INDEMNIFICATION AND ADVANCEMENT OF EXPENSES.

The indemnification and advancement of expenses provided by or granted pursuant to this Article IX shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the Certificate, any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, it being the policy of the corporation that indemnification of the persons specified in Section 9.1 and Section 9.2 of these bylaws shall be made to the fullest extent permitted by law. The provisions of this Article IX shall not be deemed to preclude the indemnification of any person who is not specified in Section 9.1 or Section 9.2 of these bylaws but whom the corporation has the power or obligation to indemnify under the provisions of the DGCL, or otherwise. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL, or by any other applicable law.

9.8 INSURANCE.

To the fullest extent permitted by the DGCL or any other applicable law, the corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was a director, officer, employee or agent of the corporation serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article IX.

9.9 CERTAIN DEFINITIONS.

For purposes of this Article IX, references to "the corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors or officers, so that any person who is or was a director or officer of such constituent corporation, or is or was a director or officer of such constituent corporation serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, shall stand in the same position under the provisions of this Article IX with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this Article IX, references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this Article IX.

9.10 SURVIVAL OF INDEMNIFICATION AND ADVANCEMENT OF EXPENSES.

The rights to indemnification and advancement of expenses conferred by this Article IX shall continue as to a person who has ceased to be a director or officer and shall inure to the benefit of the heirs, executors, administrators and other personal and legal representatives of such a person.

9.11 LIMITATION ON INDEMNIFICATION.

Notwithstanding anything contained in this Article IX to the contrary, except for proceedings to enforce rights to indemnification (which shall be governed by Section 9.5 of these bylaws), the corporation shall not be obligated to indemnify any director or officer in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the board of directors of the corporation.

9.12 INDEMNIFICATION OF EMPLOYEES AND AGENTS.

The corporation may, to the extent authorized from time to time by the board of directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the corporation similar to those conferred in this Article IX to directors and officers of the corporation.

9.13 EFFECT OF AMENDMENT OR REPEAL.

Neither any amendment or repeal of any Section of this Article IX, nor the adoption of any provision of the Certificate or the bylaws inconsistent with this Article IX, shall adversely affect any right or protection of any director, officer, employee or other agent established pursuant to this Article IX existing at the time of such amendment, repeal or adoption of an inconsistent provision, including without limitation by eliminating or reducing the effect of this Article IX, for or in respect of any act, omission or other matter occurring, or any action or proceeding accruing or arising (or that, but for this Article IX, would accrue or arise), prior to such amendment, repeal or adoption of an inconsistent provision.

ARTICLE X — MISCELLANEOUS

10.1 PROVISIONS OF CERTIFICATE GOVERN.

In the event of any inconsistency between the terms of these bylaws and the Certificate, the terms of the Certificate will govern.

10.2 CONSTRUCTION; DEFINITIONS.

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term “person” includes both a corporation and a natural person.

10.3 SEVERABILITY.

In the event that any bylaw or the application thereof becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remaining bylaws will continue in full force and effect.

10.4 AMENDMENT.

The bylaws of the corporation may be adopted, amended or repealed by a majority of the voting power of the stockholders entitled to vote; provided, however, that the corporation may, in its Certificate, also confer the power to adopt, amend or repeal bylaws upon the Board. The fact that such power has been so conferred upon the Board shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws. Notwithstanding the foregoing and any provision of law that might otherwise permit a lesser vote or no vote, the affirmative vote of the holders at least sixty-six and two-thirds percent (66 2/3%) of the voting power of the issued and outstanding shares of capital stock of the corporation

then entitled to vote shall be required to amend or repeal Section 2.3, the last paragraph of Section 2.9 (relating to no cumulative voting), Section 2.10, Section 2.14, Section 2.15, Section 3.2, Section 3.3, Section 3.4, Section 3.13 and Section 9.13 of these bylaws, or this sentence of this Section 10.4.

FLUIDIGM CORPORATION
a Delaware corporation

CERTIFICATE OF ADOPTION OF AMENDED AND RESTATED BYLAWS

The undersigned hereby certifies that he or she is the duly elected, qualified, and acting Secretary of Fluidigm Corporation, a Delaware corporation, and that the foregoing amended and restated bylaws, comprising 26 pages, were adopted as the corporation's bylaws (i) on _____ by the corporation's board of directors and (ii) on _____ by the stockholders of the corporation.

IN WITNESS WHEREOF, the undersigned has hereunto set his or her hand this ___ day of _____, 2008.

By: _____
Print Name: _____
Title: _____

FLUIDIGM CORPORATION
a Delaware corporation

CERTIFICATE OF AMENDMENT OF BYLAWS

The undersigned hereby certifies that he or she is the duly elected, qualified, and acting _____ of Fluidigm Corporation, a Delaware corporation, and that the foregoing bylaws, comprising _____ pages, were amended and restated as the corporation's bylaws (i) on _____ __, 2008 by the corporation's board of directors and (ii) on _____ __, 2008 by the stockholders of the corporation.

IN WITNESS WHEREOF, the undersigned has hereunto set his or her hand this __ day of _____, 2008.

By: _____
Print Name: _____
Title: _____

[***] Indicates text has been omitted from this Exhibit pursuant to a confidential treatment request and has been filed separately with the Securities and Exchange Commission.

Exhibit 4.4

LOAN AND SECURITY AGREEMENTS

THIS LOAN AND SECURITY AGREEMENT No. 4561 (this *"Agreement")* is entered into as of March 29, 2005, by and between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender")* and **FLUIDIGM CORPORATION**, a California corporation *("Borrower"* or sometimes referred to herein as *"Debtor")* and sets forth the terms and conditions upon which Lender will lend and Borrower will repay money. In consideration of the mutual covenants herein contained, the parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION

1.1 Definitions. Initially capitalized terms used and not otherwise defined herein are defined in the California Uniform Commercial Code *("UCC").*

"ACH" means the Automated Clearing House electronic funds transfer system.

"Advance" means a Loan advanced by Lender to Borrower hereunder.

"*Basic Rate"* means a variable *per annum* rate of interest equal to the Index plus the Interest Margin which shall be subject to adjustment as provided in the Loan Agreement and/or the Note. On and after the Loan Commencement Date the Basic Rate shall be fixed and not subject to any further adjustments.

"Borrower's Books" means all of Borrower's books and records, including records concerning Collateral, Borrower's assets, liabilities, business operations or financial condition, on any media, and the equipment containing such information.

"*Change of Management or Board Composition"* means that **(i)** Borrower's senior management shall not include Gajus Worthington; **(ii)** Versant Ventures shall cease to have a representative (currently Samuel Colella) serving on Borrower's Board of Directors; or**(iii)** Lehman Brothers shall cease to have a representative (currently Hingge Hsu) serving on Borrower's Board of Directors;.

"*Collateral"* means: **(i)** all property listed on ***Exhibit A*** attached hereto; and **(ii)** all products and proceeds of the foregoing, including proceeds of insurance and proceeds of proceeds, *provided that*, notwithstanding anything to the contrary contained in this Agreement, the term Collateral shall not include (a) any property that is subject to a Lien that is otherwise permitted pursuant to subsection (v) of the definition of 'Permitted Liens" and Lender agrees to execute any instruments or documents necessary to evidence the intent of the foregoing; (b) more than 65% of the issued and outstanding voting securities of any Subsidiary of Borrower tha is not incorporated or organized in the United States; or (c) any of the Company's Intellectual Property (as defined below).

"*Commitment"* means $13,000,000.

"*Commitment Fee"* means $10,000.

"*Commitment Termination Date"* means the earliest to occur of **(i)** the earlier to occur of (a) June 1, 2005, if Borrower has not borrowed at least $2,000,000 by such date; (b) September 1, 2005, if Borrower has not borrowed an additional $3,000,000 by such date or (c) December 1, 2005; **(ii)** any Default or Event of Default that has not been cured by Borrower or waived in writing by Lender, or **(iii)** Change of Management or Board Composition (unless Lender has waived this condition in writing).

"*Control Agreement"* means an agreement substantially in the form *of* ***Exhibit I*** or otherwise reasonably acceptable to Lender.

"*Default"* means any event that with the passing of time or the giving of notice or both would become an Event of Default.

"*Default Rate"* means the lesser of 5% per annum above the otherwise applicable rate or the highest rate permitted by applicable law.

"*Disclosure Schedule"* means the Disclosure Schedule, dated as of the date hereof, and delivered to Lender in connection with the execution and delivery of this Agreement.

"*Event of Default"* is defined in **Section 8.**

"*Funding Date"* means any date on which an Advance is made to or on account of Borrower hereunder.

"*Indebtedness"* means **(i)** all indebtedness for borrowed money or the deferred purchase of property or services, **(ii)** all obligations evidenced by notes, bonds, debentures or similar instruments, **(iii)** all capital lease obligations, and **(iv)** all contingent obligations, consisting of guaranties of Indebtedness of other persons and obligations of reimbursement with respect to letters of credit.

"*Incumbency Certificate*" means the document in the form *of* ***Exhibit E.***

"*Index*" means the prevailing variable Prime Rate of annual interest as quoted from time to time in the western edition of the Wall Street Journal.

"*Intellectual Property*" means, collectively, all rights, priorities and privileges of the Borrower relating to intellectual property, in any medium, of any kind or nature whatsoever, now or hereafter owned or acquired or received by Borrower, or in which Borrower now holds or hereafter acquires or receives any right or interest, whether arising under United States, multinational or foreign laws or otherwise, including, without limitation, any and all property of the Borrower that is subject to, listed in or otherwise described in the Negative Pledge Agreement dated March 29, 2005 between Borrower and Lender, and shall include, in any event, all copyrights, copyright licenses, patents, patent licenses, trademarks, trademark licenses, trade secrets, internet domain names (including any right related to the registration thereof), proprietary or confidential information, mask works, sources object or other programming codes, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data base, data, skill, expertise, recipe, experience, process, models, drawings, materials or records. Notwithstanding the foregoing, Intellectual Property as defined above does not include proceeds or other revenue consisting of accounts, accounts receivable, royalties, licensing fees, or payment intangibles, obtained or owed from or on account of the licensing or other exploitation or disposition of Intellectual Property, and all of which are included as Collateral in the security interest granted by Borrower to Lender.

"*Interest Margin*" means 2.5% per annum.

"*Lender's Expenses*" means all reasonable costs or expenses (including reasonable attorneys' fees and expenses) incurred in connection with the preparation, negotiation, modification, administration, or enforcement of the Loan or Loan Documents, or the exercise or preservation of any rights or remedies by Lender, whether or not suit is brought. Lender will apply deposits (including the Commitment Fee) received by Lender, if any, towards Lender's Expenses.

"*Lien*" means any lien, security interest, pledge, bailment, lease, mortgage, hypothecation, conditional sales and title retention agreement, charge, claim, or other encumbrance.

"*Liquidation Event*" means any of: **(i)** a merger of Borrower with another entity, other than a merger whereby the shareholders of Borrower immediately prior to such merger own at least 50% of the outstanding voting securities of Borrower immediately after such merger; **(ii)** the sale (in one or a series of related transactions) of all or substantially all of Borrower's assets; or **(iii)** any transaction (or series of related transactions) whereby the shareholders of Borrower immediately prior to such transaction(s) own less than 50% of the outstanding voting securities of Borrower immediately after such transaction(s).

"*Loan*" means all of the Advances, however evidenced, and all other amounts due or to become due hereunder.

"*Loan Commencement Date*" means March 1, 2006.

"*Loan Documents*" means, collectively, this Agreement, the Warrant, the Notes, the Financing Statement and Security Agreement in the form attached as ***Exhibit A*** and all other documents, instruments and agreements entered into between Borrower and Lender in connection with the Loan, all as amended or extended from time to time.

"*Negative Pledge Agreement*" means an agreement, dated as of the date hereof, in the form *of* ***Exhibit H.***

"*Note*" means each Secured Promissory Note in the form *of* ***Exhibit B,*** delivered in connection with each Advance.

"*Notice of Borrowing*" means the form attached as ***Exhibit D.***

"*Obligations*" means all Loans, debt, principal, interest, fees, charges, Lender's Expenses and other amounts, obligations, covenants, and duties owing by Borrower to Lender of any kind or description (whether pursuant to the Loan Documents or otherwise (with the exception of the Warrant), and whether or not for the payment of money), whether direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising, and including any of the same obtained by Lender by assignment or otherwise, and all amounts Borrower is required to pay or reimburse by the Loan Documents, by law, or otherwise.

"*Permitted Indebtedness*" means: **(i)** the Loan; **(ii)** unsecured trade debt incurred in the ordinary course of Borrower's business; **(iii)** Indebtedness secured by clause **(ii)** and **(v)** of Permitted Liens; **(iv)** Subordinated Indebtedness; **(v)** Indebtedness existing as of the date hereof and listed on the Disclosure Schedule; **(vi)** Indebtedness arising from the endorsement of negotiable instruments for deposits or collections or similar transactions in the ordinary course of business; **(vii)** other Indebtedness consisting of letters of credit and

reimbursement obligations in an amount not to exceed $250,000; **(viii)** Indebtedness of (A) Borrower to any Subsidiary that is unsecured, (B) one Subsidiary to another Subsidiary, or (C) any Subsidiary to Borrower in an amount not to exceed $4,500,000 in the aggregate; **(ix)** other Indebtedness in an outstanding principal amount not to exceed $150,000 in the aggregate; and **(x)** Indebtedness incurred in connection with the extension, renewal or refinancing of any Indebtedness of the type described in clauses (i) through (ix) above, provided that the principal amount of such Indebtedness does not increase other than any reasonable premium in connection therewith. Notwithstanding the foregoing, the restrictions on Indebtedness for Subordinated Indebtedness and referenced in clause (v) of the definition of Permitted Liens shall cease at the effective date of a public offering of Borrower's capital stock which results in proceeds of at least $25,000,000.

"Permitted Liens" means: **(i)** Liens in favor of Lender; **(ii)** Liens disclosed in the Disclosure Schedule; **(iii)** Liens for taxes, fees, assessments or other governmental charges or levies not delinquent or being contested in good faith by appropriate proceedings, that do not jeopardize Lender's interest in any Collateral; **(iv)** Liens to secure payment of worker's compensation, employment insurance, old age pensions or other social security obligations of Borrower on which Borrower is current and are in the ordinary course of its business; provided none of the same diminish or impair Lender's rights and remedies respecting the Collateral; and **(v)** Liens upon or in any equipment (including any accessions, attachments, replacements, improvements or proceeds thereto) acquired or held by Borrower to secure the purchase price of such equipment or Indebtedness incurred solely for the purposes of financing such equipment, provided that the aggregate outstanding principal amount of all such financing shall not exceed $5,000,000, **(vi)** license or sublicenses of Intellectual Property granted in the ordinary course of business; **(vii)** banker's Liens, rights of setoff and similar Liens incurred on deposit and securities accounts in the ordinary course of business; **(viii)** Liens arising from judgments in circumstances not constituting and Event of Default; **(ix)** Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of customs duties in connections with the importation of goods; **(x)** Liens on insurance proceeds in favor of insurance companies granted solely as security for financed premiums; **(xi)** carriers', warehousemen's, mechanics', landlords', materialmen's, repairmen's or other similar Liens arising in the ordinary course of business which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings; **(xii)** Liens with respect to cash collateral to secure Indebtedness otherwise permitted pursuant to clause (vii) of the definition of Permitted Indebtedness; and **(xiii)** Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xi) above, provided that any extension, renewal, or replacement Lien shall be limited to the collateral securing the existing Lien and the principal amount of such Indebtedness does not increase other than any reasonable premium in connection therewith.

"Regulated Substance" means any substance, material or waste the use, generation, handling, storage, treatment or disposal of which is regulated by any local or state government authority, including any of the same designated by any authority as hazardous, genetic, cloning, fetal, or embryonic.

"Responsible Officer" means each person as authorized by the board of directors of Borrower as set forth on the Incumbency Certificate.

"Subordinated Indebtedness" means Indebtedness of Borrower to Singapore EDB and Invus Group that is subordinated in both security and right of payment to the Obligations on terms and conditions reasonably satisfactory to Lender in an amount not to exceed $6,000,000.

"Subsidiary" shall mean any entity of which a majority of the outstanding equity interests entitled to vote for the election of directors is owned by Borrower.

"Term" means the period from and after the date hereof until the full, final and indefeasible payment and performance of all Obligations.

"Warrant" means the Warrant, dated as of the date hereof, in favor of Lender and its affiliates to purchase securities of Borrower substantially in the form *of* ***Exhibit C.***

1.2 Interpretation. References to "Articles," "Sections," "Exhibits," and "Schedules" are to articles, sections, exhibits and schedules herein and hereto unless otherwise indicated. "Hereof," "herein" and "hereunder" refer to this Agreement as a whole. "Including" is not limiting. All accounting and financial computations shall be computed in accordance with generally accepted accounting principles consistently applied *("GAAP").* "Or" is not necessarily exclusive. All interest computation interest shall be based on a 360-day year and actual days elapsed.

2. The Loans

2.1 Commitment. Subject to the terms hereof, Lender will make Advances to Borrower up to the principal amount of the Commitment, before the Commitment Termination Date. Notwithstanding anything in the Loan Documents to the contrary, Lender's obligation to make any Advances or to lend the undisbursed portion of the Commitment shall terminate on the Commitment Termination Date. Repaid principal of the Advances may not be re-borrowed.

2.2 The Advances. A Note setting forth the specific terms of repayment will evidence each Advance. No Advance will be made for less than $1,000,000, unless less than $1,000,000 remains available under the Commitment for borrowing. Absence of a Note evidencing any portion of the Loan shall not impair Borrower's obligation to repay it to Lender.

2.3 Terms of Payment, Repayment.

(a) Repayment. Borrower shall repay the principal and pay interest on each Advance on the terms set forth in the applicable Note. Amounts not paid when due hereunder or under the Note shall bear interest at the Default Rate. If a court of competent jurisdiction determines that Lender has received payments that, if interest, would exceed the maximum lawfully permitted, Lender will instead apply such money to fees and expenses and then to early prepayment of principal (provided that notwithstanding anything contained in any Loan Document, any such prepayment shall not trigger any Prepayment Fees).

(b) ACH. All payments due to Lender must be, at Lender's option, paid to Lender in cash or through ACH. Borrower shall execute and deliver the ACH Authorization Form substantially in the form of ***Exhibit G.*** Lender shall provide Borrower an invoice for any Obligations that are to be transferred by ACH at least 10 days in advance of the date of any ACH funds transfer with respect to Obligations which have become due and payable and are to be transferred by ACH. If the ACH payment arrangement is terminated for any reason, Borrower shall make all payments due to Lender at Lender's address specified in **Section 11.**

(c) Default Rate. While an Event of Default has occurred and is continuing, interest on the Loan shall be increased to the Default Rate. Lender's failure to charge or accrue interest at the Default Rate during the existence of a Default shall not be deemed a waiver by Lender of its right or claim thereto.

(d) Date. Whenever any payment due under the Loan Documents is due on a day other than a business day, such payment shall be made on the next succeeding business day, and such extension of time shall be included in the computation of interest or fees, as the case may be.

2.4 Fees. Borrower shall pay to Lender the following:

(a) Commitment Fee. The Commitment Fee, which has been previously paid by Borrower, and shall be applied by Lender to Lender's Expenses and other Obligations;

(b) Late Fee. On demand, a late charge on any sums due hereunder that are not paid when due, in an amount equal to 2% of the past due amount, payable on demand.

(c) Lender's Expenses. The payment of all Lender's Expenses, which may become due to Lender by Borrower hereunder shall be payable by Borrower as set forth in **Section 2.3(b).** Lender's Expenses not paid when due shall bear interest as principal at the Default Rate.

3. Conditions of Advances; Procedure for Requesting Advances

3.1 Conditions Precedent to any and all Advances. The obligation of Lender to make any Advances is subject to each and every of the following conditions precedent in form and substance satisfactory to Lender in its sole discretion: **(i)** this Agreement, a Note evidencing the Advance, the Warrant, and all other UCC financing statements, and other documents required or as specified herein have been duly authorized, executed and delivered; **(ii)** no Default or Event of Default has occurred and is continuing; **(iii)** delivery of a Notice of Borrowing with respect to the proposed Advance; **(iv)** Lender's security interests in the Collateral are valid and first priority, except for Permitted Liens; and **(v)** all such other items as Lender may reasonably deem necessary or appropriate have been delivered or satisfied. The extension of an Advance prior to the receipt by Lender of any of the foregoing shall not constitute a waiver by Lender of Borrower's obligation to deliver such item.

3.2 Procedure for Making Advances. For any Advance, Borrower shall provide Lender an irrevocable Notice of Borrowing at least 7 business days prior to the desired Funding Date and Lender shall only be required to make Advances hereunder based upon written requests which comply with the terms and exhibits of this Loan Agreement (as the same may be amended from time to time), and which are submitted and signed by a Responsible Officer. Borrower shall execute and deliver to Lender a Note and such other documents and instruments as Lender may reasonably require for each Advance made.

4. Creation of Security Interest

4.1 Grant of Security Interest. Borrower grants to Lender a valid, first priority, continuing security interest in all present and future Collateral in order to secure prompt, full, faithful and timely payment and performance of all Obligations.

4.2 Inspections. Lender shall have the right upon reasonable prior notice to inspect Borrower's Books, including computer files, and to make copies, and to test, inspect and appraise the Collateral, in order to verify any matter relating to Borrower or the Collateral.

4.3 Authorization to File Financing Statements. Borrower irrevocably authorizes Lender at any time and from time to time to file in any jurisdiction any financing statements and amendments that: **(i)** name Collateral as collateral thereunder, regardless of whether any particular Collateral falls within the scope of the UCC; **(ii)** contain any other information required by the UCC for sufficiency or filing office acceptance, including organization identification numbers; and **(iii)** contain such language as Lender determines helpful in protecting or preserving rights against third parties. Borrower ratifies any such filings made prior to the date hereof.

5. Representations and Warranties

Except as set forth on the Disclosure Schedule, Borrower represents and warrants as follows:

5.1 Due Organization and Qualification. Borrower is a corporation duly formed, existing and in good standing under the laws of its state of incorporation and qualified and licensed to do business in, and is in good standing in, any state in which the conduct of its business or its ownership of property requires that it be so qualified or in which the Collateral is located, except to the extent that such non-compliance would not reasonably be expected to result in an adverse effect on Borrower's business.

5.2 Authority. Borrower has all corporate power and authority, and has taken all actions, and has obtained all third party consents necessary to execute, deliver, and perform the Loan Documents.

5.3 Disclosure Schedule. All information on the Disclosure Schedule is true, correct and complete.

5.4 Authorization; Enforceability. The execution and delivery hereof, the granting of the security interest in the Collateral, the incurring of the Obligations, the execution and delivery of all Loan Documents and the consummation of the transactions herein and therein contemplated have been duly authorized by all necessary action by Borrower. The Loan Documents constitute legal, valid and binding obligations of Borrower, enforceable in accordance with their terms, except as enforceability may be limited by bankruptcy or similar laws relating to enforcement of creditors' rights generally.

5.5 Name and Location. Borrower has not done business under any name other than that specified on the signature page hereof. The chief executive office, principal place of business, and the place where Borrower maintains its records concerning the Collateral is set forth in **Section 11.** The Collateral is presently located at the address(es) set forth in **Section 11** and on the Disclosure Schedule or any other location that Borrower has provided Lender with written notice thereof.

5.6 Litigation. All actions or proceedings pending by or against Borrower that could reasonably be expected to result in a material adverse effect on Borrower's business before any court or administrative agency are se forth on the Disclosure Schedule.

5.7 Financial Statements. All financial statements delivered by Borrower to Lender present fairly in all material respects Borrower's financial condition for the periods indicated. All statements respecting Collateral that have been or may hereafter be delivered by Borrower to Lender are true, complete and correct in all material respects for the periods indicated.

5.8 Solvency. Borrower is solvent and able to pay its debts (including trade debts) as they come due.

5.9 Taxes. Borrower has filed and will file all required tax returns, and has paid and will pay all taxes it owes other than where the failure to comply would not reasonably be expected to have a material adverse effect o Borrower.

5.10 Rights; Title to Assets. To Borrower's knowledge, Borrower possesses, owns, or has the right to use all necessary assets, rights, trademarks, trade names, copyrights, patents, patent rights, franchises and licenses which are required to conduct of its business as now operated, except where the failure to possess or own could not reasonably be expected to have a material adverse effect on Borrower's business. Borrower has good title to its assets, free and clear of any Liens, except for Permitted Liens.

5.11 Full Disclosure. No written representation, warranty or other statement made by Borrower in any Loan Document, certificate or statement furnished to Lender contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading (it being recognized by Lender that projections and estimates as to future events are not to be viewed as facts and the actual results during the period or periods covered by any such projections and estimates may differ from projected or estimated results).

5.12 Regulated Substances. Borrower complies and will comply with all laws respecting Regulated Substances, except where the failure to comply could not reasonably be expected to have an adverse effect on Borrower's business.

5.13 Reaffirmation. Each Notice of Borrowing will constitute **(i)** a warranty and representation in favor of Lender that there does not exist any Default and **(ii)** subject to any amended Disclosure Schedule delivered to Lender or any other written disclosure required to be sent to Lender pursuant to the terms hereof, a reaffirmation as of the date thereof of all of the representations and warranties contained in this Agreement and the Loan Documents.

6. Affirmative Covenants

So long as any Obligations (other than inchoate indemnity obligations) remain outstanding, Borrower covenants and agrees that it shall do all of the following:

6.1 Good Standing and Compliance. Borrower shall maintain all governmental licenses, rights and agreements necessary for its operations or business and comply in all respects with all statutes, laws, ordinances and government rules and regulations to which it is subject except where the failure to comply would not reasonably be expected to result in a material adverse effect on Borrower.

6.2 Financial Statements, Reports, Certificates. Borrower shall deliver to Lender: **(i)** as soon as prepared, and no later than 30 days after the end of each calendar month, a balance sheet, income statement and cash flow statement covering Borrower's operations during such period; **(ii)** as soon as prepared, but no later than 90 days after the end of the fiscal year, or such other timeframe formally approved by Borrower's audit committee, audited financial statements prepared in accordance with GAAP, together with an opinion that such financial statements fairly present Borrower's financial condition by an independent public accounting firm reasonably acceptable to Lender; **(iii)** immediately upon notice thereof, a report of any legal or administrative action pending or threatened in writing against Borrower which is likely to result in liability to Borrower in excess of $100,000 (provided that Borrower shall not be required to report notices of possibly relevant third party patents, or proposals or demands to license intellectual property); and **(iv)** such other financial information as Lender may reasonably request from time to time. Financial statements delivered pursuant to subsections **(i)** and **(ii)** above shall be accompanied by a certificate signed by a Responsible Officer (each an *"Officer's Certificate")* in the form ***of Exhibit F.***

6.3 Notice of Defaults. Upon any Default or Event of Default, an Officer's Certificate setting forth the facts relating to or giving rise thereto, and the Borrower's proposed action with respect thereto.

6.4 Use; Maintenance. Borrower, at its expense, shall **(i)** maintain the tangible Collateral in good condition, reasonable wear and tear excepted, and will comply in all material respects with all laws, rules and regulations regarding use and operation of the tangible Collateral and **(ii)** repair or replace any lost or damaged Collateral except to the extent that Borrower in its good faith judgment deems it to be in its best interest not to repair or replace such lost or damaged Collateral, so long as applied to a purchase or acquisition useful to Borrower's business.

6.5 Insurance. Borrower, at its own expense, shall maintain insurance in amounts and coverages reasonably satisfactory to Lender. Each insurance shall: **(i)** name Lender loss payee or additional insured, as appropriate, **(ii)** provide for insurer's waiver of its right of subrogation against Lender and Borrower, **(iii)** provide that such insurance shall not be invalidated by any action of, or breach of warranty by, Borrower and waive set-off, counterclaim or offset against Lender, **(iv)** be primary without a right of contribution of Lender's insurance, if any, or any obligation on the part of Lender to pay premiums of Borrower, and **(v)** require the insurer to give Lender at least 30 days prior written notice of cancellation. Borrower shall furnish all certificates of insurance required by Lender.

6.6 Loss Proceeds. So long as no Event of Default has occurred and is continuing, any proceeds of insurance on or condemnation of Collateral shall, at Borrower's election and so long as Lender's security interest in such proceeds remains first priority, be used either to repair or replace such Collateral or otherwise applied to the purchase or acquisition of property useful to Borrower's business.

6.7 Further Assurances. At any time and from time to time, Borrower shall execute and deliver such further instruments and take such further action as Lender may reasonably request to effect the intent and purposes hereof, to perfect and continue perfected and of first priority Lender's security interests in the Collateral, and to effect and maintain ACH payment arrangements.

7. Negative Covenants

So long as any Obligations (other than inchoate indemnity obligations) remain outstanding, Borrower will not do any of the following:

7.1 Location of Collateral. Change its chief executive office or principal place of business or remove, except in the ordinary course of Borrower's business, the Collateral or Borrower's Books from the premises listed in **Section 11** and the Disclosure Schedule (or otherwise provided to Lender in writing pursuant to this **Section 7.1**) without giving 30 days prior written notice to Lender. Borrower's practice of delivering and maintaining inventory at a customer's location pending testing, validation and/or acceptance of such inventory by such customer shall be deemed to be in the "ordinary course of business" for purposes of this Agreement.

7.2 Extraordinary Transactions. Enter into any transaction not in the ordinary course of Borrower's business, including the sale, lease, license or other disposition of its assets, other than **(i)** sales of inventory in the ordinary course of Borrower's business; and **(ii)** licenses of intellectual property assets entered into in the ordinary course of business (provided that licensing arrangements involving universities, governmental agencies, research institutions and corporate partners shall be deemed in the "ordinary course of business"). The parties hereto agree (a) strategic partnerships, strategic collaborations, sponsored research collaborations and development transactions, (b) transactions otherwise permitted in this **Article 7,** and (c) transactions for fair value involving the sale or exclusive licensing of Intellectual Property, that is outside the scope of Borrower's business in the biotechnology field, that is not being commercialized or monetized by the Borrower; in each case, shall be deemed to be in the "ordinary course of business" for purposes of this Agreement.

7.3 Restructure. Make any material change in Borrower's corporate structure or business other than the business of the type conducted by Borrower as of the date of this Agreement or any business reasonably related or incidental thereto; or suspend operation of Borrower's business.

7.4 Liens. Create, incur, assume or suffer to exist any Lien of any kind with respect to any of its property, whether now owned or hereafter acquired, except for Permitted Liens.

7.5 Indebtedness. Create, incur, assume or suffer to exist any Indebtedness, other than Permitted Indebtedness or cause or suffer any Subsidiary to create, incur, assume or suffer to exist any Indebtedness, other than Permitted Indebtedness.

7.6 Distributions. Pay any dividends or distributions, or redeem or purchase, any capital stock, except for **(i)** repurchases of capital stock from employees, consultants or directors, under incentive stock option plans, restricted stock purchase agreements, repurchase agreements or other similar agreements approved by the Borrower's Board of Directors and **(ii)** dividends payable solely in capital stock.

7.7 Transactions with Affiliates. Directly or indirectly enter into any transaction with any affiliate which is on terms less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated entity; *provided*, any such transaction shall not be a breach of this Section 7.7 if **(i)** approved by a disinterested majority of the Borrower's Board of Directors, or **(ii)** such transaction involves sales, licensing or other transfers of property between Borrower and its Subsidiaries, or between Subsidiaries if the consideration for such sale or transfer is not less than cost (or the fair market value of such property, if lower), or **(iii)** such transaction involves intercompany loans that are otherwise permitted by **Section 7.5.**

7.8 Compliance. (i) Become regulated as an "investment company" under the Investment Company Act of 1940 or extend credit to purchase or carry margin stock; **(ii)** fail to meet the minimum funding requirements of ERISA; **(iii)** permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; **(iv)** fail to comply with the Federal Fair Labor Standards Act; or **(v)** violate any other material law or material regulation.

7.9 UCC Effectiveness. Change its name, jurisdiction of organization, or take any other action that could render Lender's financing statements misleading under the Code, without giving Lender 30 days advance written notice.

7.10 Deposit and Securities Accounts. Maintain any deposit accounts or accounts holding securities owned by Borrower except accounts in which Lender has obtained a perfected first priority security interest with the exception of **(i)** account number [***] with Silicon Valley Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $250,000 in principal amount; **(ii)** account number [***] with Comerica Bank or a successor account with Wells Fargo Bank securing a letter of credit in favor of a lender providing equipment financing to Borrower in an amount not to exceed $500,000 in principal amount; or **(iii)** account number [***] with Wells Fargo Bank securing a letter of credit in favor of Borrower's landlord in an amount not to exceed $137,527 in principal amount; or **(iv)** any other accounts at Silicon Valley Bank or Comerica Bank (other than those specified in clause (i) or (ii) of this **Section 7.10,** provided that such accounts are closed and such funds are move to deposit or securities accounts in which Lender has a perfect first priority security interest, on or before June 30, 2005.

8. Events of Default

Any one or more of the following shall constitute an Event of Default by Borrower hereunder:

8.1 Payment. Borrower fails to pay when due and payable in accordance with the Loan Documents any portion of the Obligations, or cancels an ACH payment or transfer Lender has initiated in conformity with the terms hereof *provided*, *however,* that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error if Borrower had the funds to make the payment when due and makes the payment the business day following Borrower's knowledge of such failure to pay.

8.2 Certain Covenant Defaults. Borrower fails to perform any obligation under **Section 6.5** or **6.6,** or violates any of the covenants contained in **Section 7.**

8.3 Other Covenant Defaults. Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant, or agreement contained in this Agreement, in any of the other Loan Documents, or in any other present or future agreement between Borrower and Lender and has failed to cure such failure within 30 days after its occurrence.

8.4 Attachment. Any material portion of Borrower's assets is attached, seized, subjected to a government levy, lien, writ or distress warrant, or comes into the possession of any trustee or receiver and the same is not returned, removed, waived, stayed, discharged or rescinded within 15 days.

8.5 Other Agreements. There is a default in any agreement to which Borrower is a party resulting in a right by a third party, whether or not exercised, to accelerate the maturity of any Indebtedness, in an amount greater than $ 100,000.

8.6 Judgments. One or more judgments for an aggregate of at least $100,000 is rendered against Borrower and remains unsatisfied and unstayed for more than 30 days.

8.7 Injunction. Borrower is enjoined, restrained, or in any way prevented by court order from continuing to conduct any material part of its business affairs, or if a judgment or other claim becomes a Lien upon any material portion of Borrower's assets.

8.8 Misrepresentation. Any representation, statement, or report made to Lender by Borrower was false or misleading when made in any material respect.

8.9 Enforceability. Lender's ability to enforce its rights against Borrower or any Collateral is impaired in any material respect, or Borrower asserts that any Loan Document is not a legal, valid and binding obligation of Borrower enforceable in accordance with its terms.

8.10 Involuntary Bankruptcy. An involuntary bankruptcy case remains undismissed or unstayed for 60 days or, if earlier, an order granting the relief sought is entered.

8.11 Voluntary Bankruptcy or Insolvency. Borrower commences a voluntary case under applicable bankruptcy or insolvency law, consents to the entry of an order for relief in an involuntary case under any such law, or consents or is subject to the appointment of or taking possession by a receiver, liquidator, assignee, trustee, custodian or other similar official of Borrower or any substantial part of its property, or makes an assignment for the benefit of creditors, or fails generally or admits in writing to its inability to pay its debts as they become due, or takes any corporate action in furtherance of any of the foregoing.

8.12 Merger without Assumption. Borrower or all or substantially all of Borrower's assets are acquired by or merged into any other business entity where more than 50% of Borrower's voting power is transferred by existing shareholders of Borrower, and such acquirer or resulting entity either: **(i)** does not pay off the Obligations at the closing of the acquisition, merger or sale; or **(ii)** does not provide an unconditional, unlimited guaranty of the Obligations in form and substance satisfactory to Lender and is of a credit quality unacceptable to Lender.

8.13 Liquidation Event. Borrower consummates a Liquidation Event where the acquirer or resulting entity either: **(i)** does not pay off the Obligations at the closing of the acquisition, merger or sale; or **(ii)** does not provide an unconditional, unlimited guaranty of the Obligations in form and substance satisfactory to Lender and is of a credit quality unacceptable to Lender.

8.14 General Electric Capital Corporation Indebtedness. The outstanding principal balance of Borrower owed to General Electric Capital Corporation in connection with any equipment financing shall be greater than $2,500,000 at any time after December 31, 2006.

9. Lender's Rights and Remedies

9.1 Rights and Remedies. Upon the occurrence and continuance of any Event of Default, Lender may, at its election, without notice of election and without demand, do any one or more of the following, all of which are authorized by Borrower: **(i)** accelerate and declare the Loan and all Obligations immediately due and payable; **(ii)** make such payments and do such acts as Lender considers necessary or reasonable to protect its security interest in the Collateral, with such amounts becoming Obligations bearing interest at the Default Rate; **(iii)** exercise any and all other rights and remedies available under the UCC or otherwise; **(iv)** require Borrower to assemble the Collateral at such places as Lender may designate; **(v)** enter premises where any Collateral is located, take, maintain possession of, or render unusable the Collateral or any part of it; **(vi)** without notice to Borrower, set off and recoup against any portion of the Obligations; **(vii)** ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral, in connection with which Borrower hereby grants Lender a license to use without charge Borrower's premises, labels, name, trademarks, and other property necessary to complete, advertise, and sell any Collateral; and **(viii)** sell the Collateral at one or more public or private sales.

9.2 Power of Attorney in Respect of the Collateral. Borrower hereby irrevocably appoints Lender (which appointment is coupled with an interest) its true and lawful attorney in fact with full power of substitution, for it and in its name to, during the existence of an Event of Default: **(i)** ask, demand, collect, receive, sue for, compound and give acquittance for any and all Collateral with full power to settle, adjust or compromise any claim, **(ii)** receive payment of and endorse the name of Borrower on any items of Collateral, **(iii)** make all demands, consents and waivers, or take any other action with respect to, the Collateral, **(iv)** file any claim or take any other action, in Lender's or Borrower's name, which Lender may reasonably deem appropriate to protect its rights in the Collateral, or **(v)** otherwise act with respect to the Collateral as though Lender were its outright owner.

9.3 Charges. If Borrower fails to pay any amounts required hereunder to be paid by Borrower to any third party, Lender may at its option pay any part thereof and any amounts so paid including Lender's Expenses incurred shall become Obligations, immediately due and payable, bearing interest at the Default Rate, and secured by the Collateral. Any such payments by Lender shall not constitute an agreement to make similar payments or a waiver of any Event of Default.

9.4 Remedies Cumulative. Lender's rights and remedies under the Loan Documents and all other agreements with Borrower shall be cumulative. Lender shall have all other rights and remedies as provided under the UCC, by law, or in equity. No exercise by Lender of one right or remedy shall be deemed an election, and no waiver by Lender of any Event of Default shall be deemed a continuing waiver. No delay by Lender shall constitute a waiver, election, or acquiescence.

9.5 Application of Collateral Proceeds. Lender will apply proceeds of sale, to the extent actually received in cash, in the manner and order it determines in its sole discretion, and as prescribed by applicable law.

10. Waivers; Indemnification

10.1 Waivers. Without limiting the generality of the other waivers made by Borrower herein, to the maximum extent permitted under applicable law, Borrower hereby irrevocably waives all of the following: **(i)** any right to assert *against Lender* as a defense, counterclaim, set-off or crossclaim, any defense (legal or equitable), set-off, counterclaim, crossclaim and/or other claim (a) which Borrower may now or at any time hereafter have against any party liable to Lender in any way or manner, or (b) arising directly or indirectly from the present or future lack of perfection, sufficiency, validity and/or enforceability of any Loan Document, or any security interest; **(ii)** notice of presentment, dishonor, notice of intent to accelerate, protest, default, nonpayment, maturity; **(iii)** the benefit of all marshalling, valuation, appraisal and exemption laws; **(iv)** the right, if any, to require Lender to (a) proceed against any person liable for any of the Obligations as a condition to or before proceeding hereunder; or (b) foreclose upon, sell or otherwise realize upon or collect or apply any other property, real or personal, securing any of the Obligations, as a condition to, or before proceeding hereunder; **(v)** any demand for possession before the commencement of any suit or action to recover possession of Collateral; and **(vi)** any requirement that Lender retain possession and not dispose of Collateral until after trial or final judgment.

10.2 Lender's Liability for Collateral. Lender shall not in any way or manner be liable or responsible for: **(i)** the safekeeping of any Collateral (except to the extent mandated by the UCC); **(ii)** any loss or damage thereto occurring or arising in any manner or fashion from any cause; **(iii)** any diminution in the value thereof; or **(iv)** any act or default of any carrier, warehouseman, bailee, forwarding agency, or other person or entity whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by Borrower. Lender will have no responsibility for taking any steps to preserve rights against any parties respecting any Collateral. Lender's powers hereunder are conferred solely to protect its interest in the Collateral and do not impose any duty to exercise any such powers. None of Lender or any of its officers, directors, employees, agents or counsel will be liable for any action lawfully taken or omitted to be taken hereunder or in connection herewith (excepting gross negligence or willful misconduct), nor under any circumstances have any liability to Borrower for lost profits or other special, indirect, punitive, or consequential damages. Lender retains any documents delivered by Borrower only for its purposes and for such period as Lender, at its sole discretion, may determine necessary, after which time Lender may destroy such records without notice to or consent from Borrower.

10.3 Indemnification. Borrower shall, on an after tax basis, defend, indemnify, and hold Lender and each of its officers, directors, employees, counsel, partners, agents and attorneys-in-fact (each, an *"Indemnified Person")* harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, charges, expenses or disbursements (including Lender's Expenses and reasonable attorney's fees and the allocated cost of in-house counsel) of any kind or nature whatsoever with respect to the execution, delivery, enforcement, performance and administration of this Agreement and any other Loan Documents, or the transactions contemplated hereby and thereby, with respect to noncompliance with laws or regulations respecting Regulated Substances, government secrecy or technology export, or any Lien not created by Lender or right of another against any Collateral, even if the Collateral is foreclosed upon or sold pursuant hereto, and with respect to any investigation, litigation or proceeding before any agency, court or other governmental authority relating to this Agreement or the Advances or the use of the proceeds thereof, whether or not any Indemnified Person is a party thereto (all the foregoing, collectively, the *"Indemnified Liabilities"); provided*, that Borrower shall have no obligation hereunder to any Indemnified Person with respect to Indemnified Liabilities arising from the gross negligence or willful misconduct of such Indemnified Person. The obligations in this Section shall survive the Term. At the election of any Indemnified Person, Borrower shall defend such Indemnified Person using legal counsel satisfactory to such Indemnified Person, at the sole cost and expense of Borrower. All amounts owing under this Section shall be paid within 30 days after written demand.

11. Notices

All notices shall be in writing and personally delivered or sent by certified mail, postage prepaid, return receipt requested, or by confirmed facsimile, at the respective addresses set forth below:

If to Borrower:

Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: General Counsel,
Director of Finance
FAX: (650)871-7152

If to Lender:

Lighthouse Capital Partners V, LP
500 Drake's Landing Road
Greenbrae, California 94904
Attention: Contract Administrator

FAX: (415)925-3387

12. General Provisions

12.1 Successors and Assigns. This Agreement shall bind and inure to the benefit of the parties' respective successors and permitted assigns. Borrower may not assign any rights hereunder without Lender's prior written consent, which consent may be granted or withheld in Lender's sole discretion. Lender shall have the right without the consent of or notice to Borrower to sell, transfer, negotiate, or grant participations in all or any part of any Loan Document, *provided* that Lender shall not sell, transfer, negotiate, or grant participations in all or any part of any Loan Document to any competitor of Borrower.

12.2 Time of Essence. Time is of the essence for the performance of all Obligations.

12.3 Severability of Provisions. Each provision hereof shall be severable from every other provision in determining its legal enforceability.

12.4 Entire Agreement. This Agreement and each of the other Loan Documents dated as of the date hereof, taken together, constitute and contain the entire agreement between Borrower and Lender with respect to their subject matter and supersede any and all prior agreements, negotiations, correspondence, understandings and communications between the parties, whether written or oral. This Agreement is the result of negotiations between and has been reviewed by the Borrower and Lender as of the date hereof and their respective counsel; *accordingly,* this Agreement shall be deemed to be the product of the parties hereto, and no ambiguity shall be construed in favor of or against Borrower or Lender. This Agreement may only be modified with the written consent of Lender. Any waiver or consent with respect to any provision of the Loan Documents shall be effective only in the specific instance and for the specific purpose for which it was given. No notice to or demand on Borrower in any one case shall entitle Borrower to any other or further notice or demand in similar or other circumstances.

12.5 Reliance by Lender. All covenants, agreements, representations and warranties made herein by Borrower shall, notwithstanding any investigation by Lender, be deemed to be material to and to have been relied upon by Lender.

12.6 No Set-Offs by Borrower. All sums payable by Borrower pursuant to this Agreement or any of the other Loan Documents shall be payable without notice or demand and shall be payable in United States Dollars without set-off or reduction of any manner whatsoever.

12.7 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of which, when taken together, shall constitute one and the same original instrument.

12.8 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations (other than inchoate indemnity obligations) remain outstanding.

12.9 No Original Issue Discount. Borrower and Lender acknowledge and agree that the Warrant is part of an investment unit within the meaning of Section 1273(c)(2) of the Internal Revenue Code, which includes the Loan. Borrower and Lender further agree as between them, that the fair market value of the Warrant is $100 and that, pursuant to Treas. Reg. § 1.1273-2(h), $100 of the issue price of the investment unit will be allocable to the Warrant and the balance shall be allocable to the Loans. Borrower and Lender agree to prepare their federal income tax returns in a manner consistent with the foregoing and, pursuant to Treas. Reg. § 1.1273, the original issue discount on the Loan shall be considered to be zero.

12.10 Relationship of Parties. The relationship between Borrower and Lender is, and at all times shall remain, solely that of a borrower and lender. Lender is not a partner or joint venturer of Borrower; nor shall Lender under any circumstances be deemed to be in a relationship of confidence or trust or have a fiduciary relationship with Borrower or any of its affiliates, or to owe any fiduciary duty to Borrower or any of its affiliates. Lender does not undertake or assume any responsibility or duty to Borrower or any of its affiliates to select, review, inspect, supervise, pass judgment upon or otherwise inform any of them of any matter in connection with its or their property, the Loans, any Collateral or the operations of Borrower or any of its affiliates. Borrower and each of its affiliates shall rely entirely on their own judgment with respect to such matters, and any review, inspection, supervision, exercise of judgment or supply of information undertaken or assumed by Lender in connection with such matters is solely for the protection of Lender and neither Borrower nor any affiliate is entitled to rely thereon.

12.11 Choice of Law and Venue; Jury Trial Waiver. **THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF ANY OF THE LOAN DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.**

12.12 Termination. Upon the full, faithful and indefeasible payment and performance of all Obligations(other than inchoate indemnity obligations) and the termination of any commitment to extend credit under this Agreement, the security interest granted herein and under the other Loan Documents shall terminate and this Agreement and the other Loan Documents (other than the Warrant) shall terminate, except for any inchoate indemnity obligations under **Section 10.3** of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington
Name: Gajus Worthington
Title: PRESIDENT & CEO

LIGHTHOUSE CAPITAL PARTNERS V, L.P.
By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,**
its general partner

By: /s/ Thomas Conneely
Name: Thomas Conneely
Title: Vice President

Exhibit A Collateral Description
Exhibit B Form of Note
Exhibit C Form of Preferred Stock Warrant
Exhibit D Form of Notice of Borrowing
Exhibit E Form of Incumbency Certificate
Exhibit F Form of Officers Certificate
Exhibit G ACH Authorization
Exhibit H Form of Negative Pledge Agreement
Exhibit I Control Agreement

EXHIBIT A

COLLATERAL

This FINANCING STATEMENT and SECURITY AGREEMENT covers all of Debtor's interests in all of the following types or items of property described on this **Exhibit A** (collectively, the *"Collateral")*, wherever located and whether now owned or hereafter acquired, and Debtor hereby grants Secured Party a security interest therein as collateral for the payment and performance of all present and future indebtedness, liabilities, guarantees and obligations of Debtor to Secured Party, howsoever arising. Debtor agrees that said security interest may be enforced by Secured Party in accordance with the terms of all security and other agreements between Secured Party and Debtor, the California Uniform Commercial Code, or both, and that this document shall be fully effective as a security agreement, even if there is no other security or other agreement between Secured Party or Debtor:

All assets of the Debtor; all personal property of Debtor;

All "accounts", "general intangibles", "chattel paper", "contract rights", "documents", "instruments", "deposit accounts", "inventory", "farm products", "fixtures" and "equipment", as such terms are defined in Division 9 of the California Uniform Commercial Code in effect on the date hereof;

All general intangibles of every kind, including without limitation, federal, state and local tax refunds and claims of all kinds; all rights as a licensee or any kind; all customer lists, telephone numbers, and purchase orders, and all rights to purchase, lease sell, or otherwise acquire or deal with real or personal property and all rights relating thereto;

All returned and repossessed goods and all rights as a seller of goods; all collateral securing any of the foregoing; all deposit accounts, special and general, whether on deposit with Secured Party or others;

All life and other insurance policies, claims in contract, tort or otherwise, and all judgments now or hereafter arising therefrom;

All right, title and interest of Debtor, and all of Debtor's rights, remedies, security and liens, in, to and in respect of all accounts and other collateral, including, without limitation, rights of stoppage in transit, replevin, repossession and reclamation and other rights and remedies of an unpaid vendor, lienor or secured party, and all guarantees and other contracts of suretyship with respect to any accounts and other collateral, and all deposits and other security for any accounts and other collateral, and all credit and other insurance;

All notes, drafts, letters of credit, contract rights, and things in action; all drawings, specifications, blueprints and catalogs; and all raw materials, work in process, materials used or consumed in Debtor's business, goods, finished goods, returned goods and all other goods and inventory of whatsoever land or nature, any and all wrapping, packaging, advertising and shipping materials, and all documents relating thereto, and all labels and other devices, names and marks affixed or to be affixed thereto for purposes of selling or identifying the same or the seller or manufacturer thereof;

All inventory wherever located; all present and future claims against any supplier of any of the foregoing, including claims for defective goods or overpayments to or undershipments by suppliers; all proceeds arising from the lease or rental of any of the foregoing;

All equipment and fixtures, including without limitation all machinery, machine tools, motors, controls, parts, vehicles, workstations, tools, dies, jigs, furniture, furnishings and fixtures; and all attachments, accessories, accessions and property now or hereafter affixed to or used in connection with any of the foregoing, and all substitutions and replacements for any of the foregoing; all warranty and other claims against any vendor or lessor of any of the foregoing;

All investment property;

All books, records, ledger cards, computer data and programs and other property and general intangibles at any time evidencing or relating to any or all of the foregoing; and

All cash and non-cash products and proceeds of any of the foregoing, in whatever form, including proceeds in the form of inventory, equipment or any other form of personal property, including proceeds of proceeds and proceeds of insurance, and all claims by Debtor against third parties for loss or damage to, or destruction of, or otherwise relating to, any or all of the foregoing.

NOTICE — PURSUANT TO AN AGREEMENT BETWEEN DEBTOR AND SECURED PARTY, DEBTOR HAS AGREED NOT TO FURTHER ENCUMBER THE COLLATERAL DESCRIBED HEREIN (EXCEPT AS EXPRESSLY PERMITTED PURSUANT TO SUCH AGREEMENT), THE FURTHER ENCUMBERING OF WHICH MAY CONSTITUTE THE TORTIOUS INTERFERENCE

WITH SECURED PARTY'S RIGHTS BY SUCH ENCUMBRANCER. IN THE EVENT THAT ANY ENTITY IS GRANTED A SECURITY INTEREST IN DEBTOR'S ACCOUNTS, CHATTEL PAPER, GENERAL INTANGIBLES OR OTHER ASSETS CONTRARY TO THE ABOVE, THE SECURED PARTY ASSERTS A CLAIM TO ANY PROCEEDS THEREOF RECEIVED BY SUCH ENTITY.

Notwithstanding any of the foregoing, this Financing Statement and Security Agreement does not cover any of Debtor's interests in, and the Collateral shall not under any circumstance include, and no security interest is granted in, (i) any property that is subject to a Lien that is otherwise permitted pursuant to subsection (v) of the definition of "Permitted Liens" as defined in that certain Loan and Security Agreement, dated as of March 29, 2005, by and between Secured Party and Debtor, and Secured Party agrees to execute any instruments or documents necessary to evidence the intent of the foregoing, (ii) more than 65% of the issued and outstanding voting securities of any subsidiary of Debtor that is not incorporated or organized in the United States, or (iii) Debtor's Intellectual Property, including, without limitation, any and all property of the Debtor that is subject to, listed in or otherwise described in the Negative Pledge Agreement dated March 29, 2005 between the Secured Party and the Debtor. *"Intellectual Property"* means, collectively, all rights, priorities and privileges of the Debtor relating to intellectual property, in any medium, of any kind or nature whatsoever, now or hereafter owned or acquired or received by Debtor, or in which Debtor now holds or hereafter acquires or receives any right or interest, whether arising under United States, multinational or foreign laws or otherwise, and shall include, in any event, all copyrights, copyright licenses, patents, patent licenses, trademarks, trademark licenses, trade secrets, internet domain names (including any right related to the registration thereof), proprietary or confidential information, mask works, sources object or other programming codes, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data base, data, skill, expertise, recipe, experience, process, models, drawings, materials or records. Notwithstanding the foregoing, Intellectual Property as defined above does not include proceeds or other revenue consisting of accounts, accounts receivable, royalties, licensing fees, or payment intangibles obtained or owed from or on account of the licensing or other exploitation or disposition of Intellectual Property, none of which are excluded, and all of which are included as collateral in the security interest granted by Debtor to Secured Party.

"DEBTOR"

FLUIDIGM CORPORATION, a California corporation

By: _____

Name: _____

Title: _____

"SECURED PARTY"

LIGHTHOUSE CAPITAL PARTNERS V, L.P.
BY: LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,
its general partner

By: _____

Name: _____

Title: _____

EXHIBIT B

[_____]

SECURED PROMISSORY NOTE

This SECURED PROMISSORY NOTE (this *"Note")* is made _____, 200_____, by **FLUIDIGM CORPORATION (***"Borrower")* in favor of **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** (collectively with its assigns, *"Lender").* Initially capitalized terms used and not otherwise defined herein are defined in that certain Loan and Security Agreement No. 4561 between Borrower and Lender dated March 29, 2005 (the *"Loan Agreement").*

FOR VALUE RECEIVED, Borrower promises to pay in lawful money of the United States, to the order of Lender, at 500 Drake's Landing Road, Greenbrae, California 94904, or such other place as Lender may from time to time designate *("Lender's Office")*, the principal sum of $_____ (the "Advance"), including interest on the unpaid balance and all other amounts due or to become due hereunder according to the terms hereof and of the Loan Agreement.

"Basic Rate" means a variable *per annum* rate of interest equal to the Index plus the Interest Margin which shall be subject to adjustment as provided herein. On and after the Loan Commencement Date the Basic Rate shall be fixed and not subject to any further adjustments.

"Final Payment" means 9% of the Advance.

"Index" means the prevailing variable Prime Rate of annual interest as quoted from time to time in the western edition of the Wall Street Journal.

"Interest Margin" means 2.5% per annum.

"Loan Commencement Date" means March 1, 2006.

"Maturity Date" means the last day of the Repayment Period, or if earlier, the date of prepayment under the Note.

"Payment Date" means the first day of each calendar month.

"Prepayment Fee" means (i) if prepaid in the calendar year 2006, 3% of the outstanding principal amount being prepaid; (ii) if prepaid in the calendar year 2007, 2% of the outstanding principal amount being prepaid; and (iii) if prepaid in the calendar year 2008 or 2009, 1% of the outstanding principal amount being prepaid.

"Repayment Period" means the period beginning on the Loan Commencement Date and continuing for 36 calendar months.

1. Repayment. Borrower shall pay principal and interest due hereunder from the Funding Date, until this Note is paid in full, on each Payment Date pursuant to the terms of the Loan Agreement and this Note. Prior to the Loan Commencement Date, Borrower shall pay to Lender, monthly in advance on each Payment Date, interest calculated using the Basic Rate prevailing on the first business day of such calendar month. Beginning on the Loan Commencement Date and on each Payment Date thereafter during the Repayment Period, Borrower shall make equal installments of principal and interest in advance, calculated at the Basic Rate. On the Maturity Date, Borrower shall pay, in addition to all unpaid principal and interest outstanding hereunder, the Final Payment.

2. Interest. Interest not paid when due will, to the maximum extent permitted under applicable law, become part of principal, at Lender's option, and thereafter bear like interest as principal. Interest shall be computed on the basis of a 360 day year. All Obligations not paid when due shall bear interest at the Default Rate unless waived in writing by Lender. All amounts paid hereunder will be applied to the Obligations in Lender's discretion and as provided in the Loan Agreement.

3. Voluntary Prepayment. Borrower may prepay the Note if and only if Borrower pays to Lender **(i)** the outstanding principal amount of this Note and any unpaid accrued interest **(ii)** the Final Payment, **(iv)** the Prepayment Fee, and **(v)** all other sums, if any, that shall have become due and payable hereunder with respect to this Note.

4. Collateral. This Note is secured by the Collateral.

5. Waivers. Borrower, and all guarantors and endorsers of this Note, regardless of the time, order or place of signing, hereby waive notice, demand, presentment, protest, and notices of every kind, presentment for the purpose of accelerating maturity, diligence in collection to the fullest extent permitted by law.

6. Choice of Law; Venue. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA. BORROWER AND LENDER EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS NOTE. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

7. Miscellaneous. The Note MAY BE MODIFIED ONLY BY A WRITING SIGNED BY BORROWER AND LENDER. Each provision hereof is severable from every other provision hereof and of the Loan Agreement when determining its legal enforceability. Sections and subsections are titled for convenience, and not for construction. "Hereof," "herein," "hereunder," and similar words refer to this Note in its entirety. "Or" is not necessarily' exclusive. "Including" is not limiting. The terms and conditions hereof inure to the benefit of and are binding upon the parties' respective permitted successors and assigns. This Note is subject to all the terms and conditions of the Loan Agreement.

IN WITNESS WHEREOF, Borrower has caused this Note to be executed by a duly authorized officer as of the day and year first above written.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

Exhibit C

Warrants

1

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE *"1933 ACT"),* OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

PREFERRED STOCK PURCHASE WARRANT

Warrant No._____

Number of Shares: initially, 185,714
Series D Preferred Stock
subject to increase as set forth below

FLUIDIGM CORPORATION

Effective as of March 29, 2005

Void after March 29, 2012

1. Issuance. This Preferred Stock Purchase Warrant (the *"Warrant")* is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION,** a California corporation (hereinafter with its successors called the *"Company").*

2. Purchase Price; Number of Shares.

(a) The registered holder of this Warrant (the *"Holder"),* commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share of $2.80 (the *"Purchase Price"),* 185,714 fully paid and nonassessable shares of the Company's Series D Preferred Stock, (the *"Exercise Quantity"),* $0.001 par value (the *"Preferred Stock").*

(b) On the Commitment Termination Date, the Exercise Quantity shall automatically be increased by such additional number of shares (rounded to the nearest whole share) of Series D Preferred Stock, if any, as is equal to the amount determined by dividing (A) 4% of the Aggregate Advances under the Loan Agreement, if any, by (B) the Purchase Price

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "Aggregate Advances" means the aggregate original dollar amount of all Advances made under the Loan Agreement, whether such Advances are outstanding or prepaid, at the time of any scheduled adjustment to the Exercise Quantity.

(ii) "Loan Agreement" means that certain Loan and Security Agreement No. 4561 dated March 29, 2005 between the Company and Lighthouse Capital Partners V, L.P..

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. **Net Issue Election.** The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4.**

Y = the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4.**

A = the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4.**

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4.**

"Fair *Market Value"* of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.001 par value (the *"Common Stock")* if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the *"Determination Date")* shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the Securities Act of 1933, as amended (a *"Public Offering")*, and if the Company's Registration Statement relating to such Public Offering *("Registration Statement")* has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6,** be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on March 29, 2012, and shall be void thereafter (the *"Expiration Date").* Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. *"Merger"* means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. *"Unaffiliated Entity"* means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise

of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series D Preferred Stock of the Company are set forth in the Amended and Restated Articles of Incorporation, as amended from time to time (the *"Articles"),* a true and complete copy in its current form which has been made available to Holder. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series D Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Articles promptly after the same has been made.

11. Mergers and Reclassifications. (a) Except as set forth in **Section 7,** If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11,** the term *"Reorganization"* shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series D Preferred Stock into Common Stock in accordance with the Company's Articles, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Articles or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 65,500,000 shares of Common Stock, of which 8,909,357 shares are issued and outstanding and 185,714 shares are reserved for issuance upon the exercise of this Warrant with respect to Common Stock and the conversion of the Preferred Stock into Common Stock if this Warrant is exercised with respect to Preferred Stock, (ii) 2,727,273 shares of Series A Preferred Stock, of which 2,727,273 are issued and outstanding shares, (iii) 6,460,675 shares of Series B Preferred Stock, of which 6,460,675 are issued and outstanding shares, (iv) 20,551,163 shares of Series C Preferred Stock, of which 16,364,832 are issued and outstanding shares, and (v) 13,887,716 shares of Series D Preferred Stock, of which 7,292,127 are issued and outstanding shares. Company has delivered a capitalization table to Holder summarizing the capitalization of the Company. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

15. Registration Rights. The Company grants to the Holder all the rights of a "Holder" [and an "Investor"] under the Company's Amended and Restated Investors' Rights Agreement dated as of December 18, 2003 (the *"Rights Agreement"),* including, without limitation, the registration rights contained therein, and agrees to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be *"Registrable Securities,"* and (ii) the Holder shall be a "Holder" [and an "Investor"] for all purposes of such Rights Agreement.

16. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

17. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 17.**

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

18. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant.

19. No Impairment. The Company will not, by amendment of its Articles or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 18 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

20. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

21. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

22. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

23. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for _____ shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Net Issue Election Notice

To: _____ Date: _____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

Exhibit A

Amended and Restated Certificate of Incorporation

See attached pages.

Exhibit A

Amended and Restated Articles of Incorporation

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

Gajus V. Worthington and William Smith certify that:

1. They are the President and Secretary, respectively, of Fluidigm Corporation, a California corporation (the "Corporation").

2. The Articles of Incorporation of the Corporation are amended and restated in full to read as set forth in EXHIBIT A attached hereto and incorporated by reference as if fully set forth herein.

3. Said Amended and Restated Articles of Incorporation have been duly approved by the Corporation's Board of Directors.

4. Said Amended and Restated Articles of Incorporation have been duly approved by the required vote of shareholders in accordance with Sections 902 and 903 of the Corporations Code. The total number of outstanding shares of the corporation is 7,753,917 shares of Common Stock, 2,727,273 shares of Series A Preferred Stock, 6,460,675 shares of Series B Preferred Stock and 14,315,608 shares of Series C Preferred Stock. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding Common Stock, voting as a single class, more than 66 2/3% of the outstanding Series C Preferred Stock, voting as a single class, more than 66 2/3% of the outstanding Preferred Stock voting as a single class and more than 50% of the outstanding Common Stock and Preferred Stock, voting together as a single class.

I further declare under penalty of perjury that the matters set forth in the foregoing certificate are true and correct of my own knowledge.

Executed at Palo Alto, California, this ___ day of October, 2002.

_____
Gajus V. Worthington
President

_____
William Smith
Secretary

Exhibit A

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

ARTICLE I

The name of the corporation is Fluidigm Corporation.

ARTICLE II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated under the California Corporations Code.

ARTICLE III

The total number of shares of stock that the corporation shall have authority to issue is Seventy-Four Million Three Hundred Ninety Thousand Two Hundred Seventy-Four (74,390,274), consisting of Forty-Four Million Six Hundred Fifty-One Thousand One Hundred Sixty-Three (44,651,163) shares of Common Stock, $0.001 par value per share, and Twenty-Nine Million Seven Hundred Thirty-Nine Thousand One Hundred Eleven (29,739,111) shares of Preferred Stock, $0.001 par value per share. The first series of Preferred Stock shall be designated "Series A Preferred Stock" and shall consist of Two Million Seven Hundred Twenty–Seven Thousand Two Hundred Seventy–Three (2,727,273) shares. The second series of Preferred Stock shall be designated "Series B Preferred Stock" and shall consist of Six Million Four Hundred Sixty Thousand Six Hundred Seventy-Five (6,460,675) shares. The third series of Preferred Stock shall be designated "Series C Preferred Stock" and shall consist of Twenty Million Five Hundred Fifty-One Thousand One Hundred Sixty-Three (20,551,163) shares.

ARTICLE IV

The terms and provisions of the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) "Conversion Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock and $2.58 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Preferred Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.11 per share for the Series A Preferred Stock, an annual rate of $0.18 for the Series B Preferred Stock and an annual rate of $0.26 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock and $2.58 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 for the Series B Preferred Stock and $2.58 per share for the Series C Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, Series B Preferred Stock and the Series C Preferred Stock.

2. Dividends.

(a) Series C Preferred Stock. The holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock (collectively, the "**Junior Stock**") of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Junior Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all declared dividends on the Series C Preferred Stock have been paid or set apart for payment to the Series C Preferred Stock holders. The right to receive dividends on shares of Series C Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(b) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made

with respect to the Common Stock, other than dividends payable solely in Common Stock, until all declared dividends on the Preferred Stock have been paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro-rata, pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Distribution. For purposes of this Section 2, unless the context otherwise requires, a "**distribution**" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

(d) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Section 6 below.

(e) Non-Cash Distributions. Whenever a distribution provided for in this Section 2 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(f) Consent to Certain Repurchases. As authorized by Section 402.5(c) of the California Corporations Code, Sections 502, 503 and 506 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of capital stock of the Corporation unanimously approved by the Board of Directors and approved by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

3. Liquidation Rights.

(a) Series C Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock and the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series C Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series C Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Series B Liquidation Preference. After the payment to the holders of Series C Preferred Stock of the full amounts specified in Section 3(a) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock and the Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(b).

(c) Series A Liquidation Preference. After the payment to the holders of Series C Preferred Stock and the holders of Series B Preferred Stock of the full amounts specified in Sections 3(a) and 3(b) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(c), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(c).

(d) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 3(a), 3(b) and 3(c) above, the entire remaining assets of the

Corporation legally available for distribution shall be distributed pro-rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(e) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(f) Reorganization. For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(g) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to shareholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to shareholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this subsection 3(g), "**trading day**" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

(a) Right to Convert. Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the "**Conversion Rate**" for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 4, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the "**Securities Act**"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $7.10 (as adjusted for stock splits or stock dividends) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an "**Automatic Conversion Event**").

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and

to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, and shall give written notice to the Corporation at such office that he elects to convert the same; provided, however, that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this paragraph 4(d), "**Additional Shares of Common**" shall mean all shares of Common Stock issued (or, pursuant to paragraph 4(d)(iii), deemed to be issued) by the Corporation after the filing of these Articles of Incorporation, other than:

(1) shares of Common Stock issued or issuable upon conversion of shares of Preferred Stock;

(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of these Articles of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to paragraph 4(e), 4(f) or 4(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors; and

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to paragraph 4(d)(v)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of these Articles of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Corporation, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(3) no readjustment pursuant to clause (2) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(4) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 4(d)(v)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(5) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of

business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this paragraph 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to paragraph 4(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of a series of Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the affected series of Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Subsection 4(d)(iv), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Subsection 4(d)(iii) hereof, shall be deemed to be outstanding.

(v) Determination of Consideration. For purposes of this subsection 4(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation excluding amounts paid or payable for accrued interest or accrued dividends;

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (a) and (b) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to paragraph 4(d)(iii) shall be determined by dividing

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating

thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above ("**Liquidation Rights**"), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 4(h) shall prohibit the Corporation from amending its Articles of Incorporation with the requisite consent of its shareholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 3(f);

then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend, distribution or subscription rights (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of this Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived, either prospectively or retroactively and either generally or in a particular instance, by the holders of more

than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived, either prospectively or retroactively and either generally or in a particular instance, by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

5. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any shareholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Election of Directors. So long as at least 2,000,000 shares (as adjusted for Recapitalizations) of Preferred Stock remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A Preferred Stock and Series B Preferred Stock,

voting together as a single class. If a vacancy on the Board of Directors is to be filled by the Board of Directors, only directors elected by the same class or classes of shareholders as those who would be entitled to vote to fill such vacancy shall vote to fill such vacancy.

6. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Articles of Incorporation or By-laws of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 3(f) above.

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 2(c)) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party;

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 6.

7. Amendments and Changes Requiring the Approval of the Series C Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series C Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 2(c)) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above nine (9); or

(f) amend this Section 7.

8. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series B Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 8.

9. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Article 4 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Articles of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

10. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE V

1. Limitation of Directors' Liability. The liability of the directors of this Corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

2. Indemnification of Corporate Agents. This Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, votes of shareholders or disinterested directors or

otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to this Corporation and its shareholders.

3. Repeal or Modification. Any repeal or modification of the foregoing provisions of this Article V shall not adversely affect any right of indemnification or limitation of liability of an agent of this Corporation relating to acts or omissions occurring prior to such repeal or modification.

(THE GREAT SEAL OF THE STATE OF CALIFORNIA - OFFICE OF THE SECRETARY OF STATE)

EXHIBIT D

NOTICE OF BORROWING

_____, _____

Lighthouse Capital Partners V, L.P.
500 Drake's Landing Road
Greenbrae, CA 94904-3011

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement No. 4561 dated as of March 29, 2005 (as it has been and may be amended from time to time, the *"Loan Agreement,"* initially capitalized terms used herein as defined therein), between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** and **FLUIDIGM CORPORATION** (the *"Company")*

The undersigned is the President and CEO of the Company, and hereby irrevocably requests an Advance under the Loan Agreement, and in that connection certifies as follows:

1. The amount of the proposed Advance is $_____. The business day of the proposed Advance is _____.

2. The Loan Commencement Date for this Advance shall be March 1, 2006.

3. As of this date, no Event of Default, or event which with notice or the passage of time would constitute an Event of Default, has occurred and is continuing, or will result from the making of the proposed Advance, and the representations and warranties of the Company contained in **Section 5** of the Loan Agreement are true and correct in all material respects.

4. No event that could reasonably be expected to have a material adverse effect on the ability of Borrower to fulfill its obligations under the Loan Agreement has occurred since the date of the most recent financial statements, submitted to you by the Company.

The Company agrees to notify you promptly before the funding of the Advance if any of the matters to which I have certified above shall not be true and correct on the Funding Date.

Very truly yours,

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

EXHIBIT E

INCUMBENCY CERTIFICATE

The undersigned, William Smith, hereby certifies that:

1. He/She is the duly elected and acting General Counsel and Vice President of Legal Affairs of **FLUIDIGM CORPORATION**, a California corporation (the *"Company")*.

2. That on the date hereof, each person listed below holds the office in the Company indicated opposite his or her name and that the signature appearing thereon is the genuine signature of each such person:

NAME	OFFICE	SIGNATURE
Gajus Worthington	President and CEO	
William Smith	General Counsel and Vice President of Legal Affairs	

3. Attached hereto as ***Exhibit A*** is a true and correct copy of the Articles of Incorporation of the Company, as amended, as in effect as of the date hereof.

4. Attached hereto as ***Exhibit B*** is a true and correct copy of the Bylaws of the Company, as amended, as in effect as of the date hereof.

5. Attached hereto as ***Exhibit C*** is a copy of the resolutions of the Board of Directors of the Company authorizing and approving the Company's execution, delivery and performance of a loan facility with Lighthouse Capital Partners V, L.P.

IN WITNESS WHEREOF, the undersigned has executed this Incumbency Certificate on March 29, 2005.

FLUIDIGM CORPORATION

By: _____

Name: William Smith

Title: General Counsel and Vice President of Legal Affairs

I, the President and CEO of the Company, do hereby certify that William Smith is the duly qualified, elected and acting General Counsel and Vice President of Legal Affairs of the Company and that the above signature is his or her genuine signature.

IN WITNESS WHEREOF, the undersigned has executed and delivered this Officer's Certificate on March 29, 2005.

FLUIDIGM CORPORATION

By: _____

Name: Gajus Worthington

Title: President and CEO

EXHIBIT F

OFFICER'S CERTIFICATE

The undersigned, to induce **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender")*, to extend or continue financial accommodations to **FLUIDIGM CORPORATION**, a California corporation (the *"Borrower")* pursuant to the terms of that certain Loan and Security Agreement dated March 29, 2005 (the *"Loan Agreement")*, hereby certifies that on the date hereof:

1. I am the duly elected and acting _____ of Borrower.

2. I am a Responsible Officer as that term is defined in the Loan Agreement.

3. The information submitted herewith complies with **Sections 5.7** and **6.2** of the Loan Agreement.

4. The financial statements delivered herewith fairly present the financial condition of Borrower

5. Borrower is currently able to meet its obligations as they come due.

6. I understand that Lender is relying upon the truthfulness, accuracy and completeness hereof in connection with the Loan Agreement.

7. I will advise you if it comes to my attention that, as of the date hereof, the information submitted herewith was not in fact true, correct and complete.

IN WITNESS WHEREOF, the undersigned has executed this Officer's Certificate on _____.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

EXHIBIT G

AUTHORIZATION FOR AUTOMATIC PAYMENT

The undersigned **FLUIDIGM CORPORATION** *("Borrower")* authorizes **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** and any and all affiliated funds (collectively, *"Lender")* and the bank / financial institution (*"Bank")* named below to initiate variable debit and/or credit entries to Borrower's deposit, checking or savings accounts as designated below and to cause funds transfers to an account of Lender as payment of any and all amounts due under the Loan and Security Agreement between Borrower and Lender dated March _____, 2005 (the *"Loan Agreement").*

1. Lender is hereby authorized to initiate variable debit and/or credit transactions and resulting funds transfers in Borrower's designated accounts with respect to amounts calculated by Lender to be due and owing to Lender by Borrower periodically under the Loan Agreement. Borrower consents to all such debit and/or credit transactions and resulting funds transfers and hereby authorizes Lender to take all such actions as may be required by Bank with respect to such transactions. Borrower acknowledges and agrees that such credit and/or debit entries may be made in amounts due under the Loan Agreement in order to cause timely payments as required by the terms of the Loan Agreement.

2. Borrower hereby authorizes Lender to release to Bank all information concerning Borrower that may be necessary or desirable for Bank to investigate or recover any erroneous funds transfers that may occur.

3. Borrower acknowledges and agrees that all such debit and/or credit transactions and funds transfers are intended to be made through an Automated Clearing House system and in compliance with the NACHA Rules and in compliance with Bank's security procedures.

4. Borrower represents and warrants that the account information set forth below is accurate and complete and that each of the account(s) set forth below is a business account maintained in Borrower's name and for Borrower's account.

This Consent shall be effective as of March 29, 2005 and shall remain in effect until the Loan Agreement has been terminated. Any cancellation by Borrower of this consent shall (i) be made in writing and (ii) delivered to Bank and Lender in such time as to afford Bank and Lender a reasonable opportunity to act on said cancellation.

Wells Fargo Bank
(Name of Borrower's Bank)

420 Montgomery St.	San Francisco	CA	94104
(Address of Bank)	(City)	(State)	(Zip Code)

Bank Routing Number [***]
(between these symbols " /:" ":/" on bottom left of check)

Account Number: [***] (checking /deposit /savings) *(circle one)*

Copy of a voided check is attached to this form

Borrower Name: **FLUIDIGM CORPORATION**
Borrower Address: 7100 Shoreline Court
South San Francisco. CA 94080

Authorized by: _____
Its: _____

Date authorized: _____

Internal ACH Authorizations from Lender:

Approved by: _____ Date: _____

EXHIBIT H

NEGATIVE PLEDGE AGREEMENT

THIS NEGATIVE PLEDGE AGREEMENT is made as of March 29, 2005, by and between **FLUIDIGM CORPORATION** *("Borrower")* and **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** *("Lender").*

In consideration of the Loan and Security Agreement between the parties of proximate date herewith (the *"Loan Agreement")*, Borrower agrees as follows:

Except as otherwise permitted in the Loan Agreement, Borrower shall not sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber any of Borrower's owned intellectual property, including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registration and like protection in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the *"Copyrights");*

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights which may be available to Borrower now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections, including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including, without limitation, the patents and patent applications (collectively, the *"Patents");*

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks (collectively, the *"Trademarks");*

(f) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for an collect such damages for said use or infringement of the intellectual property rights identified above;

(g) Any and all licenses or other rights to use any of the Copyrights, Patents or Trademarks and all license fees and royalties arising from such use to the extent permitted by such license or rights

(h) Any and all amendments, extensions, renewals and extensions of any of the Copyrights, Patents or Trademarks; and

(i) Any and all proceeds and products of the foregoing, including, without limitation, all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

It shall be an Event of Default under the Loan Agreement if there is a breach of any term of this Negative Pledge Agreement. Borrower agrees to properly execute all documents reasonably required by Lender in order to fulfill the intent and purposes hereof.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.**, its general partner

By: _____

Name: _____

Title: _____

EXHIBIT I

CONTROL AGREEMENT

[In form and substance acceptable to Lender in its reasonable discretion]

RESTRICTED ACCOUNT AGREEMENT

(ACCOUNT RESTRICTED AFTER INSTRUCTIONS — Standing Wire Transfers)

This **Restricted Account Agreement** (the "Agreement"), dated as of the date specified at the end of this Agreement, is entered into among **Fluidigm Corporation** ("Company"), **Lighthouse Capital Partners V, L.P.** ("Secured Party") and the Wells Fargo Bank identified in the signature block at the end of this Agreement ("Bank"), and sets forth the rights of Secured Party and the obligations of Bank with respect to the deposit account(s) of Company at Bank identified at the end of this Agreement as the "Restricted Account(s)". As used in this Agreement, the term "Restricted Account" refers, individually and collectively, to each such deposit account.

1. **Secured Party's Interest in Restricted Account.** Secured Party represents that it is either (i) a lender who has extended credit to Company and has been granted a security interest in the Restricted Account or (ii) such a lender and the agent for a group of such lenders (the "Lenders"). Company hereby confirms, and Bank hereby acknowledges, the security interest granted by Company to Secured Party in all of Company's right, title and interest in and to the Restricted Account and all sums now or hereafter on deposit in or payable or withdrawable from the Restricted Account (the "Account Funds"). Except as specifically provided otherwise in this Agreement, Company has given Secured Party complete control over the Account Funds. Secured Party hereby appoints Bank as agent for Secured Party only for the purpose of perfecting the security interest of Secured Party in the Account Funds while they are in the Restricted Account. Company and Secured Party would like to use the Restricted Account Service of Bank described in this Agreement (the "Service") to further the arrangements between Secured Party and Company regarding the Restricted Account and the Account Funds.

2. **Access to Restricted Account.** Secured Party agrees that Company will be allowed access to the Account Funds until Bank receives written instructions from Secured Party directing that Company no longer have access to any Account Funds (the "Instructions"). Company agrees that the Account Funds should be paid to Secured Party after Bank receives the Instructions, and hereby irrevocably authorizes Bank to comply with the Instructions even if Company objects in any way to the Instructions. Company further agrees that after Bank receives the Instructions, Company will not have access to any Account Funds.

3. **Balance Reports.** Bank agrees, at the telephone request of Secured Party on any Business Day (a day on which Bank is open to conduct its regular banking business, other than a Saturday, Sunday or public holiday), to make available to Secured Party a report ("Balance Report") showing the opening available balance in the Restricted Account as of the beginning of such Business Day, either on-line or by facsimile transmission, at Bank's option. Company expressly consents to this transmission of information. Secured Party and Company understand and agree that the opening available balance in the Restricted Account at the beginning of any Business Day will be determined after deducting from the Restricted Account the face amount of all Returned Items (as defined in Section 8 of this Agreement).

4. **Transfers to Secured Party.** Bank agrees that on each Business Day after it receives the Instructions it will transfer to the Secured Party's account specified at the end of this Agreement

with the bank specified at the end of this Agreement (the "Secured Party Account") the full amount of the opening available balance in the Restricted Account at the beginning of such Business Day. Bank will use the Fedwire system to make each funds transfer unless for any reason the Fedwire system is unavailable, in which case Bank will determine the funds transfer system to be used in making each funds transfer and the means by which each transfer will be made. Bank, Secured Party and Company each agree that Bank will comply with instructions given to Bank by Secured Party directing disposition of funds in the Restricted Account without further consent by Company, subject otherwise to the terms of this Agreement and Bank's standard policies, procedures and documentation in effect from time to time governing the type of disposition requested. Company authorizes all such transfers. Except as otherwise required by law, Bank will not agree with any third party to comply with instructions for disposition of funds in the Restricted Account originated by such third party.

5. **Delays in Making Funds Transfers.** Secured Party and Company understand that a funds transfer may be delayed or not made if (a) the transfer would cause Bank to exceed any limitation on its intra-day net funds position established in accordance with Federal Reserve or other regulatory guidelines or to violate any other Federal Reserve or other regulatory risk control program, or (b) the funds transfer would otherwise cause Bank to violate any applicable law or regulation. If a funds transfer cannot be made or will be delayed, Bank will notify Secured Party by telephone.

6. **Reliance on Identifying Numbers.** If Secured Party indicates a name and an identifying number for the bank of the person or entity to receive funds transfers out of the Restricted Account, Secured Party and Company understand and agree that Bank may rely on the number Secured Party indicates even if that number identifies a bank different from the bank Secured Party named. If Secured Party indicates a name and an account number for the person or entity to receive funds transfers out of the Restricted Account, Secured Party and Company understand and agree that Bank may rely on the account number Secured Party indicates even if that account number is not the account number for the person or entity who is to receive the transfers.

7. **Reporting Errors in Transfers.** If Secured Party or Company learns of any error in a funds transfer or any unauthorized funds transfer, then the party learning of such error or unauthorized transfer (the "Informed Party") must notify Bank as soon as possible by telephone at (800) AT- WELLS (which is a recorded line), and provide written confirmation to Bank of such telephonic notice within two Business Days at the address given for Bank on the signature page of this Agreement. In no case may such notice to Bank by an Informed Party be made more than fourteen (14) calendar days after such Informed Party learns of the erroneous or unauthorized transfer. If a funds transfer is made in error and Bank suffers a loss because an Informed Party breached its agreement to notify Bank of such error within the time limits specified in this Section 7, then such Informed Party shall reimburse Bank for the loss promptly upon demand by Bank; provided, however, that in the event both Secured Party and Company breach this notification requirement, Secured Party shall not be obligated to reimburse Bank for the loss unless Company fails to satisfy Bank's demand for reimbursement within fifteen (15) calendar days after demand is made on Company.

8. **Returned Item Amounts.** Secured Party and Company understand and agree that the face amount ("Returned Item Amount") of each Returned Item will be paid by Bank debiting the Restricted Account, without prior notice to Secured Party or Company. As used in this Agreement, the term "Returned Item" means (i) any item deposited to the Restricted Account and returned unpaid, whether for insufficient funds or for any other reason, and without regard to the timeliness of such return or the occurrence or timeliness of any drawee's notice of non-payment; (ii) any item subject to a claim against Bank of breach of transfer or presentment warranty under the Uniform Commercial Code, as adopted in the applicable state; (iii) any automated clearing house ("ACH") entry credited to the Restricted Account and returned unpaid

or subject to an adjustment entry under applicable clearing house rules, whether for insufficient funds or for any other reason, and without regard to the timeliness of such return or adjustment; (iv) any credit to the Restricted Account from a merchant card transaction, against which a contractual demand for chargeback has been made; and (v) any credit to the Restricted Account made in error. Company agrees to pay all Returned Item Amounts immediately on demand, without setoff or counterclaim, to the extent there are not sufficient funds in the Restricted Account to cover the Returned Item Amounts on the day they are to be debited from the Restricted Account. Secured Party agrees to pay all Returned Item Amounts within thirty (30) calendar days after demand, without setoff or counterclaim, to the extent the Returned Item Amounts are not paid in full by Company within fifteen (15) calendar days after demand on Company by Bank, and to the extent Secured Party received proceeds from the corresponding Returned Items.

9. **Bank Fees.** Company agrees to pay all Bank's fees and charges for the maintenance and administration of the Restricted Account and for the treasury management and other account services provided with respect to the Restricted Account (collectively "Bank Fees"), including, but not limited to, the fees for (a) the Balance Reports provided on the Restricted Account, (b) the wire transfer services received with respect to the Restricted Account, (c) Returned Items, (d) funds advanced to cover overdrafts in the Restricted Account (but without Bank being in any way obligated to make any such advances), and (e) duplicate bank statements on the Restricted Account. Before Bank receives the Instructions, the Bank Fees will be paid by Bank debiting the Restricted Account, and after Bank receives the Instructions the Bank fees will be paid by Bank debiting one or more of the demand deposit operating accounts of Company at Bank specified at the end of this Agreement (the "Operating Accounts"). All such debits will be made on the Business Day that the Bank Fees are due without notice to Secured Party or Company. If there are not sufficient funds in the Restricted Account, or after Bank receives the Instructions, the Operating Accounts, to cover fully the Bank Fees on the Business Day they are debited from the Restricted Account or the Operating Accounts, or if no Operating Accounts are indicated at the end of this Agreement, such shortfall or the amount of such Bank Fees will be paid by Company sending Bank a check in the amount of such shortfall or such Bank Fees, without setoff or counterclaim, within fifteen (15) calendar days after demand of Bank. After Bank receives the Instructions, Secured Party agrees to pay the Bank Fees within thirty (30) calendar days after demand, without setoff or counterclaim, to the extent such Bank Fees are not paid in full by Company by check within fifteen (15) calendar days after demand on Company by Bank. Bank may, in its discretion, change the Bank Fees upon thirty (30) calendar days prior written notice to Company and Secured Party.

10. **Account Documentation.** Secured Party and Company agree that, except as specifically provided in this Agreement, the Restricted Account will be subject to, and Bank's operation of the Restricted Account will be in accordance with, the terms and provisions of Bank's deposit account agreement governing the Restricted Account ("Account Agreement"), a copy of which Company and Secured Party acknowledge having received.

11. **Bank Statements.** After Bank receives the Instructions, Bank will, if so indicated on the signature page of this Agreement, send to Secured Party by United States mail, at the address indicated for Secured Party after its signature to this Agreement, duplicate copies of all bank statements on the Restricted Account which are sent to Company. Company and/or Secured Party will have thirty (30) calendar days after receipt of a bank statement to notify Bank of an error in such statement. Bank's liability for such errors is limited as provided in the "Limitation of Liability" section of this Agreement.

12. **Partial Subordination of Bank's Rights.** Bank hereby subordinates to the security interest of Secured Party in the Restricted Account (i) any security interest which Bank may have or acquire in the Restricted Account, and (ii) any right which Bank may have or acquire to set off or otherwise apply any Account Funds against the payment of any indebtedness from time to time

owing to Bank from Company, except for debits to the Restricted Account permitted under this Agreement for the payment of Returned Item Amounts or Bank Fees.

13. **Bankruptcy Notice; Effect of Filing.** If Bank at any time receives notice of the commencement of a bankruptcy case or other insolvency or liquidation proceeding by or against Company (a "Bankruptcy Notice"), Bank will continue to comply with its obligations under this Agreement, except to the extent that any action required of Bank under this Agreement is prohibited under applicable bankruptcy laws or regulations or is stayed pursuant to the automatic stay imposed under the United States Bankruptcy Code or by order of any court or agency. With respect to any obligation of Secured Party hereunder which requires prior demand upon Company, the commencement of a bankruptcy case or other insolvency or liquidation proceeding by or against Company shall automatically eliminate the necessity of such demand upon Company by Bank, and shall immediately entitle Bank to make demand on Secured Party with the same effect as if demand had been made upon Company and the time for Company's performance had expired.

14. **Legal Process, Legal Notices and Court Orders.** Bank will comply with any legal process, legal notice or court order it receives if Bank determines in its sole discretion that the legal process, legal notice or court order is legally binding on it.

15. **Indemnification for Following Instructions.** Secured Party and Company each agree that, notwithstanding any other provision of this Agreement, except to the extent caused by Bank's gross negligence or willful misconduct Bank will not be liable to Secured Party or Company for any losses, liabilities, damages, claims (including, but not limited to, third party claims), demands, obligations, actions, suits, judgments, penalties, costs or expenses, including, but not limited to, attorneys' fees, (collectively, "Losses and Liabilities") suffered or incurred by Secured Party or Company as a result of or in connection with, (a) Bank complying with any binding legal process, legal notice or court order referred to in Section 14 of this Agreement, (b) Bank following any instruction or request of Secured Party, or (c) Bank complying with its obligations under this Agreement. Further, Company, and to the extent not paid by Company within fifteen (15) calendar days after demand, Secured Party, will indemnify Bank against any Losses and Liabilities Bank may suffer or incur as a result of or in connection with any of the circumstances referred to in clauses (a) through (c) of the preceding sentence.

16. **No Representations or Warranties of Bank.** Bank agrees to perform its obligations under this Agreement in a manner consistent with the quality provided when Bank performs similar services for its own account. However, Bank will not be responsible for the errors, acts or omissions of others, such as communications carriers, correspondents or clearinghouses through which Bank may perform its obligations under this Agreement or receive or transmit information in performing its obligations under this Agreement. Secured Party and Company also understand that Bank will not be responsible for any loss, liability or delay caused by wars, failures in communications networks, labor disputes, legal constraints, fires, power surges or failures, earthquakes, civil disturbances or other events beyond Bank's control. **BANK MAKES NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE SERVICE OTHER THAN THOSE EXPRESSLY SET FORTH IN THIS AGREEMENT.**

17. **Limitation of Liability.** In the event that Secured Party, Company or Bank suffers or incurs any Losses and Liabilities as a result of, or in connection with, its or any other party's performance or failure to perform its obligations under this Agreement, the affected parties shall negotiate in good faith in an effort to reach a mutually satisfactory allocation of such Losses and Liabilities, it being understood that Bank will not be responsible for any Losses and Liabilities due to any cause other than its own negligence or breach of this Agreement, in which case its liability to Secured Party and Company shall, unless otherwise provided by any law which cannot be

varied by contract, be limited to direct money damages in an amount not to exceed ten (10) times all the Bank Fees charged or incurred during the calendar month immediately preceding the calendar month in which such Losses and Liabilities occurred (or, if no Bank Fees were charged or incurred in the preceding month, the Bank Fees charged or incurred in the month in which the Losses and Liabilities occurred). Company will indemnify Bank against all Losses and Liabilities suffered or incurred by Bank as a result of third party claims; provided, however, that to the extent such Losses and Liabilities are directly caused by Bank's negligence or breach of this Agreement such indemnity will only apply to those Losses and Liabilities which exceed the liability limitation specified in the preceding sentence. The limitation of Bank's liability and the indemnification by Company set out above will not be applicable to the extent any Losses and Liabilities of any party to this Agreement are directly caused by Bank's gross negligence or willful misconduct. **IN NO EVENT WILL BANK BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES, WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT, WHETHER THE LIKELIHOOD OF SUCH DAMAGES WAS KNOWN TO BANK AND REGARDLESS OF THE FORM OF THE CLAIM OR ACTION, INCLUDING, BUT NOT LIMITED TO, ANY CLAIM OR ACTION ALLEGING GROSS NEGLIGENCE, WILLFUL MISCONDUCT, FAILURE TO EXERCISE REASONABLE CARE OR FAILURE TO ACT IN GOOD FAITH.** Any action against Bank by Company or Secured Party under or related to this Agreement must be brought within twelve months after the cause of action accrues.

18. **Termination.** This Agreement and the Service may be terminated by Secured Party or Bank at any time by either of them giving thirty (30) calendar days prior written notice of such termination to the other two parties to this Agreement at their contact addresses specified after their signatures to this Agreement; provided, however, that this Agreement and the Service may be terminated immediately upon written notice from Bank to Company and Secured Party should Secured Party fail to make any payment when due to Bank from Secured Party under the terms of this Agreement. Secured Party and Company agree that the Restricted Account may be closed by Bank as provided in the Account Agreement. Company's and Secured Party's obligation to report errors in funds transfers and bank statements and to pay the Bank Fees, as well as the indemnifications made, and the limitations on the liability of Bank accepted, by Company and Secured Party under this Agreement will continue after the termination of this Agreement and/or the closure of the Restricted Account with respect to all the circumstances to which they are applicable existing or occurring before such termination or closure, and any liability of any party to this Agreement, as determined under the provisions of this Agreement, with respect to acts or omissions of such party prior to such termination or closure will also survive such termination or closure. Upon any termination of this Agreement and the Service or closure of the Restricted Account all collected and available balances in the Restricted Account on the date of such termination or closure will be transferred to Secured Party as requested by Secured Party in writing to Bank.

19. **Modifications, Amendments, and Waivers.** This Agreement may not be modified or amended, or any provision thereof waived, except in a writing signed by all the parties to this Agreement; provided, however, that the Bank Fees may be changed after thirty (30) calendar days prior written notice to Company and Secured Party.

20. **Notices.** All notices from one party to another shall be in writing, or be made by a telecommunications device capable of creating a written record, shall be delivered to Company, Secured Party and/or Bank at their contact addresses specified after their signatures to this Agreement, or any other address of any party notified to the other parties in writing, and shall be effective upon receipt. Any notice sent by one party to this Agreement to another party shall also be sent to the third party to this Agreement. Bank is authorized by Company and Secured Party to act on any instructions or notices received by Bank if (a) such instructions or notices

purport to be made in the name of Secured Party, (b) Bank reasonably believes that they are so made, and (c) they do not conflict with the terms of this Agreement as such terms may be amended from time to time, unless such conflicting instructions or notices are supported by a court order.

21. **Successors and Assigns.** Neither Company nor Secured Party may assign or transfer its rights or obligations under this Agreement to any person or entity without the prior written consent of Bank, which consent will not be unreasonably withheld. Bank may not assign its rights or obligations under this Agreement to any person or entity without the prior written consent of Secured Party, which consent will not be unreasonably withheld; provided, however, that no such consent will be required if the assignee is a bank affiliate of Bank.

22. **Governing Law.** Company and Secured Party understand that Bank's provision of the Service under this Agreement is subject to federal laws and regulations. To the extent that such federal laws and regulations are not applicable this Agreement shall be governed by and be construed in accordance with the laws of the state in which the office of Bank that maintains the Restricted Account is located, without regard to conflict of laws principles.

23. **Severability.** To the extent that this Agreement or the Service to be provided under this Agreement are inconsistent with, or prohibited or unenforceable under, any applicable law or regulation, they will be deemed ineffective only to the extent of such prohibition or unenforceability and be deemed modified and applied in a manner consistent with such law or regulation. Any provision of this Agreement which is deemed unenforceable or invalid in any jurisdiction shall not affect the enforceability or validity of the remaining provisions of this Agreement or the same provision in any other jurisdiction.

24. **Usury.** It is never the intention of Bank to violate any applicable usury or interest rate laws. Bank does not agree to, or intend to contract for, charge, collect, take, reserve or receive (collectively, "charge or collect") any amount in the nature of interest or in the nature of a fee, penalty or other charge which would in any way or event cause Bank to charge or collect more than the maximum Bank would be permitted to charge or collect by any applicable federal or state law. Any such excess interest or unauthorized fee shall, notwithstanding anything stated to the contrary in this Agreement, be applied first to reduce the amount owed, if any, and then any excess amounts will be refunded.

25. **Counterparts.** This Agreement may be executed in any number of counterparts each of which shall be an original with the same effect as if the signatures thereto and hereto were upon the same instrument.

26. **Entire Agreement.** This Agreement, together with the Account Agreement, contains the entire and only agreement among all the parties to this Agreement and between Bank and Company, and Bank and Secured Party, with respect to (a) the Service, (b) the interest of Secured Party and the Lenders in the Account Funds and the Restricted Account, and (c) Bank's obligations to Secured Party and the Lenders in connection with the Account Funds and the Restricted Account.

This Agreement has been signed by the duly authorized officers or representatives of Company, Secured Party and Bank on the date specified below.

Date: March 29, 2005

Restricted Account Number(s):	**[***]**
Operating Account Number(s):	**[***]**
Secured Party Account Number:	**[***]**
Bank of Secured Party Account:	**Comerica Bank**

Secured Party is to be sent duplicate Bank Statements.

[Company] FLUIDIGM CORPORATION

By: _____
Name: **Gajus Worthington**
Title: **CEO**

Address For All Notices:

Fluidigm Corporation
Attn: James Neesen
7100 Shoreline Court

[Secured Party] LIGHTHOUSE CAPITAL PARTNERS V, L.P.

BY: LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C. ITS GENERAL PARTNER

By: _____
Name: **Thomas Conneely**
Title: **Vice President**

Address For All Notices:

Lighthouse Capital Partners V, L.P.
500 Drakes Landing Road
Greenbrae, CA 94904
Attn: Contracts Administration

WELLS FARGO BANK , N.A.

By: _____
Name: **Scott M. Van Gorder**
Title: **Vice President, Senior Relationship Manager**

Address For All Notices:

420 Montgomery Street, 9th Floor
MAC A0101-096
San Francisco, CA 94108

March 29, 2005

Morgan Stanley & Co. Incorporated (the "Broker")
555 California Street 14th Floor
San Francisco, CA 94104

Re: **Notice of Pledge and Security**

Gentlemen:

Please be advised that the undersigned, Fluidigm Corporation ("Pledgor"), has pledged a security interest in Account No. [***] (the "Account") held by Broker, as securities intermediary, and in all of the securities, proceeds, cash or other assets now or hereafter held in the Account (collectively, the "Collateral"), to Lighthouse Capital Partners V, L.P. ("Pledgee") pursuant to the terms and provisions of a certain Loan and Security Agreement (the "Agreement"), dated March 29, 2005.

Broker, Pledgor and Pledgee, by signing this letter, hereby agree as follows:

a) The Account shall be retitled "Fluidigm Corporation — Pledgor/ Lighthouse Capital – Pledgee";

b) Pledgee has a security interest in the Collateral and is authorized to instruct the Broker with regard to the Account without further consent needed by Pledgor;

c) Broker is hereby notified of Pledgee's security interest, and agrees to comply with all instructions and entitlement orders of Pledgee with regard to the Account. Broker shall not comply with instructions and entitlement orders with respect to the Collateral or the Account that are originated by the Pledgor except as described in Paragraph D below. Broker is also hereby authorized and agrees to send duplicate copies of any and all statements and confirmations, as well as any other appropriate correspondence, relating to the Account directly to the Pledgee at the address indicated below, or to such other address as Pledgee may designate in writing. This pledge will remain in full force and effect until Pledgee notifies Broker in writing to the contrary;

d) Pledgee hereby instructs Broker that until further instruction in writing from an Authorized Officer of Pledgee (as defined below) that Pledgee is assuming exclusive control over the Account ("Notice of Exclusive Control"), the Broker shall comply with directions of Pledgor with respect to any transactions, including withdrawals, in the Account. Notwithstanding anything contained herein, upon receipt of a Notice of Exclusive Control (it being understood that Broker shall have no duty or obligation whatsoever to investigate or determine whether the Notice of Exclusive Control was

rightfully or legally issued), Broker shall only follow the directions and instructions of Pledgee with regard to the Account. In that case, if Pledgee so requests, Broker will proceed to liquidate the assets of the Account in accordance with Pledgee's instructions and to deliver the proceeds to Pledgee.

For purposes of this Agreement, "Authorized Officer of Pledgee" shall refer to any one of the following individuals: Richard Stubblefield and Thomas Conneely. If Pledgee finds it necessary to designate a replacement for any of the designated Authorized Officers of Pledgee, written notice of replacement shall be given to Broker, which notice shall be signed by the President, an Executive Vice President, a Senior Vice President, or such other officer of Pledgee as Broker may approve. However, Broker shall be entitled to rely on any notice it receives from someone whom it reasonably believes is an Authorized Officer of Pledgee;

e) Broker shall have no obligation to monitor the Account for any purpose in connection with the pledge granted hereunder. The Pledgee accepts and acknowledges full responsibility for reviewing daily confirmations and monthly statements to ensure that it is adequately secured;

f) Pledgor and Pledgee hereby agree to indemnify and hold harmless Broker, its affiliates, officers, and employees from and against any and all claims, causes of actions, liabilities, lawsuits, demands, and/or damages, including, without limitation, any and all court costs and reasonable attorney's fees, that might result by reason of the actions of Broker under this Agreement. Broker shall not be responsible for any losses, claims, damages, liabilities and expenses incurred by Pledgor or Pledgee, except to the extent that such losses, claims, damages, liabilities or expenses arise out of the bad faith, gross negligence, or criminal acts or omissions on the part of Broker;

g) Broker may terminate this Agreement at any time by canceling the Account and transferring all funds and securities in the Account to Pledgee;

h) As of the date hereof, the Collateral has not been paid to or withdrawn by the Pledgor; Broker is not in receipt of any notice of withdrawal or redemption with regard to the Collateral or notice not to renew the Account, and Broker has not given any notice that the Account will not be renewed or extended, as the case may be;

i) Broker's records indicate that the value of the Collateral, as of the date hereof, is approximately [***].

j) Broker subordinates any right of offset Broker may now or hereafter have against the Collateral for any indebtedness now or hereafter owing to Broker by the Pledgors to the security interest of Pledgee; provided that Broker shall continue to have a first perfected security interest in the Collateral with respect to any charges incurred in connection with the operation of the Account, including, but not limited to, fees, commissions and any costs related to unsettled securities transactions.

k) This Agreement shall be governed by the law of the State of New York, excluding its conflict of law rules. The parties hereby agree that (i) the "securities intermediary's jurisdiction" with respect to the Account and the Collateral is New York and (ii) the parties shall not agree with any other person that such securities intermediary's jurisdiction is any jurisdiction other than New York.

Very truly yours,
FLUIDIGM CORPORATION

_____
By: James Neeson
Title: Controller

Read and Agreed to:
MORGAN STANLEY & CO. INCORPORATED

By _____
Name:
Title:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: Lighthouse Management Partners V, L.L.C.
its general partner

By _____
Name: Thomas Conneely
Title: Vice President
Address: 500 Drakes Landing Road
Greenbrae, CA 94904

SUBORDINATION AGREEMENT

This SUBORDINATION AGREEMENT (this "Agreement"), dated as of March 29, 2005, is between, on the one hand, each undersigned holder (each a "Holder" and collectively the "Holders") of Convertible Promissory Notes issued pursuant to those certain Convertible Note Purchase Agreement dated December 18, 2003, as amended from time to time (each a "Note" and collectively the "Notes") issued by **Fluidigm Corporation,** a California corporation ("Company"), and, on the other hand, **Lighthouse Capital Partners V, L.P.,** a Delaware limited partnership ("LCP"), lender under that certain Loan and Security Agreement No. 4561, dated March 29, 2005 (the "Loan Agreement") with Company (all obligations of payment and performance due or to become due pursuant to the Obligations or the Loan Documents as those terms are defined therein, as the same may be amended from time to time, are the "LCP Obligations"), with reference to the following:

WHEREAS, in order to induce LCP to enter into the Loan Agreement, the Holders agree to enter into this Agreement;

NOW, THEREFORE, in consideration of the mutual promises herein contained, the parties hereby agree as follows:

1. Subordination. Each Holder agrees that it shall not receive any payment of any amounts on account of the Notes until the LCP Obligations have been paid and performed in full. Regardless of (i) any agreement of any Holder or LCP with Company, (ii) the time, place, manner or order of attachment, perfection, or the filing of UCC-1 filings or other documents, or (iii) the giving or failure to give notice, each Holder does hereby subordinate payment by Company on its Notes to the full and final payment to LCP of the LCP Obligations. Each Holder agrees that all payments and the proceeds received by Holders on account of the Notes shall be held by them in trust for LCP for the payment of the LCP Obligations, and turned over to LCP in kind upon receipt of notice from LCP that Company has failed to pay LCP any of the LCP Obligations. Holders hereby agree they have no security interest in any property of the Company.

Notwithstanding anything in this Agreement, (i) in the event the Convertible Note, dated as of December 18, 2003 (the "Initial EDB Note"), issued by Company to Biomedical Sciences Investment Fund Pte Ltd ("BMSIF") has not been converted according to the terms set forth in Section 2 of such Initial EDB Note by the Payment Date (as defined in such Initial EDB Note), BMSIF may receive payment by the Company in an amount not to exceed 50% of the principal amount outstanding under such Initial EDB Note, and (ii) each Holder may convert any Note into capital stock of the Company and accept cash in lieu of fractional shares in connection with any such conversion. Upon conversion of any Note into capital stock of the Company and acceptance of cash in lieu of fractional shares in connection with any such conversion, this Agreement shall terminate with respect to such Note and any proceeds received by a Holder in connection with the conversion of such Note.

2. Bankruptcy. (Subject to paragraph (1) above), Each Holder agrees that upon any

distribution of assets or readjustment of indebtedness of Company, whether by liquidation, bankruptcy, assignment for the benefit of creditors, or otherwise, LCP shall receive payment in full on the LCP Obligations before Holder receives payment of any amounts due under the Notes and Holders shall pay over to LCP any amounts so received by them related to the Notes until the LCP Obligations are paid in full. In furtherance thereof, each Holder authorizes LCP to make and vote (without LCP being obligated to make or vote) any and all proofs of claim respecting the Notes in any such proceeding and to receive and collect all dividends or other payments thereupon; provided that LCP will pay over to Holders a pro rata distribution of amounts received by it in excess of that necessary for the full and final satisfaction of the LCP Obligations. Holders agree to execute such instruments of assignment and other documents as may be necessary to enforce such claims and collect such dividends or to otherwise carry out the intent and purpose hereof.

3. Representations. Each party hereto warrants and represents to the others that it has full power and authority to enter hereinto and to perform all obligations hereunder, that this Agreement is valid, binding and enforceable in accordance with its terms and that execution and performance hereof does not violate any agreement with any other person or entity. Each Holder represents and warrants that it (i) is the owner of the Notes, free and clear of the claims of any others, (ii) has not heretofore subordinated or assigned the Notes or its interest therein to any entity, (iii) will not transfer any Notes to any entity other than one which agrees to be bound hereby, and (iv) waives any rights to claim that the enforceability of this Agreement may be affected by any subsequent modification, release, extension, or change in LCP obligations.

4. No Third Party Beneficiaries. Company has no rights hereunder. This Agreement is made only for the benefit of Holders and LCP and their successors and assigns, and may not be relied upon by any other third party, including Company or any successor thereto or any judgment lien creditor thereof. Nothing herein shall constitute a commitment or agreement by either of LCP or Holder to provide funds to Company.

5. Miscellaneous. This Agreement: (i) may only be amended by a writing signed by LCP and the affected Holder; (ii) contains the entire agreement between Holders and LCP with respect to its subject matter, and all prior negotiations, documents and discussions are superseded hereby; (iii) shall be governed by the laws of the state of California; (iv) may be executed in counterparts delivered by telefacsimile, all of which, when taken together, shall constitute one and the same original document; and (v) may be attached to a Form UCC-1 and filed in the public records of any jurisdiction; and (vi) shall terminate upon the full, final and indefeasible payment and performance by Company to LCP of all LCP Obligations.

6. Waiver of Jury Trial. TO THE FULLEST EXTENT PERMITTED BY LAW, EACH OF THE PARTIES HERETO WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

Lighthouse Capital Partners V, L.P.
a Delaware limited partnership

by: Lighthouse Management Partners V, L.L.C.
its general partner

by: /s/ Thomas Conneely
Thomas Conneely
Vice President

500 Drakes Landing Road
Greenbrae, CA 94904
Attn: Contracts Administration
Tel: (415) 464-5900
Fax: (415) 925-3387

HOLDERS:

Biomedical Sciences Investment Fund Ptd Ltd

By: /s/ Lily Chan
Title: Director
20 Biopolis Way
#09-01 Centros
Singapore 138668
Attn: Lily Chan, PhD
Tel: 65-6395-7700
Fax: 65-6395-7796

Invus, L.P.

By: Invus Advisors, LLC
Its general partner

By: _____
Title: _____
135 East 57th Street
New York, NY 10022
Attn: Phillipe J. Amouyal
Tel: (212) 371-1717
Fax: (212) 371-1829

Company hereby acknowledges and consents to the Agreement, promises to take all such action as may be necessary to fulfill its essential intent and purpose, agrees that failure to do so shall be an Event of Default under the LCP Obligations, and acknowledges that in the transactions referenced herein it has been advised to seek, and has selected, counsel of its own choosing, namely Wilson, Sonsini, Goodrich & Rosati of Palo Alto, California.

Fluidigm Corporation

By _____
Its _____

HOLDERS:

Biomedical Sciences Investment Fund Ptd Ltd

By: _____
Title: _____

20 Biopolis Way
#09-01 Centros
Singapore 138668
Attn: General Manager
Tel: 65-6395-7700
Fax: 65-6395-7796

Invus, L.P.

By: Invus Advisors, LLC
Its general partner

By: /s/ Aflalo Guimaraes
Title: Managing Director
135 East 57th Street
New York, NY 10022
Attn: Phillipe J. Amouyal
Tel: (212) 371- 1717
Fax: (212) 371-1829

Company hereby acknowledges and consents to the Agreement, promises to take all such action as may be necessary to fulfill its essential intent and purpose, agrees that failure to do so shall be an Event of Default under the LCP Obligations, and acknowledges that in the transactions referenced herein it has been advised to seek, and has selected, counsel of its own choosing, namely Wilson, Sonsini, Goodrich & Rosati of Palo Alto, California.

Fluidigm Corporation

By _____
Its _____

HOLDERS:

Biomedical Sciences Investment Fund Ptd Ltd

By: _____
Title: _____

20 Biopolis Way
#09-01 Centros
Singapore 138668
Attn: General Manager
Tel: 65-6395-7700
Fax: 65-6395-7796

Invus, L.P.

By: Invus Advisors, LLC
Its general partner

By: _____
Title: _____

135 East 57th Street
New York, NY 10022
Attn: Phillipe J. Amouyal
Tel: (212) 371-1717
Fax: (212) 371-1829

Company hereby acknowledges and consents to the Agreement, promises to take all such action as may be necessary to fulfill its essential intent and purpose, agrees that failure to do so shall be an Event of Default under the LCP Obligations, and acknowledges that in the transactions referenced herein it has been advised to seek, and has selected, counsel of its own choosing, namely Wilson, Sonsini, Goodrich & Rosati of Palo Alto, California.

Fluidigm Corporation

By /s/ Gajus Worthington
Its President & CEO

AMENDMENT NO. 01 ("*Amendment*")
TO LOAN AND SECURITY AGREEMENT NO. 4561

Entered into as of August 4, 2006 by and between
Lighthouse Capital Partners V, L.P. *("Lender")* and **Fluidigm Corporation** *("Borrower").*

RECITALS

WHEREAS, Borrower and Lender have previously entered into that certain Loan and Security Agreement No. 4561 dated as of March 29, 2005 (the *"Loan and Security Agreement";* all initially capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Loan and Security Agreement), together with the other agreements and instruments entered into in connection therewith (collectively, the *"Loan Documents");* and

WHEREAS, Borrower and Lender each have agreed to amend the Loan Documents subject to Borrower's performance of the terms and conditions hereof; and

WHEREAS, as of August 31, 2006, Borrower and Lender mutually agree that the outstanding principal balance of the Loans is $11,093,832.04;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Loan Documents by entering into this Amendment and Borrower agrees to perform such other covenants and conditions as follows:

A) Loan and Security Agreement

(i) Definitions — The definition *of "Subordinated Indebtedness"*, shall be amended and restated to read as follows:

> *"Subordinated Indebtedness"* means Indebtedness of Borrower to Singapore EDB (including its investment fund BioMedical Sciences Investment Fund Ptd Ltd) and Invus Group that is subordinated in both security and right of payment to the Obligations on terms and conditions reasonably satisfactory to Lender in an amount not to exceed $8,000,000.

B) Secured Term Promissory Note

(i) Definitions — The following definitions shall be added to the Notes, and to the extent these terms are already defined in the Loan Documents, they shall be deleted in their entirety and replaced with the following:

"*Final Payment"* means 11.25% of the Advance.

"*Basic Rate"* means a variable *per annum* rate of interest equal to the Index plus the Interest Margin which shall be subject to adjustment as provided herein. On and after March 1, 2006 through and including August 31, 2006, the Basic Rate shall be fixed at 10.00%. On and after September 1, 2006, the Basic Rate shall be fixed at 9.75%.

"*Repayment Period"* means the period beginning on the Loan Commencement Date and continuing for 48 calendar months.

C) Additional Terms and Conditions

1. Repayment. Notwithstanding anything contained in any Note issued in connection with the Loan and Security Agreement, Section 1 of each such Note shall be superseded by the following payment terms: for and on account of all of the Notes, from March 1, 2006 through and including August 31, 2006, Borrower will pay Lender $416,006.71 per month. On and after September 1, 2006 through February 28, 2010, Borrower shall pay Lender $310,305.95 per month. In addition to all other amounts due or to become due hereunder, the Final Payment is due on the earliest to occur of the Maturity Date or March 1, 2009.

2. Restructure Fee. In addition to all other amounts due or to become due hereunder, on the earliest to occur of (i) the Maturity Date; (ii) the date of prepayment of all of the Notes, or (ii) March 1, 2009, Borrower shall pay to Lender a restructure fee in the amount of $150,000, in cash.

3. Expenses. Borrower shall pay reasonable fees and expenses incurred by Lender's legal counsel in connection with the preparation and negotiation of documentation related to this Amendment. Such restructure expenses are due and payable when billed.

D) Acknowledgments; Representations and Warranties. Borrower warrants and represents to Lender, as a material inducement to Lender's entering hereinto, as follows:

a) No Further Funding Obligations. Lender has no obligations to make further Advances to Borrower.

b) No Waivers. Lender has made no separate oral or written waiver of any existing or future Default or Event of Default by Borrower under any Loan Document.

c) No Set-Off. Borrower has no claims or rights of set-off against Lender of any kind under any Loan Document or otherwise. Borrower has no defenses to payments of any amounts owed to Lender as the same become due and payable.

d) Representations and Warranties of Borrower. The representations and warranties contained in the Loan Agreement are true and complete in all material respects as of the date hereof, except with respect to any such representation or warranty which speak only as of a specific date prior to the date hereof. Borrower warrants and represents that no Events of Default have occurred. Borrower warrants and represents that it has not reached any settlement with any other creditor of Borrower that has not been disclosed in writing to Lender.

E. Release. Borrower for itself and for its agents, partners, stockholders, employees and affiliates and its or their successors and assigns hereby (a) agrees to waive, release and further discharge Lender and its officers, directors, stockholders, partners, successors, assigns, agents and employees of and from any and all manner of claims arising in connection with the Loan Documents for damages at law or in equity with respect to any matter occurring prior to the date hereof which Borrower or such other releasing party may have had, and (b) waives California Civil Code Section 1542, which reads: "A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor." Each provision of this release shall be severable from every other provision when determining its legal enforceability.

Except as amended hereby, the Loan Documents remain unmodified and unchanged and ratified by Borrower as though fully set forth herein. In the event of any contradiction between any term of this Amendment with any other Loan Document, the terms under this Amendment shall control Lender and Borrower have executed this Amendment as of the date first written above.

Borrower:	**Lender:**
Fluidigm Corporation	**Lighthouse Capital Partners V, L.P.**
	By: **Lighthouse Management Partners V, L.L.C.,** its general partner
By: /s/ Gajus Worthington	By: /s/ Thomas Conneely
Name: Gajus Worthington	Name: Thomas Conneely
Title: CEO	Title: Vice President

AMENDMENT NO. 02 *("Amendment")*
TO LOAN AND SECURITY AGREEMENT NO. 4561

Entered into as of November 16, 2006 by and between
Lighthouse Capital Partners V, L.P. *("Lender")* and **Fluidigm Corporation** *("Borrower").*

Without limiting or amending any other provisions of the Agreement, as amended, Lender and Borrower agree to the following:

Section 1.1 of the Agreement, the definition of *"Subordinated Indebtedness"*, shall be amended and restated to read as follows:

> *"Subordinated Indebtedness"* means Indebtedness of Borrower to Singapore EDB (including its investment fund BioMedical Sciences Investment Fund Ptd Ltd) and Invus Group that is subordinated in both security and right of payment to the Obligations on terms and conditions reasonably satisfactory to Lender in an amount not to exceed $13,000,000.

All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.

Borrower:	**Lender:**
Fluidigm Corporation	**Lighthouse Capital Partners V, L.P.**
	By: **Lighthouse Management Partners V, L.L.C.,** its general partner
By: /s/ Rich Delateur	By: /s/ Darren Haggerty
Name: Rich Delateur	Name: Darren Haggerty
Title: Chief Financial Officer	Title: Director of Portfolio Analysis

AMENDMENT NO. 03

Dated August 8, 2007

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended *("Agreement")*, by and between
Lighthouse Capital Partners V, L.P. *("Lender")* and
Fluidigm Corporation, a Delaware corporation (formerly a California corporation) *("Borrower")*.

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

Without limiting or amending any other provisions of the Loan Documents, Lender and Borrower agree to the following:

Effective March 29, 2007, Borrower's state of incorporation has reincorporated from the State of California to the State of Delaware.

Except as amended hereby, the Loan Documents remains unmodified and unchanged.

BORROWER:	**LENDER:**
Fluidigm Corporation	**Lighthouse Capital Partners V, L.P.**
	By: **Lighthouse Management Partners V, L.L.C.,** its general partner
By: /s/ Gajus Worthington	By: /s/ Tom Conneely
Name: Gajus Worthington	Name: Tom Conneely
Title: President & CEO	Title: Vice President

AMENDMENT NO. 04

Dated February 15, 2008

TO

that certain Loan and Security Agreement No. 4561
dated as of March 29, 2005, as amended *("Agreement")*, by and between
Lighthouse Capital Partners V, L.P. *("Lender")* and
Fluidigm Corporation *("Borrower").*

this Amendment No. 04 *("Amendment 04")* to that certain Loan and Security Agreement No. 4561 dated March 29, 2005 (as amended to date, the *"Agreement)* is entered into as of February 15, 2008, by and between **Lighthouse Capital Partners V, L.P.** *("Lender")* and **Fluidigm Corporation**, a Delaware corporation *("Borrower").*

WHEREAS, Borrower and Lender have previously entered into and amended the Agreement; and

WHEREAS, Borrower has requested Lender provide an additional term loan financing, which Lender has agreed to provide subject to the terms of this Amendment 04.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the parties hereby agree to modify the Agreement and to perform such other covenants and conditions as follows:

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Agreement.)

I. Section 1.1, the following definitions shall be added to the Agreement:

"Change of Management or Board Composition " means that **(i)** Borrower's senior management shall not include Gajus Worthington; **(ii)** Versant Ventures or any of its affiliated funds shall cease to have a representative (currently Samuel Colella) serving on Borrower's Board of Directors; or **(iii)** Alloy Ventures or any of its affiliated funds shall cease to have a representative (currently Mike Hunkapiller) serving on Borrower's Board of Directors.

"Commitment One" means the Commitment as that term is used in the Agreement prior to the effect of this Amendment 04.

"Commitment Two" means $10,000,000.

"Commitment Two Warrant" mean the Warrant in favor of Lender to purchase securities of Borrower, substantially in the form *of **Exhibit C-2*** attached to this Amendment 04 and issued in conjunction with Commitment Two.

II. Section 1.1, the following definitions of the Agreement shall be deleted in its entirety and replaced with the following:

"Basic Rate" (i) under Commitment One, as defined in the Notes, as amended pursuant to Amendment No. 01, and (ii) under Commitment Two, as defined in the Notes for Advances under Commitment Two.

"Commitment" means Commitment One and Commitment Two.

"Commitment Fee" means $10,000 under Commitment One and $10,000 under Commitment Two.

"Commitment Termination Date" has occurred for Commitment One, and for Commitment Two it means the earliest to occur of **(i)** July 1, 2008; **(ii)** any Default or Event of Default, or **(iii)** Change of Management or Board Composition (unless Lender has waived this condition in writing).

"Disclosure Schedule" means the Disclosure Schedule delivered to Lender in connection with the execution and delivery of Amendment No. 04 to this Agreement.

"Loan Commencement Date" means **(i)** for Advances under Commitment One, as defined in the Notes, as amended pursuant to Amendment No. 01, and **(ii)** for Advances under Commitment Two, as defined in the Notes for Advances under Commitment Two.

"Note" means (i) in connection with Advances under Commitment One, Secured Promissory Notes in the form *of* ***Exhibit B***, and (ii) in connection with Advances under Commitment Two, Secured Promissory Notes in the form *of* ***Exhibits B-2*** to Amendment 04.

"Notice of Borrowing" means (i) in connection with Advances under Commitment One, the form attached as ***Exhibit D,*** and (ii) in connection with Advances under Commitment Two in the form of ***Exhibit D-2*** attached to Amendment 04.

"Warrant" means (i) all Warrants issued by Borrower to Lender prior to the date of Amendment 04, and (ii) the Commitment Two Warrant.

III. Section 6.2 — Section 6.2 of the Agreement shall be amended deleted in its entirety and replaced with the following:

6.2 Financial Statements, Reports, Certificates. Borrower shall deliver to Lender: **(i)** as soon as prepared, and no later than 30 days after the end of each calendar quarter, a balance sheet, income statement and cash flow statement covering Borrower's operations for each of the three months during such period, provided for each calendar month ending after the calendar quarter ending on September 30, 2008, Borrower shall deliver to Lender as soon as prepared, and no later than 30 days after the end of each calendar month, a balance sheet, income statement and cash flow statement covering Borrower's operations during such period; **(ii)** as soon as prepared, but no later than 90 days after the end of the fiscal year, or such other timeframe formally approved by Borrower's audit committee, audited financial statements prepared in accordance with GAAP, together with an opinion that such financial statements fairly present Borrower's financial condition by an independent public accounting firm reasonably acceptable to Lender; **(iii)** immediately upon notice thereof, a report of any legal or administrative action pending or threatened in writing against Borrower which is likely to result in liability to Borrower in excess of $100,000 (provided that Borrower shall not be required to report notices of possibly relevant third party patents, or proposals or demands to license intellectual property); and **(iv)** such other financial information as Lender may reasonably request from time to time. Financial statements delivered pursuant to subsections **(i)** and **(ii)** above shall be accompanied by a certificate signed by a Responsible Officer (each an *"Officer's Certificate")* in the form *of* ***Exhibit F.***

IV. Section 3 — Conditions of Advances; Procedure for requesting Advances; the following new **Sections 3.2 and 3.3** shall be added:

3.2 Procedure for Making Advances. For any Advance, Borrower shall provide Lender an irrevocable Notice of Borrowing at least 15 business days prior to the desired Funding Date and Lender shall only be required to make Advances hereunder based upon written requests which comply with the terms and exhibits of this Loan Agreement (as the same may be amended from time to time), and which are submitted and signed by a Responsible Officer. Borrower shall execute and deliver to Lender a Note and such other documents and instruments as Lender may reasonably require for each Advance made.

3.3. Conditions Precedent to Initial Advance under Commitment Two. The obligation of Lender to make the Initial Advance under Commitment Two is subject the satisfaction of each of the following conditions:

(a) This Amendment 04 duly executed by Borrower.

(b) The Commitment Two Warrant to be issued to Lender duly executed by Borrower.

(c) Delivery to Ledner of an officer's certificate of Borrower with copies of the following documents attached: **(i)** the certificate of incorporation and by-laws or other organizational documents of Borrower certified by Borrower as being in full force and effect as of the date of Amendment 04, **(ii)** incumbency and representative signatures, and **(iii)** resolutions authorizing the execution and delivery of Amendment 04 and each of the other Loan Documents.

(d) Delivery to Lender of a good standing certificate from Borrower's state of incorporation or formation and the state in which Borrower's principal place of business is located, together with certificates of the applicable governmental authorities stating that Borrower is in compliance with the franchise tax laws of each such state, each dated as of a recent date.

(e) Borrower has obtained all necessary consents of shareholders, members, and other third parties with respect to the execution, delivery and performance of the Agreement, Amendment 04, the Commitment Two Warrant, and the other Loan Documents.

(f) Borrower shall have satisfied all the conditions set forth in **Section 3.1 and 3.2** of the Agreement.

3.4 Reaffirmation Subject to the Disclosure Schedule attached hereto as Schedule 1, Borrower reaffirms the representations and warranties made to Lender in the Agreement as of the date hereof as though fully set forth herein.

3.5 Existing Notes Notes for Advances under Commitment Two are not affected by Amendment No. 01 and Notes for Advances under Commitment One remain subject to Amendment No. 01

V. Further Terms and Conditions of this Amendment 04.

1. Representations and Warranties of Borrower. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that: (i) no Events of Default have occurred and are continuing that have not been disclosed to Lender by Borrower in writing; (ii) it is not and has no reason to believe it may be named as a party to any judicial or administrative proceeding, litigation or arbitration, and has not received any written communication from any person or entity (whether private or governmental) threatening or indicating the same, except to the extent that any such written communication could not reasonably be expected to result in a material adverse effect on Borrower's business; and (iii) it is in full compliance with Section 7.10 of the Loan and Security Agreement.

2. No Control. Borrower warrants and represents, as a significant material inducement to Lender to enter hereinto, that none of Lender nor any affiliate, officer, director, employee, agent, or attorney of Lender have at any time, from Borrower's date of formation through to the date hereof, (i) exercised management or other control over the Borrower, (ii) exercised undue influence over Borrower or any of its officers, employees or directors, (iii) made any representation or warranty, express or implied, to any party on behalf of Borrower, (iv) entered into any joint venture, agency relationship, employment relationship, or partnership with Borrower, (v) directed or instructed Borrower on the manner, method, amount, or identity of payee of any payment made to any creditor of Borrower, and further, Borrower warrants and represents that by entering hereinto with Lender has not, are not and will not have engaged in any of the foregoing.

3. Integration Clause. This Agreement represents and documents the entirety of the agreement and understanding of the parties hereto with respect to its subject matter. All prior understandings, whether oral or written, other than the Loan Documents, are hereby merged hereinto. **NEITHER THE LOAN AND SECURITY AGREEMENT NOR THIS AGREEMENT MAY BE MODIFIED EXCEPT BY A WRITING SIGNED BY LENDER AND BORROWER.** Each provision hereof shall be severable from every other provision when determining its legal enforceability such that Lender's rights and remedies under this Agreement and the Loan Documents may be enforced to the maximum extent permitted under applicable law. This Agreement shall be binding upon, and inure to the benefit of, each party's respective permitted successors and assigns. This Agreement may be executed in counterpart originals, all of which, when taken together, shall constitute one and the same original document. No provision of any other document between Lender and Borrower shall limit the effectiveness hereof or the rights and remedies of Lender against Borrower. In the event of any contradiction or inconsistency among the terms and conditions of this Agreement or any Loan Document, the interpretation most favorable to the interests of Lender shall prevail.

Except as amended hereby, the Agreement remains unmodified and unchanged.

BORROWER:

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington
Name: Gajus Worthington
Title: President and CEO

LENDER:

LIGHTHOUSE CAPITAL PARTNERS V, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS V, L.L.C.,**
its general partner

By: /s/ Thomas Conneely
Name: Thomas Conneely
Title: Vice President

EXHIBIT B-2
(COMMITMENT TWO)

[_____]

SECURED PROMISSORY NOTE

This SECURED PROMISSORY NOTE (this *"Note")* is made _____ , 2008, by **FLUIDIGM CORPORATION** *("Borrower")* in favor of **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** (collectively with its assigns, *"Lender").* Initially capitalized terms used and not otherwise defined herein are defined in that certain Loan and Security Agreement No. 4561 between Borrower and Lender dated March 29, 2005, as amended (the *"Loan Agreement").*

FOR VALUE RECEIVED, Borrower promises to pay in lawful money of the United States, to the order of Lender, at 500 Drake's Landing Road, Greenbrae, California 94904, or such other place as Lender may from time to time designate (*"Lender's Office"),* the principal sum of $_____ (the *"Advance"),* including interest on the unpaid balance and all other amounts due or to become due hereunder according to the terms hereof and of the Loan Agreement.

"Basic Rate" means a fixed per *annum* rate of interest equal 8.5%.

"Final Payment" means 6.5% of the Advance.

"Loan Commencement Date" means January 1,2009.

"Maturity Date" means the last day of the Repayment Period, or if earlier, the date of prepayment under the Note.

"Payment Date" means the first day of each calendar month.

"Prepayment Fee" means (i) if prepaid in the calendar years 2008 or 2009, 3% of the outstanding principal amount being prepaid; (ii) if prepaid in the calendar year 2010, 2% of the outstanding principal amount being prepaid; and (iii) if prepaid in the calendar year 2011 or thereafter, 1% of the outstanding principal amount being prepaid.

"Repayment Period" means the period beginning on the Loan Commencement Date and continuing for 30 calendar months.

1. Repayment. Borrower shall pay principal and interest due hereunder from the Funding Date, until this Note is paid in full, on each Payment Date pursuant to the terms of the Loan Agreement and this Note. Borrower shall pay to Lender, monthly in advance on each Payment Date, interest calculated using the Basic Rate. Beginning on the Loan Commencement Date and on each Payment Date thereafter during the Repayment Period, Borrower shall make equal installments of principal and interest in advance, calculated at the Basic Rate. On the Maturity Date, Borrower shall pay, in addition to all unpaid principal and interest outstanding hereunder, the Final Payment.

2. Interest. Interest not paid when due will, to the maximum extent permitted under applicable law, become part of principal, at Lender's option, and thereafter bear like interest as principal. Interest shall be computed on the basis of a 360 day year. All Obligations not paid when due shall bear interest at the Default Rate unless waived in writing by Lender. All amounts paid hereunder will be applied to the Obligations in Lender's discretion and as provided in the Loan Agreement.

3. Voluntary Prepayment. Borrower may prepay the Note if and only if Borrower pays to Lender **(i)** the outstanding principal amount of this Note and any unpaid accrued interest **(ii)** the Final Payment, **(iv)** the Prepayment Fee, and **(v)** all other sums, if any, that shall have become due and payable hereunder with respect to this Note.

4. Collateral. This Note is secured by the Collateral.

5. Waivers. Borrower, and all guarantors and endorsers of this Note, regardless of the time, order or place of signing, hereby waive notice, demand, presentment, protest, and notices of every kind, presentment for the purpose of accelerating maturity, diligence in collection to the fullest extent permitted by law.

6. Choice of Law; Venue. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH OF BORROWER AND LENDER HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE CITY AND

County of San Francisco, State of California. Borrower and Lender each hereby waive their respective rights to a jury trial of any claim or cause of action based upon or arising out of this Note. Each party further waives any right to consolidate any action in which a jury trial has been waived with any other action in which a jury trial cannot be or has not been waived.

7. Miscellaneous. This Note may be modified only by a writing signed by Borrower and Lender. Each provision hereof is severable from every other provision hereof and of the Loan Agreement when determining its legal enforceability. Sections and subsections are titled for convenience, and not for construction. "Hereof," "herein," "hereunder," and similar words refer to this Note in its entirety. "Or" is not necessarily exclusive. "Including" is not limiting. The terms and conditions hereof inure to the benefit of and are binding upon the parties' respective permitted successors and assigns. This Note is subject to all the terms and conditions of the Loan Agreement.

In Witness Whereof, Borrower has caused this Note to be executed by a duly authorized officer as of the day and year first above written.

Fluidigm Corporation

By: _____

Name: _____

Title: _____

EXHIBIT C-2

NEITHER THIS WARRANT NOR THE SHARES OF CAPITAL STOCK ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE *"1933 ACT")*, OR ANY APPLICABLE STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE COMPANY, TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS.

PREFERRED STOCK PURCHASE WARRANT

Warrant No._____

Number of Shares: initially, 100,000
Series E Preferred Stock
subject to increase as set forth below

FLUIDIGM CORPORATION

Effective as of February 15, 2008

Void after February 15, 2015

1. Issuance. This Preferred Stock Purchase Warrant (the *"Warrant")* is issued to **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** by **FLUIDIGM CORPORATION,** a Delaware corporation (hereinafter with its successors called the *"Company").*

2. Purchase Price; Number of Shares.

(a) The registered holder of this Warrant (the *"Holder"),* commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company, at a price per share of $4.00 (the *"Purchase Price"),* 100,000 fully paid and nonassessable shares of the Company's Series E Preferred Stock, (the *"Exercise Quantity"),* $0.001 par value (the *"Preferred Stock").*

(b) On the Commitment Termination Date, the Exercise Quantity shall automatically be increased by such additional number of shares (rounded to the nearest whole share) of Series E Preferred Stock, if any, as is equal to the amount determined by dividing (A) 8% of the Aggregate Advances under the Loan Agreement, if any, by (B) the Purchase Price

In addition to other terms which may be defined herein, the following terms, as used in this Warrant, shall have the following meanings:

(i) "Aggregate Advances" means the aggregate original dollar amount of all Advances made under Commitment Two of the Loan Agreement, whether such Advances are outstanding or prepaid, at the time of any scheduled adjustment to the Exercise Quantity.

(ii) "Loan Agreement" means that certain Loan and Security Agreement No. 4561 dated March 29, 2005 between the Company and Lighthouse Capital Partners V, L.P., as amended.

Any capitalized term not defined herein shall have the meaning as set forth in the Loan Agreement.

Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons in whose name or

names any certificate representing shares of Preferred Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Preferred Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Preferred Stock as is computed using the following formula:

$$X=\frac{Y(A-B)}{A}$$

where: X= the number of shares of Preferred Stock to be issued to the Holder pursuant to this **Section 4**.
Y= the number of shares of Preferred Stock covered by this Warrant in respect of which the net issue election is made pursuant to this **Section 4**.
A= the Fair Market Value (defined below) of one share of Preferred Stock, as determined at the time the net issue election is made pursuant to this **Section 4**.
B= the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this **Section 4**.

"Fair Market Value" of a share of Preferred Stock (or fully paid and nonassessable shares of the Company's common stock, $0.001 par value (the *"Common Stock"*) if the Preferred Stock has been automatically converted into Common Stock) as of the date that the net issue election is made (the *"Determination Date"*) shall mean:

(i) If the net issue election is made in connection with and contingent upon the closing of the sale of the Company's Common Stock to the public in a public offering pursuant to a Registration Statement under the Securities Act of 1933, as amended (a "*Public Offering*"), and if the Company's Registration Statement relating to such Public Offering ("*Registration Statement"*) has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible.

(ii) If the net issue election is not made in connection with and contingent upon a Public Offering, then as follows:

(a) If traded on a securities exchange or the Nasdaq National Market, the fair market value of the Common Stock shall be deemed to be the average of the closing or last reported sale prices of the Common Stock on such exchange or market over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible;

(b) If otherwise traded in an over-the-counter market, the fair market value of the Common Stock shall be deemed to be the average of the closing ask prices of the Common Stock over the five day period ending five trading days prior to the Determination Date, and the fair market value of the Preferred Stock shall be deemed to be such fair market value of the Common Stock multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible; and

(c) If there is no public market for the Common Stock, then fair market value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Preferred Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant in its entirety, the Holder would, except as provided in this **Section 6,** be entitled to receive a fractional share of Preferred Stock, then the Company shall issue the next higher number of full shares of Preferred Stock, issuing a full share with respect to such fractional share.

7. Expiration Date; Automatic Exercise. This Warrant shall expire at the close of business on February 15, 2015, and shall be void thereafter (the *"Expiration Date").* Notwithstanding the term of this Warrant fixed pursuant to this **Section 7,** and provided Holder has received advance written notice of at least twenty (20) days and has not earlier exercised this Warrant, and provided this Warrant has not been assumed by the successor entity (or parent thereof), upon the consummation of a Merger (as defined below), this Warrant shall automatically be exercised pursuant to **Section 4** hereof, without any action by Holder. *"Merger"* means: (i) a sale of all or substantially all of the Company's assets to an Unaffiliated Entity (as defined below), or (ii) the merger, consolidation or acquisition of the Company with, into or by an Unaffiliated Entity (other than a merger or consolidation for the principle purpose of changing the domicile of the Company or a bona fide round of preferred stock equity financing), that results in the Company's shareholders immediately prior to such merger, consolidation, or acquisition holding, immediately thereafter, less than a majority of the outstanding voting securities of the successor corporation or its parent. *"Unaffiliated Entity"* means any entity that is owned or controlled by parties who own less than twenty percent (20%) of the combined voting power of the voting securities of the Company immediately prior to such merger or sale of assets, consolidation or acquisition. Notwithstanding the foregoing, in the event that any outstanding warrants to purchase equity securities of the Company (it being acknowledged and agreed that options to acquire common stock issued to officers, directors, employees and consultants shall not be deemed "warrants") are assumed by the successor entity of a Merger (or parent thereof), this Warrant shall also be similarly assumed and the automatic exercise provision in this **Section 7** shall have no effect. The Company agrees to give the Holder written notice promptly after it has entered into a definitive agreement relating to any proposed Merger and written notice of termination of any definitive agreement relating to any proposed Merger. Notwithstanding anything to the contrary in this Warrant, (i) the Holder may expressly make any voluntary exercise of this Warrant contingent on, and effective immediately prior to, the consummation of such Merger and (ii) any automatic exercise of this Warrant in connection with a Merger shall be conditioned on consummation of such Merger and shall be effective immediately prior thereto.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Preferred Stock and Common Stock free from all preemptive or similar rights therein, as will be sufficient to permit, respectively, the exercise of this Warrant in full and the conversion into shares of Common Stock of all shares of Preferred Stock receivable upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise and/or conversion will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Preferred Stock, by split-up or otherwise, or combine the Preferred Stock, or issue additional shares of Preferred Stock in payment of a stock dividend on the Preferred Stock, the number of shares of Preferred Stock issuable on the exercise

of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Adjustments for Diluting Issuances. The antidilution rights applicable to the Series E Preferred Stock of the Company are set forth in the Amended and Restated Certificate of Incorporation, as amended from time to time (the "*Articles*"), a true and complete copy in its current form which has been made available to Holder. Such rights shall not be restated, amended or modified in any manner which affects the Holder differently than the holders of outstanding Series E Preferred Stock without such Holder's prior written consent. The Company shall provide the Holder hereof with any restatement, amendment or modification to the Articles promptly after the same has been made.

11. Mergers and Reclassifications. (a) Except as set forth in **Section 7**, If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Preferred Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this **Section 11,** the term "*Reorganization*" shall include without limitation any reclassification, capital reorganization or change of the Preferred Stock (other than as a result of a subdivision, combination or stock dividend provided for in **Section 9** hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Preferred Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

(b) Notwithstanding any other provision of this Warrant, in the event of an automatic conversion of the Company's outstanding Series E Preferred Stock into Common Stock in accordance with the Company's Articles, as in effect from time to time, this Warrant shall thereafter represent the right to acquire for the aggregate Purchase Price (as then in effect) the number of shares of Common Stock into which the number of shares of Preferred Stock issuable upon exercise of this Warrant would have then been convertible.

12. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's chief financial officer (or other appropriate officer) setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least twenty (20) business days prior to the date specified in such notice on which any such action is to be taken.

14. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary corporate power and authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy or similar laws relating to the enforcement of creditors' rights generally.

(b) The shares of Preferred Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Preferred Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Articles or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity (other than such notices or filings as may be required under applicable securities laws).

(d) As long as this Warrant is, or any shares of Preferred Stock issued upon exercise of this Warrant or any shares of Common Stock issued upon conversion of such shares of Preferred Stock are, issued and outstanding, the Company will provide to the Holder the financial and other information described in that certain Loan and Security Agreement No. 4561 between the Company and Lighthouse Capital Partners V, L.P. dated as of March 29, 2005, as amended.

(e) As of the date hereof, the authorized capital stock of the Company consists of (i) 87,385,839 shares of Common Stock, of which 9,946,605 shares are issued and outstanding and 300,000 shares are reserved for issuance upon the exercise of this Warrant with respect to Common Stock and the conversion of the Preferred Stock into Common Stock if this Warrant is exercised with respect to Preferred Stock, (ii) 2,727,273 shares of Series A Preferred Stock, of which 2,727,273 are issued and outstanding shares, (iii) 6,460,675 shares of Series B Preferred Stock, of which 6,460,675 are issued and outstanding shares, (iv) 16,854,624 shares of Series C Preferred Stock, of which 16,364,832 are issued and outstanding shares, (v) 13,962,261 shares of Series D Preferred Stock, of which 13,353,333 are issued and outstanding shares and (vi) 20,109,947 shares of Series E Preferred Stock, of which 17,764,781 are issued and outstanding shares. Company has delivered a capitalization table to Holder summarizing the capitalization of the Company. At the request of Holder, not more than once per calendar quarter, the Company will provide Holder with a current capitalization table indicating changes, if any, to the number of outstanding shares of common stock and preferred stock.

15. Registration Rights. The Company grants, upon effectiveness of the Rights Agreement referenced herein, to the Holder all the rights of a "Holder" and an "Investor" under the Company's Eighth Amended and Restated Investors' Rights Agreement dated as of June 13, 2006, as amended from time to time (the "*Rights Agreement*"), including, without limitation, the registration rights contained therein, and agrees to solicit approval to amend the Rights Agreement so that (i) the shares of Common Stock issuable upon conversion of the shares of Preferred Stock issuable upon exercise of this Warrant shall be "*Registrable Securities,*" and (ii) the Holder shall be a "Holder" and an "Investor" for all purposes of such Rights Agreement.

16. Amendment. The terms of this Warrant may be amended, modified or waived only with the written consent of the Holder and the Company.

17. Representations and Covenants of the Holder. This Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Preferred Stock or the Preferred Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501 of Regulation D, promulgated under the 1933 Act as presently in effect.

(c) Private Issue. The Holder understands (i) that neither the issuance of this Warrant nor the issuance of any shares of the Company's capital stock issuable upon exercise of the Holder's rights contained herein has been registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuances contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof, and (ii) that the Company's reliance on such exemption is predicated on the representations of the Holderset forth in this **Section 17.**

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

18. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Preferred Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon

receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant

19. No Impairment. The Company will not, by amendment of its Articles or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder. In no event shall any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other transaction be deemed an "impairment" for purposes of this Section 18 if the shares of the Company's capital stock issuable upon exercise of this Warrant are affected thereby in the same manner as outstanding shares of such capital stock.

20. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California without giving effect to its principles regarding conflicts of laws.

21. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

22. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

23. Value. The Company and the Holder agree that the value of this Warrant on the date of grant is $100.

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

Subscription

To: _____

Date: _____

The undersigned hereby subscribes for_____shares of Preferred Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____

Signature

_____

Name for Registration

_____

Mailing Address

Net Issue Election Notice

To: _____ Date: _____

The undersigned hereby elects under **Section 4** to surrender the right to purchase shares of Preferred Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____

Signature

_____

Name for Registration

_____

Mailing Address

Assignment

For value received _____ hereby sells, assigns and transfers unto

_____

_____

[Please print or typewrite name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated: _____

_____

Signature

_____

Name for Registration

In the Presence of:

_____

EXHIBIT D-2

NOTICE OF BORROWING

_____, _____

Lighthouse Capital Partners V, L.P.
500 Drake's Landing Road
Greenbrae, CA 94904-3011

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement No. 4561 dated as of March 29, 2005 (as it has been and may be amended from time to time, the *"Loan Agreement,"* initially capitalized terms used herein as defined therein), between **LIGHTHOUSE CAPITAL PARTNERS V, L.P.** and **FLUIDIGM CORPORATION** (the *"Company")*

The undersigned is the President and CEO of the Company, and hereby irrevocably requests an Advance under the Loan Agreement, and in that connection certifies as follows:

1. The amount of the proposed Advance is $_____. The business day of the proposed Advance is _____.

2. The Loan Commencement Date for this Advance shall be March 1, 2006.

3. As of this date, no Event of Default, or event which with notice or the passage of time would constitute an Event of Default, has occurred and is continuing, or will result from the making of the proposed Advance, and the representations and warranties of the Company contained in **Section 5** of the Loan Agreement are true and correct in all material respects.

4. No event that could reasonably be expected to have a material adverse effect on the ability of Borrower to fulfill its obligations under the Loan Agreement has occurred since the date of the most recent financial statements, submitted to you by the Company.

The Company agrees to notify you promptly before the funding of the Advance if any of the matters to which I have certified above shall not be true and correct on the Funding Date.

Very truly yours,

FLUIDIGM CORPORATION

By: _____

Name: _____

Title: _____

Schedule 1

DISCLOSURE SCHEDULE

DEPOSIT AND SECURITIES ACCOUNTS

	Account Information:	**Contact Information for Account:**
Account Number 1	Company Name: Wells Fargo Bank Address: 420 Montgomery Street, 9th Floor City, State, Zip: San Francisco, CA 94104 Phone: Fax: Type of Account: Checking, Payroll Account number: [***], [***]	Contact Name: Gerry Klein Phone: 415.396.2961 Fax: 415.975.7573 E-mail: gerry.h.klein@wellsfargo.com
Account Number 2	Company Name: Morgan Stanley Address: 555 California Street, Suite 1400 City, State, Zip: San Francisco, CA 94104 Phone: 415.576.2016 Fax: 415-576-2060 Type of Account: Investment Account number: [***]	Contact Name: Thomas Piliero/WAXMAN Phone: 415-576-2016 Fax: 415-576-2060 E-mail: Thomas.Piliero@morganstanley.com
Account Number 3	Company Name: Silicon Valley Bank Address: 3003 Tasman Drive, HF 195 City, State, Zip: Santa Clara, CA 95054 Phone: 510.284.1129 Fax: 510.284.1127 Type of Account: Checking, CDs Account number: [***], [***], [***]	Contact Name: Michael White Phone: 415.512.4215 Fax: 415.856.0810 E-mail: mwhite@svbank.com
Account Number 4	Company Name: Comerica Bank Address: 226 Airport Parkway City, State, Zip: San Jose, CA 95110 Phone: 650.213.1716 Fax: 650.213.1710 Type of Account: Checking, Sweep, LC Account number: [***], [***], [***]	Contact Name: Heather Lynam Phone: 650.213.1726 Fax: 650.213.1710 E-mail: hlynam@comerica.com

SUBSIDIARIES

Fluidigm Singapore Pte. Ltd.
Fluidigm KK
Fluidigm Europe BV
Fluidigm France SARL

Prior Names

Mycometrix

Litigation and Administrative Proceedings

None

Business Premises

	Each Location Address where Lighthouse Capital Partners has financed assets:	Landlord/Property Management Information:
Current Headquarters (Location 1)	Contact Name: Jim Neesen Address: 7000 Shoreline Court, Suite 100 City, State, Zip: South San Francisco, CA 94080 Phone: (650) 226-6000 Fax: (650) 871-7152	Contact Name: Bob Farrell, Controller Facility Operations Company Name: Oscient Pharmaceuticals Address: 1000 Winter Street City, State, Zip: Waltham, MA 02451 Phone: (781) 398-2604 Fax: (781) 398-2350 Contact Name: Stephen Richardson Company Name: Alexandria Real Estate Equities, Inc. Address: 2929 Campus Drive, Suite 400-A City, State, Zip: San Mateo, CA 94403 Phone: (650) 286-1200 Fax: (650) 286-1256
Location 2	Contact Name: Mr. Takeshi Iwabuchi Company Name: Fluidigm KK (Sales office) Address: Level 5 Ginza TK Bldg, 1-1-7 Shintomi City, State, Zip: Chuo-Ku, Tokyo, 104-0041 Japan Phone: +813-3555-2351 Fax: +813-3555-2353	Contact Name: Mr. Jyun Kusakabe Company Name: Sankou estate K.K Address: Shibuyanomurasyouken building 1-14-16 Shibuya, Shibuya-Ku, Tokyo, 150-0002 JAPAN Phone: +813-3409-1411 Fax: +813-3409-1413
Location 3	Contact Name: Company Name: Fluidigm KK (Sales Office) Address: Level 3-123 Soukendoshomachi bldg 2-1-10 Doshomachi, Chuo-Ku, Osaka-Shi, Osaka 541-0045 JAPAN City, State, Zip: Osaka Phone: +816-6220-0500 Fax: +816-6220-0660	Contact Name: Ms. Akemi Minamino Company Name: K.K. HIT Address: Level 25 Osakaekimae daisan bldg 1-1-3 Umeda, Kita-Ku, Osaka-Shi Osaka 530-0001 JAPAN Phone: +816-6345-1210 Fax: +816-6347-0660
Location 4	Contact Name: Grace Yow Company Name: Fluidigm Singapore Address: 39 Robinson Road #07-01 Robinson Point City, State, Zip: Singapore 068911 Phone: 65 9748 2922 Fax: 65 62825531	Contact Name: Phoa Cheng Han Company Name: JTC Corporation Address: 8 Jurong Town Hall Road City, State, Zip: Singapore 609434

Please see attached Disclosure Schedule which by this reference shall be deemed to be a part hereof.

Exhibit 4.5

FLUIDIGM CORPORATION

CONVERTIBLE NOTE PURCHASE AGREEMENT

(US$15 Million Credit Facility)

August 7, 2006

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(Continued)

EXHIBITS

Fluidigm Corporation

CONVERTIBLE NOTE PURCHASE AGREEMENT
(US$15 Million Credit Facility)

This **Convertible Note Purchase Agreement** (the "**Agreement**") is made as of August 7, 2006, by and between Fluidigm Corporation, a California corporation (the "**Company**"), and Biomedical Sciences Investment Fund Pte Ltd ("**Purchaser**").

WHEREAS, the Purchaser has agreed to purchase, pursuant to the terms of this Agreement and upon the election of the Company, up to US$15,000,000 in aggregate principal of Convertible Promissory Notes of the Company;

WHEREAS, the Purchaser has agreed that the Company may elect to sell to the Purchaser within the time periods set forth herein, and the Purchaser has agreed to purchase should the Company so elect, a Convertible Promissory Note in the principal amount of US$5,000,000 in substantially the form attached hereto as Exhibit A (the "**First Note**"), the principal and interest on which are convertible into shares of Series E Preferred Stock of the Company upon the happening of certain events described in the First Note;

WHEREAS, provided that the First Note has converted (as set forth in the First Note), the Purchaser has agreed that the Company may elect to sell to the Purchaser within the time periods set forth herein, and Purchaser has agreed to purchase should the Company so elect, a second Convertible Promissory Note of the Company in the principal amount of US$5,000,000, in substantially the form attached hereto as Exhibit B (the "**Second Note**"), the principal and interest on which are convertible into shares of Series E Preferred Stock of the Company upon the happening of certain events as described in the Second Note; and

WHEREAS, provided that the Second Note has converted (as set forth in the Second Note), the Purchaser has agreed that the Company may elect to sell to the Purchaser within the time periods set forth herein, and Purchaser has agreed to purchase should the Company so elect, a third Convertible Promissory Note of the Company in the principal amount of US$5,000,000, in substantially the form attached hereto as Exhibit C (the "**Third Note**," and together with the First Note and the Second Note, an "**Additional Note**" or the "**Additional Notes**"), the principal and interest on which are convertible into shares of Series E Preferred Stock of the Company upon the happening of certain events as described in the Third Note.

NOW, THEREFORE, the parties hereby agree as follows:

1. The First Note.

1.1 Authorization; Purchaser's Obligation to Purchase. The Purchaser shall, at the Company's election and in accordance with the procedures set forth in this Section 1, purchase the First Note. Such election shall indicate that the Company has authorized the sale and issuance of the First Note in the principal amount of US$5,000,000, convertible (i) at the election of the Purchaser, (ii) upon the achievement of certain Milestones (as set forth in the First Note), or (iii) as otherwise as set forth in the First Note into shares of Series E Preferred Stock of the Company at a conversion price of US$3.60 per share. Shares of Series E Preferred Stock together with any other securities which may be issued upon conversion of any of the Additional Notes are referred to herein as the "**Note Shares**." The Additional Notes, the Note Shares and securities of the Company issued or issuable upon conversion thereof are referred to herein as the "**Securities**."

1.2 First Note Procedure. Subject to Section 1.1, the Company may exercise its option to require the Purchaser to purchase the First Note at any time on or before September 30, 2006 by giving Purchaser written notice thereof (the "**First Note Election Notice**"). The First Note Election Notice shall state that the Company has elected to require the Purchaser to purchase the First Note and shall indicate the date, time, and location of the closing of the purchase and sale of the First Note (the "**First Note Closing**"), which shall occur no sooner than 14 days or later than 25 days after the date of the First Note Election Notice.

1.3 Closing of First Note Purchase. At the First Note Closing, the Company shall deliver to the Purchaser the First Note and a duly executed Compliance Certificate in the form attached hereto as Exhibit D (the "**Compliance Certificate**"). At the First Note Closing, the Purchaser shall deliver to the Company (i) the aggregate principal amount of the First Note totalling US$5,000,000 by check or wire transfer and (ii) the Investment Representation Statement, duly executed by Purchaser, in the form attached hereto as Exhibit E (the "**Investment Representation Statement**").

1.4 Effect of Change in Series E Preferred Stock. The form of the First Note will be modified upon the happening of certain events as set forth in Section 5.2(d).

2. Representations and Warranties of the Company. Except as set forth in the Schedule of Exceptions dated of even date hereof and separately delivered to Purchaser contemporaneously with the execution and delivery of this Agreement (the "**Schedule of Exceptions**"), the Company represents and warrants to Purchaser as of the date hereof as follows:

2.1 Organization, Good Standing and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has all requisite corporate power and authority to carry on its business as currently conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify, individually or in the aggregate, would have a material adverse effect on its business (as now conducted), properties, or financial condition.

2.2 Corporate Power. The Company has all requisite legal and corporate power and authority to execute and deliver this Agreement and to carry out and perform its obligations under the terms of this Agreement. Subject to the corporate authorization of and election to sell and issue any of the Additional Notes hereunder, the Company will have all requisite legal and corporate power and authority to (i) sell and issue the Additional Notes hereunder and (ii) issue the Series E Preferred Stock initially issuable upon conversion of any of the Additional Notes.

2.3 Subsidiaries. The Company does not presently own or control, directly or indirectly, any interest in any other corporation, association, or other business entity.

2.4 Capitalization. The authorized capital stock of the Company consists of 77,857,144 shares of Common Stock ("**Common Stock**"), of which 9,422,895 shares are issued and outstanding and 51,687,948 shares of Preferred Stock ("**Preferred Stock**"), 2,727,273 of which are designated Series A Preferred Stock of which 2,727,273 are outstanding, 6,460,675 of which are designated Series B Preferred Stock of which 6,460,675 are outstanding, 17,000,000 of which are designated Series C Preferred Stock, 16,364,832 of which are issued and outstanding, 15,500,000 of which are designated Series D Preferred Stock, 12,196,191 of which are issued and outstanding, and 10,000,000 of which are designated Series E Preferred Stock, 1,250,000 of which are issued and outstanding. All such issued and outstanding shares have been duly authorized and validly issued in compliance with applicable laws, and are fully paid and nonassessable.

In connection with the sale and issuance of any Additional Notes, the Company will have reserved 4,166,667 shares of Series E Preferred Stock for issuance upon conversion of such Additional Note (the "**Conversion Shares**") and 4,166,667 shares of Common Stock for issuance upon conversion of such Conversion Shares. As of the date of this Agreement, the Company has reserved: (i) 10,000,000 shares of Common Stock for issuance upon conversion of the outstanding shares of Series E Preferred Stock; (ii) 12,196,191 shares of Common Stock for issuance upon conversion of the outstanding shares of Series D Preferred Stock; (iii) 408,928 shares of Series D Preferred Stock for issuance upon exercise of outstanding warrants and 408,928 shares of Common Stock for issuance upon conversion of such Series D Preferred Stock; (iv) 16,364,832 shares of Common Stock for issuance upon conversion of the outstanding shares of Series C Preferred Stock; (v) 294,868 shares of Series C Preferred Stock for issuance upon exercise of outstanding warrants and 294,868 shares of Common Stock for issuance upon conversion of such Series C Preferred Stock; (vi) 6,460,675 shares of Common Stock for issuance upon conversion of the outstanding Series B Preferred Stock; (vii) 2,727,273 shares of Common Stock for issuance upon conversion of the outstanding Series A Preferred Stock; and (viii) an aggregate of 10,800,000 shares of Common Stock for issuance to employees and consultants of the Company pursuant to the Company's 1999 Stock Plan, pursuant to which options to purchase 5,276,828 shares are granted and outstanding and 1,727,039 shares are available for future grant. Other than with respect to the shares reserved for issuance in the preceding sentence, or as set forth in this Agreement, the Investor Rights Agreement (as defined below) or the Voting Agreement (as defined below), there are no outstanding rights, options, warrants, conversion rights, preemptive rights, rights of first refusal or similar rights for the purchase or acquisition from the Company of any securities of the Company. There are no outstanding obligations of the Company to repurchase or redeem any of its securities.

Except as contemplated in the Eighth Amended and Restated Investor Rights Agreement dated June 13, 2006 (the "**Investor Rights Agreement**"), the Company has not granted or agreed to grant any registration rights, including piggyback rights, to any person or entity. Except as contemplated in the Second Amended and Restated Voting Agreement dated August 16, 2005 (the "**Voting Agreement**"), the Company is not a party or subject to any agreement or understanding, and to the Company's knowledge, there is no agreement or understanding between any person or entities, which relates to the voting or the giving of written consents with respect to any security of the Company or by a director of the Company.

2.5 Authorization. All corporate action on the part of the Company, its officers, directors and shareholders necessary for the authorization, execution and delivery of this Agreement, the performance of all obligations of the Company under this Agreement has been taken, subject to corporate authorization of any election to require the Purchasers to purchase Additional Notes pursuant to this Agreement. This Agreement constitutes a valid and legally binding obligation of the Company, enforceable in accordance with its terms, subject to: (i) judicial principles limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights.

2.6 Valid Issuance of Note and Conversion Shares. Any Additional Note that is purchased by the Purchaser hereunder, when issued, sold and delivered in accordance with the terms of this Agreement, will be free of restrictions on transfer other than restrictions on transfer under this Agreement, such Additional Note, and the Investor Rights Agreement and under applicable state and federal securities laws as in effect on the date of issuance of such Additional Note. Any Conversion Shares (and the shares of Common Stock issuable upon conversion thereof) will have been duly and validly reserved for issuance, and, upon issuance in accordance with the terms of the applicable Additional Note and the Amended and Restated Articles of Incorporation of the Company as amended through the date of issuance of such Additional Note (the "**Restated Articles**"), will be duly and validly issued, fully paid, and nonassessable and will be free of restrictions on transfer other than restrictions on transfer under this Agreement, the terms of the applicable Additional Note, and the Investor Rights Agreement and under applicable state and federal securities laws as in effect on the date of issuance of such Additional Note. The Conversion Shares (and the shares of Common Stock issuable upon conversion thereof) may be issued without any registration or qualification under state and federal securities laws as such laws are in effect as of the date of this Agreement.

2.7 Governmental Consents. As of the date of this Agreement, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Company would be required in connection with the offer, sale or issuance of any of the Additional Notes or the Conversion Shares (and the shares of Common Stock issuable upon conversion thereof) or the consummation of any other transaction contemplated hereby, except in connection with the sale and issuance of Additional Notes for filings that may be required pursuant to applicable federal and state securities laws and blue sky laws, which filings, the Company covenants to complete within the required statutory period.

2.8 Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company before any court, administrative agency or other governmental body which questions the validity of this Agreement or the Investor Rights Agreement or the right of the Company to enter into any of them, or to consummate the transactions contemplated hereby or thereby, or which could result, either individually or in the aggregate, in any material adverse change in the condition (financial or otherwise), business, property, assets or liabilities of the Company, nor is the Company aware that there is any basis for the foregoing. The Company is not a party or subject to, and none of its assets is bound by, the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality. There is no action, suit, proceeding or investigation by or involving the Company currently pending or that the Company intends to initiate.

2.9 Employees. Each employee of the Company has executed a proprietary information and invention assignment agreement substantially in the form or forms made available to the Purchaser. To the Company's knowledge, no officer or key employee is in violation of any prior employee contract or proprietary information agreement. No employees of the Company are represented by any labor union or covered by any collective bargaining agreement. There is no pending or, to the Company's knowledge, threatened labor dispute involving the Company and any group of its employees. The Company is not aware that any officer or key employee intends to terminate his or her employment with the Company within the six months after the date of this Agreement. The Company does not have a present intention to terminate the employment of any officer or key employee. Each officer and key employee is devoting 100% of his or her business time to the conduct of the business of the Company. The Company is not aware that any officer or key employee intends to work less than full time during the six months after the date of this Agreement. Subject to general principles related to wrongful termination of employees, the employment of each officer and employee of the Company is terminable at will.

2.10 Patents and Other Intangible Assets.

(a) The Company owns, or is licensed or otherwise has the legally enforceable right to use, all copyrights, domain names, maskworks, applications for the issuance or registration of any of the foregoing, trade secrets, confidential or proprietary know-how, data and information, ideas, inventions, designs, developments, algorithms, processes, schematics, techniques, computer programs, applications and other software, works of authorship, creative effort and, to the Company's knowledge after such investigation as the Company deemed reasonable, patents, patent applications, trademarks (including service marks and design marks) and applications therefor, tradenames (all of the foregoing generically, "**Intellectual Property Rights**") utilized in, or necessary for, its business as now conducted (collectively, the "**Company Intellectual Property**") without infringing upon the right of any person, corporation or other entity.

(b) Section 2.10 of the Schedule of Exceptions lists (i) all patents and patent applications and all registered and unregistered trademarks, trade names, copyrights and maskworks and registered domain names included in the Company Intellectual Property, including the jurisdictions in which each such intellectual property right has been issued or registered or in

which any application for such issuance or registration has been filed, (ii) all licenses, sublicenses, collaborations and other agreements (or options for any of the foregoing) to which the Company is a party and pursuant to which any person, corporation or other entity is authorized to use any of the Company Intellectual Property, and (iii) all licenses, sublicenses, collaborations and other agreements (or options for any of the foregoing) to which the Company is a party and pursuant to which the Company is authorized to use any Intellectual Property Right of any third party (other than standard licenses for commercially available software). Each of the agreements in (ii) and (iii) above remain in full force and effect and, to the Company's knowledge, no party to any such agreement is in material breach or default under such agreement, and the Company is not aware of any act or failure to act by a party which would constitute a material breach or default under any such agreement, give rise to a right of the licensor to terminate any such agreement or otherwise result in termination of, or suspension or loss of exclusive rights under, any such agreement.

(c) To the Company's knowledge, the Company has not infringed or misappropriated any Intellectual Property Right of any other person, corporation or other entity. The Company has not received any communication or otherwise received any information alleging any such conduct by the Company or asserting a claim by any third party to the ownership of, or right to use, any of the Company Intellectual Property, and the Company does not know of any basis for any such claim. The Company is not aware of any action, suit, proceeding or investigation pending or currently threatened against the Company (or any third party owner or licensor of rights to the Company of any of the Company Intellectual Property) which would have a material impact on the Company's ownership of or exclusive or co-exclusive rights to use, the Company Intellectual Property.

(d) The Company is not aware that any of its employees is obligated under any agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with his or her ability to fully and freely perform their duties to the Company or that would conflict with the Company's business. To the Company's knowledge, neither the execution and delivery of this Agreement nor the issuance of any of the Additional Notes nor the carrying on of the Company's business by the employees of the Company, will conflict with or result in a material breach of the terms, conditions, or provisions of, or constitute a default under, any agreement under which any such employee is now obligated. The Company does not utilize, and will not be required to utilize, any invention, development or work of authorship of any of its employees (or persons it currently intends to hire) made prior to their employment by the Company.

(e) Except as described in Schedule 2.10, (i) the Company is not obligated, or under any liability whatsoever to make any payments by way of royalties, fees or otherwise, to any owner or licensor of, or other claimant to, any Company Intellectual Property, and (ii) the Company is not a party to any agreement concerning the Company Intellectual Property or any other Intellectual Property Right used or to be used by the Company in its business as conducted. No founder, director, officer or employee of the Company, or, to the Company's knowledge, no shareholder of the Company has any interest in the Company Intellectual Property.

(f) Except with respect to any rights granted under the agreements described in Schedule 2.10, the Company owns exclusively all rights arising from or associated with the research and development efforts of the Company, its founders, employees and independent contractors relating to the Company's business as now conducted, and all such rights form part of the Company Intellectual Property. The Company has secured valid written assignments from all employees and independent contractors who contributed to the creation or development of any of the Company Intellectual Property of the rights to such contributions that the Company does not already own by operation of law. The Company has not received notice of any claim being asserted by any current or former employee, independent contractor or other third party to the ownership, of or right to use, any of the Company Intellectual Property, or challenging or questioning the validity of any of the Company Intellectual Property, and the Company is not aware of any basis for any such claim.

(g) The Company has taken reasonable steps to protect and preserve the confidentiality of all material trade secrets included in Company Intellectual Property not otherwise protected by patents or copyright ("**Confidential Information**"). All disclosure of Confidential Information to a third party has been pursuant to the terms of a written confidentiality or non-disclosure agreement between the Company and such third party.

(h) The Company hereby represents and warrants that the data, written and oral reports and other representations and information that the Company provided to its investors (or their counsel) pertaining to the Company Intellectual Property, when taken as a whole, were truthful and, to the Company's knowledge, accurate in all material respects, and there was no omission therefrom which made such information misleading, or incomplete in any material way.

2.11 Compliance with Other Instruments. The Company is not in violation or default of any provision of its Articles of Incorporation or Bylaws, each as amended and in effect on and as of the date hereof. The Company is not in violation or default of any material provision of any instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation to which it is a party or by which it or any of its properties or assets are bound or, to the best of its knowledge, of any provision of any federal, state or local statute, rule or governmental regulation. The execution, delivery and performance of and compliance with this Agreement, the Investor Rights Agreement and the Voting Agreement and the issuance and sale of the Additional Notes, will not result in any such violation, be in conflict with or constitute, with or without the passage of time or giving of notice, a default under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation; or require any consent or waiver under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation (other than any consents or waivers that have been obtained); or result in the creation of any mortgage, pledge, lien, encumbrance or charge upon any of the properties or assets of the Company pursuant to any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order or obligation.

2.12 Permits. The Company has all franchises, permits, licenses, and any similar authority necessary for the conduct of its business as now being conducted by it. The Company is not in default in any material respect under any of such franchises, permits, licenses, or other similar authority.

2.13 Environmental and Safety Laws. To its knowledge, the Company is not in violation of any applicable statute, law, or regulation relating to the environment or occupational health and safety, and to its knowledge, no material expenditures by the Company are or will be required in order to comply with any such existing statute, law, or regulation.

2.14 Title to Property and Assets. The Company has good and marketable title to all of its properties and assets free and clear of all pledges, mortgages, liens, security interests, charges and encumbrances, except liens for current taxes and assessments not yet due and possible minor liens and encumbrances which do not, in any case, individually or in the aggregate, materially detract from the value of the property subject thereto or materially impair the ownership or use of said property or assets, or the operations of the Company. With respect to the property and assets it leases, the Company is in compliance with such leases and, to the best of its knowledge, holds a valid leasehold interest free of all liens, claims or encumbrances. The Company's properties and assets are in good condition and repair in all material respects.

2.15 Agreements; Action.

(a) Except for agreements contemplated by this Agreement, there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, affiliates, or any affiliate thereof other than standard option grants and stock purchase agreements entered into prior to the date of this Agreement.

(b) There are no agreements, understandings, instruments, contracts, proposed transactions, judgments, orders, writs or decrees to which the Company is a party or by which it is bound that may involve (i) obligations (contingent or otherwise) of, or payments by the Company in excess of, US$100,000, other than in the ordinary course of business, (ii) the license of any patent, copyright, trade secret or other proprietary right to or from the Company other than standard commercial software licenses, (iii) provisions restricting or adversely affecting the development, manufacture or distribution of the Company's products or services, or (iv) indemnification by the Company with respect to infringements of proprietary rights other than indemnifications entered into in the ordinary course of business.

(c) For the purposes of subsection (b) above, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same person or entity (including persons or entities the Company has reason to believe are affiliated therewith) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(d) The Company is not a party to and is not bound by any contract, agreement or instrument, or subject to any restriction under its Restated Articles or its Bylaws that adversely affects its business as now conducted, its properties or its financial condition.

(e) The Company is not a guarantor or indemnitor of any indebtedness of any other person or entity.

(f) The Company has not engaged in the past three months in any discussion (i) with any representative of any entity or entities regarding the merger of the Company with or into any such entity or entities or any affiliate thereof, (ii) with any representative of any entity or any individual regarding the sale, conveyance or disposition of all or substantially all of the assets of the Company or a transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company would be disposed of, or (iii) regarding any other form of liquidation, dissolution or winding up of the Company.

2.16 Financial Statements. The Company has fully provided the Purchaser with all the information that the Purchaser has requested for deciding whether to enter into this Agreement and to acquire the Additional Notes. The Company has made available to Purchaser its audited balance sheets dated as of December 31, 2005 and the audited statement of operations for the fiscal year then ended, its unaudited balance sheets as of March 31, 2006, and its unaudited statement of operations and cash flow statement covering the three month period then ended (collectively, the "**Financial Statements**"). The Financial Statements are complete and correct in all material respects and have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated. The Financial Statements accurately set out and describe the financial condition and operating results of the Company as of the date, and during the periods, indicated therein. Except as set forth in the Financial Statements, the Company has no material liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to March 31, 2006 and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate are not material to the financial condition or operating results of the Company.

2.17 Changes. Since March 31, 2006:

(a) the Company has not (i) declared or paid any dividends or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or any other liabilities outside the ordinary course of its business individually in excess of US$100,000 or, in the case of indebtedness and/or liabilities individually less than US$100,000, in excess of US$200,000 in the aggregate, (iii) made any loans or advances to any person, other than ordinary advances for reimbursable businesses expenses, (iv) sold, exchanged, assigned, transferred, licensed or otherwise disposed of any of its assets or rights (including Company Intellectual Property), other than the sale of its inventory in the ordinary course of business, (v) waived or compromised a valuable right or a material debt owed to it, (vi) materially changed any compensation arrangement or agreement with any employee, officer,

director or shareholder, or (vii) arranged or committed to do any of the things described in this subsection (a); and

(b) there has not been (i) a loss of, or a material order cancellation by, any major customer of the Company, (ii) any damage, destruction or loss, whether or not covered by insurance, materially and adversely affecting the business, properties, or financial condition of the Company, (iii) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business that have not been, in the aggregate, materially adverse, (iv) any resignation or termination of any officer or key employee of the Company, and the Company is not aware of the impending resignation or termination of employment of any such officer, or (v) to the best of the Company's knowledge, any other event or condition of any character that would materially and adversely affect the business, properties, or financial condition of the Company.

2.18 Brokers or Finders. The Company has not agreed to incur, directly or indirectly, any liability for brokerage or finders' fees, agents' commissions or other similar charges in connection with this Agreement or any of the transactions contemplated hereby.

2.19 Employee Benefit Plans. The Company does not have any Employee Benefit Plan as defined in the Employee Retirement Income Security Act of 1974 other than the Company's 401(k) Plan. The Company is in material compliance with the terms of the Company's 401(k) Plan and has not received notice of any material increase in the costs of such plans.

2.20 Tax Matters. The Company has filed all tax returns and reports as required by law. These returns and reports are true and correct in all material respects. The Company has paid all taxes and other assessments due. The Company has not elected pursuant to the Code, to be treated as a Subchapter S corporation or a collapsible corporation pursuant to Section 1362(a) or Section 341(f) of the Code, nor has it made any other elections pursuant to the Code (other than elections that relate solely to methods of accounting, depreciation or amortization) that would have a material effect on the business, properties or condition (financial or otherwise) of the Company. None of the Company's tax returns have ever been audited by any governmental authorities. The Company has withheld or collected from each payment made to its employees the amount of all taxes (including without limitation, federal income taxes, Federal Insurance Contribution Act taxes and Federal Unemployment Tax Act taxes) required to be withheld or collected therefrom, and has paid the same to the proper tax receiving officers or authorized depositories.

2.21 Insurance. The Company has in full force and effect fire and casualty insurance policies, with extended coverage, sufficient in amount (subject to reasonable deductibles) to allow it to replace any of its properties that might be damaged or destroyed. The Company has obtained term life insurance payable to the Company on the lives of Stephen Quake and Gajus Worthington in the amount of US$500,000. The Company has in full force and effect directors and officers liability insurance, covering its directors, with aggregate coverage in the amount of US$2,000,000.

2.22 Corporate Documents. The Restated Articles and By-Laws of the Company are in the form made available to the Purchaser. The copy of the minute books of the Company made available to Purchaser's counsel contains true and correct minutes of all meetings of directors (including any committees thereof) and shareholders and all actions by written consent taken without a meeting by the directors and shareholders since December 18, 2003.

2.23 Disclosure. The Company has fully provided Purchaser with all the information which Purchaser has requested in connection with the purchase of the Additional Notes hereunder, as well as all information which the Company in its judgment believes is reasonably necessary to enable Purchaser to make a decision as to whether to enter into this Agreement and to invest in the Company. Neither this Agreement with the Exhibits hereto, nor any other statements, certificates or documents made or delivered in connection herewith or therewith, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements herein or therein not misleading in light of the circumstances under which they were made. The financial projections made available to the Purchaser (the "**Projections**") were prepared in good faith and based upon assumptions that the Company believes are reasonable, and represent the Company's good faith estimate of its future plans and results; provided however, that the Company does not represent or warrant that it will achieve any of the Projections.

2.24 Offering. Subject in part to the truth and accuracy of Purchaser's representations set forth in this Agreement, the offer, sale and issuance of the Additional Notes as contemplated by this Agreement would be, if issued as of this date of this Agreement, exempt from the registration requirements of the Securities Act of 1933, as amended (the "**Securities Act**"), and neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemption.

2.25 Returns and Complaints. The Company has not received customer complaints concerning alleged defects in the design of its products that, if true, would have, individually or in the aggregate, a material adverse effect on its business, properties, or financial condition.

3. Representations and Warranties of the Purchasers. Purchaser hereby represents, warrants and agrees as follows:

3.1 Experience. Purchaser is experienced in evaluating start-up companies such as the Company, is able to evaluate and represent its own interests in transactions such as the one contemplated by this Agreement, has such knowledge and experience in financial and business matters such that Purchaser is capable of evaluating the merits and risks of Purchaser's investment in the Company, and has the ability to bear the economic risks of its investment.

3.2 Investment. Purchaser is acquiring and will acquire, the Securities, for investment for Purchaser's own account and not with the view to, or for resale in connection with, any distribution thereof. Purchaser understands that the Securities have not been registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act, which depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein. Purchaser further represents that it does not have any contract, undertaking,

agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to any of the Securities other than a transfer not involving a change of beneficial ownership. Purchaser understands and acknowledges that the offering of the Securities pursuant to this Agreement will not be registered under the Securities Act on the ground that the sale provided for in this Agreement is exempt from the registration requirements of the Securities Act.

3.3 Rule 144. Purchaser acknowledges that the Securities must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser is aware of the provisions of Rule 144 promulgated under the Securities Act, which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions. Purchaser covenants that, in the absence of an effective registration statement covering the securities in question, Purchaser will sell, transfer, or otherwise dispose of the Securities only in accordance with applicable securities laws and in a manner consistent with Purchaser's representations and covenants set forth in this Agreement and the applicable Additional Note. In connection therewith, Purchaser acknowledges that the Company will make a notation on its stock books regarding the restrictions on transfer set forth in this Agreement and the applicable Additional Note and will transfer securities on the books of the Company only to the extent not inconsistent therewith.

3.4 No Public Market. Purchaser understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Securities.

3.5 Access to Data. Purchaser has received and reviewed information about the Company and has had an opportunity to discuss the Company's business, management and financial affairs with its management and to review the Company's facilities.

3.6 Authorization. This Agreement when executed and delivered by the Purchaser will constitute a valid and legally binding obligation of the Purchaser, enforceable against the Purchaser in accordance with its terms, subject to: (i) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights.

3.7 Accredited Investor. Purchaser acknowledges that it is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated by the United States Securities and Exchange Commission (the "**Commission**") under the Securities Act and shall submit to the Company such further assurances of such status as may be reasonably requested by the Company. The principal address of such Purchaser is as set forth on the signature page hereto.

3.8 Public Solicitation. Purchaser knows of no public solicitation or advertisement of an offer in connection with the proposed issuance and sale of the Securities.

3.9 Tax Advisors. Purchaser has reviewed with its own tax advisors the tax consequences of the purchase of the Securities and the transactions contemplated by this Agreement.

Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents and understands that Purchaser (and not the Company) shall be responsible for the Purchaser's own tax liability that may arise as a result of the Purchase of the Securities or the transactions contemplated by this Agreement.

3.10 Purchaser Counsel. Purchaser acknowledges that it has had the opportunity to review this Agreement and the exhibits hereto and the transactions contemplated by this Agreement with its own legal counsel. Purchaser is relying solely on such counsel and not on any statements or representations of the Company or any of its agents for legal advice with respect to this investment or the transactions contemplated by this Agreement.

3.11 Brokers or Finders. The Company has not incurred and will not incur, directly or indirectly, as a result of any action taken by such Purchaser, any liability for brokerage or finders' fees or agents' commissions or any similar changes in connection with this Agreement.

3.12 Non-United States Persons. Purchaser hereby represents that Purchaser is satisfied as to the full observance of the laws of Purchaser's jurisdiction in connection with any invitation to subscribe for the Securities and the Additional Notes (and securities issuable upon conversion thereof) or any use of this Agreement, including (i) the legal requirements within Purchaser's jurisdiction for the purchase of the Securities and the Additional Notes (and securities issuable upon conversion thereof), (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of such securities. Purchaser's subscription and payment for, and Purchaser's continued beneficial ownership of, the Securities and the Additional Notes (and securities issuable on conversion thereof) will not violate any applicable securities or other laws of Purchaser's jurisdiction.

4. Covenants of the Company. The Company hereby covenants and agrees as follows:

4.1 Subsidiary Business Plan. The Company has incorporated a wholly owned (either directly or indirectly through another subsidiary of the Company) subsidiary of the Company in Singapore (the "**Subsidiary**"). Unless prohibited by applicable law, or unless the Company and the Purchaser otherwise agree in writing, from and after incorporation of the Subsidiary, the Company shall cause the Subsidiary to use commercially reasonable efforts to conduct, its activities materially in accordance with the provisions of the business plan as established by the Board of Directors of the Subsidiary and described to the Purchaser, including the Subsidiary's plans with respect to the BioMark II project, as may be modified as set forth in this Section 4.1 (the "**Subsidiary Business Plan**"); provided, however, that the Company and the Subsidiary shall have no such obligation in the event the Subsidiary does not receive a grant under the Singapore Research Incentive Scheme for Companies ("**RISC**") and tax incentives from the Economic Development Board of Singapore (the "**EDB**") consistent with the application submitted by the Company to the EDB. Notwithstanding any provision in this Agreement to the contrary, the Company and Purchaser agree that the Subsidiary Business Plan may only be modified by the Board of Directors of the Subsidiary.

4.2 Subsidiary Board of Directors. Unless the Purchaser or its affiliates (as such term is defined under Rule 12b-2 promulgated by the Commission under the Securities Exchange Act of 1934, as amended) shall fail to hold 500,000 shares of the Company's Common Stock (on an as converted basis), the Company agrees that it will vote the voting securities of the Subsidiary now or hereafter held by the Company in such a manner as may be necessary to elect a nominee of Purchaser to the Board of Directors of the Subsidiary (the "**Nominee**"). The Purchaser may notify the Company in writing of an intention to remove from the Subsidiary's Board of Directors any incumbent Nominee or notify the Company in writing of an intention to select a new Nominee. In such event the Company shall take reasonable actions necessary to facilitate such removal and election of the new Nominee to the Board of Directors of the Subsidiary.

4.3 Affirmative Covenants. So long as any of the Additional Notes (if issued) shall remain unpaid or unconverted or the Purchaser shall have any obligation to purchase any of the Additional Notes hereunder, the Company agrees that:

4.4 Preservation of Existence. It will maintain and preserve, through itself or any successor to its business, its corporate existence and its rights to transact business and will maintain and preserve, through itself or any successor to its business, such other rights, franchises and privileges as it may in good faith determine necessary or desirable in the normal course of its business and operations and the ownership of its material properties.

4.5 Payment of Taxes. It will pay and discharge all taxes, fees, assessments and governmental charges or levies imposed upon it or upon its properties or assets prior to the date on which material penalties attach thereto, and all lawful claims for labor, materials and supplies which, if unpaid, might become a material lien upon any properties or assets of the Company, except to the extent such taxes, fees, assessments or governmental charges or levies, or such claims, are being contested in good faith by appropriate proceedings and are adequately reserved against in accordance with generally accepted accounting principles.

4.6 Compliance with Laws. It will comply in all material respects with the requirements of all applicable laws, rules, regulations and orders of any governmental authority and the terms of any material indenture, contract or other instrument to which it may be a party or under which it or its properties may be bound, except to the extent failure to so comply would not have a material adverse effect on the Company's business.

4.7 Maintenance of Properties. It will use commercially reasonable efforts to maintain and preserve all of its material properties, as it may in good faith determine to be necessary or useful in the proper conduct of its business, in good working order and condition in accordance with the general practice of other corporations of similar character and size, ordinary wear and tear accepted.

4.8 Government Authority. It will use commercially reasonable efforts to obtain and maintain all authorizations, consents, filings, exemptions, registrations and other governmental approvals necessary in connection with the execution, delivery and performance of this Agreement, the consummation of the transactions contemplated hereby or the operation and conduct of its

business and ownership of its properties, except to the extent such failure to obtain or maintain would not have a material adverse effect on the Company's business or financial condition or its ability to deliver or perform under this Agreement or consummate the transactions contemplated hereby.

4.9 Opinion of Company Counsel. Contemporaneously with the execution and delivery of this Agreement, the Purchaser will receive from Wilson Sonsini Goodrich & Rosati, P.C., counsel for the Company, an opinion, dated as of the date of this Agreement, in the form attached hereto as Exhibit F (the "**Legal Opinion**"), relating to the sale and issuance of the First Note pursuant to this Agreement.

5. Covenants of the Purchaser. The Purchaser hereby covenants and agrees as follows:

5.1 Transfers. Purchaser shall be bound by the restrictions on transfer of the Securities as set forth in the applicable Additional Note. Any permitted purchaser, assignee, transferee or pledgee of securities issued on conversion of the applicable Additional Note shall agree in writing to take and hold such securities subject to and upon the conditions set forth in the this Agreement, the applicable Additional Note, the Investor Rights Agreement, and the Voting Agreement, as each may be amended from time to time.

5.2 Additional Convertible Promissory Notes.

(a) Purchaser's Obligation to Purchase. In the event that the First Note is converted as set forth in the First Note, the Purchaser shall, at the Company's election, purchase the Second Note in the principal amount of US$5,000,000 (the "**Additional Note Principal**") in accordance with Section 5.2(b), and in the event the Second Note is converted as set forth in the Second Note, the Purchaser shall, at the Company's election, purchase the Third Note in the principal amount equal to the Additional Note Principal in accordance with Section 5.2(b).

(b) Additional Notes Procedure. Subject to Section 5.2(a), the Company may exercise its option to require the Purchaser to purchase the (i) Second Note at any time within 45 days following the conversion of the First Note and (ii) the Third Note at any time within 45 days following the conversion of the Second Note by giving Purchaser written notice thereof (the "**Election Notice**"). The Election Notice shall state that the Company has elected to require the Purchaser to purchase the Second Note or the Third Note, as the case may require, and shall indicate the date, time and location of the closing of the purchase and sale of the Second Note or the Third Note, as the case may require (each, an "**Additional Note Closing**"), which shall occur no sooner than 28 days or later than 50 days after the date of the Election Notice.

(c) Closing of Subsequent Purchase. At an Additional Note Closing, the Company shall deliver to the Purchaser the Second Note, or the Third Note, as the case may require, and a duly executed Compliance Certificate in substantially the form attached hereto as Exhibit D. At an Additional Note Closing, the Purchaser shall deliver to the Company (i) the Additional Note Principal by check or wire transfer and (ii) the Investment Representation Statement, duly executed by Purchaser.

(d) Effect of Change in Series E Preferred Stock on Additional Notes. The forms of any then-unissued Additional Notes attached hereto as Exhibits A, B, and C shall be modified upon the happening of certain events as follows:

(i) In the event the Company should at any time prior to the First Note Closing or an Additional Note Closing split or subdivide the outstanding shares of its Series E Preferred Stock (or other securities that would be issuable upon conversion of any then-unissued Additional Note) or issue additional shares of Series E Preferred Stock (or other securities that would be issuable upon conversion of any then-unissued Additional Note) to the holders thereof as a dividend or make any other distribution payable in additional shares of Series E Preferred Stock (or other securities that would be issuable upon conversion of any then-unissued Additional Note) to the holders thereof without payment of any consideration by such holder for the additional shares of Series E Preferred Stock (or such other securities), then, as of the date of such dividend, distribution, split or subdivision, the Conversion Price as set forth in the form of Additional Note shall be appropriately decreased so that the number of shares of Series E Preferred Stock or other securities issuable upon conversion of the Additional Note shall be increased in proportion to such increase of outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of the Additional Note, as applicable. If the number of shares of Series E Preferred Stock (or other securities that would be issuable upon conversion of any then-unissued Additional Note) outstanding at any time prior to the First Note Closing or an Additional Note Closing is decreased by a combination of the outstanding shares of Series E Preferred Stock (or such other securities), then, following the record date of such combination, the Conversion Price set forth in the form of Additional Note shall be appropriately increased so that the number of shares of Series E Preferred Stock or other securities issuable upon conversion of the Additional Note shall be decreased in proportion to such decrease in outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of the Additional Note, as applicable.

(ii) In case of any reclassification, capital reorganization, or change in the Series E Preferred Stock (or other securities that would be issuable upon conversion of any then-unissued Additional Note) of the Company prior to the First Note Closing or an Additional Note Closing, including conversion of such shares pursuant to the Company's Articles of Incorporation then in effect (other than as a result of a split, subdivision, combination, or stock dividend provided for in Section 5.2(d)(i)), then appropriate adjustment shall be made to the Conversion Price and kind of securities or other property issuable upon conversion of the form of Additional Note so that the Additional Note if purchased shall be convertible upon the terms set forth therein as of the date of such First Note Closing or Additional Note Closing, as applicable, into the kind and amount of shares of stock and other securities and property receivable in connection with such reclassification, reorganization, or change by a holder of the same number of shares of Series E Preferred Stock or other securities as would be issuable on conversion of the Additional Note as of the First Note Closing or such Additional Note Closing, as the case may require.

(iii) If at any time prior to the First Note Closing or an Additional Note Closing, as the case may require, there shall be an acquisition of the Company by merger, consolidation or otherwise where the Company is not the surviving corporation or as a result of

which all of the outstanding capital stock of the Company is exchanged for capital stock of another corporation, then, as a part of such acquisition, the Conversion Price and kind of securities issuable upon conversion of the form of Additional Note shall be appropriately adjusted so that if such Additional Note is purchased such Additional Note shall initially be convertible into, the number of shares of stock or other securities or property of the surviving or successor corporation resulting from such acquisition (or the corporation the capital stock of which is issued in exchange for the capital stock of the Company), to which a holder of the securities that would be issuable upon conversion of such Additional Note would have been entitled in such acquisition if such Additional Note had been converted immediately before such acquisition.

(e) Transfer. In the event that the Company issues any of the Additional Notes to the Purchaser, each issued Additional Note and any securities issued on conversion thereof (including securities issued on conversion of such securities) shall be subject to Section 4.1 of this Agreement, the Investment Representation Statement and the restrictions on transfer set forth in such Additional Note.

6. Termination. This Agreement shall terminate and shall be of no further force or effect at such time as (i) the Company has paid to Purchaser in cash, by check or by wire transfer the principal amount and accrued interest owing under all outstanding Additional Notes or all outstanding Additional Notes have been converted into Note Shares in accordance with their Terms and (ii) the Company has no further right to require the Purchaser to purchase any Additional Notes pursuant to this Agreement; ***provided***, ***however***, that in the event of the conversion of any of the Additional Notes, Section 12 of each such Additional Note, and Section 3, Section 5.1 and Section 8 hereof shall survive such termination.

7. Miscellaneous.

7.1 Governing Law. This Agreement and the Additional Notes (if issued) shall in all respects be governed by and construed and enforced in accordance with the laws of the State of California, without reference to the conflicts of law provisions thereof.

7.2 California Corporate Securities Law. THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT AND RECEIPT OF ANY PART OF THE CONSIDERATION THEREFROM PRIOR TO SUCH REGISTRATION IS UNLAWFUL UNLESS AN EXEMPTION FROM SUCH QUALIFICATION IS AVAILABLE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON REGISTRATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

7.3 Survival. The representations, warranties, covenants and agreements made in this Agreement shall survive any investigation made by any party hereto and the closing of the transactions contemplated hereby.

7.4 Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto; *provided*, *however*, that the covenants and agreements of the Company set forth in Section 4 and the obligation of the Purchaser to purchase the Additional Notes as set forth in Section 1.1 and Section 5.2 shall not be assigned or transferred by Purchaser by operation of law or otherwise without the prior written consent of the Company.

7.5 Entire Agreement; Amendment. This Agreement (including its exhibits), the Schedule of Exceptions, the Business Plan, and the Additional Notes constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof, and no party shall be liable or bound to any other party in any manner by any warranties, representations, or covenants except as specifically set forth herein or therein. Except as expressly provided herein, neither this Agreement nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought.

7.6 Notices, etc. Any notice, request, other communication, or payment required or permitted hereunder shall be in writing and shall be deemed to have been duly given upon delivery, if delivered personally or by facsimile, or by recognized overnight courier service, or five days after deposit, if deposited in the United States mail for mailing by registered or certified mail, postage prepaid, and addressed as follows:

If to Purchaser:	Biomedical Sciences Investment Fund Pte Ltd 20 Biopolis Way #09-01 Centros Singapore 138668 Attention: Chu Swee Yeok Tel: 65-6336-2288 Fax: 65-6334-8478
If to the Company:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, California 94080 Attention: Chief Executive Officer Tel: (650) 266-6000 Fax: (650) 871-7195
with a copy to:	Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, California 94304-1050 Attention: Ken Clark and Robert Kornegay Tel: (650) 493-9300 Fax: (650) 493-6811

Each of the above addressees may change its address or facsimile number for purposes of this paragraph by giving to the other addressee notice of such new address in conformity with this paragraph.

7.7 Counterparts; Facsimile. This Agreement may be executed in counterparts, each of which shall be enforceable against the party or parties actually executing such counterparts, and all of which together shall constitute one instrument. This Agreement may be executed by facsimile signature.

7.8 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision.

7.9 Expenses. Except as set forth in the Purchase Agreement, each party shall pay all costs and expenses that it incurs with respect to the negotiation, execution and delivery and performance of this Agreement. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, or any of the Additional Notes, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary distributions in addition to any other relief to which such party may be entitled.

7.10 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not considered in construing or interpreting this Agreement.

7.11 Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS AGREEMENT.

7.12 Jurisdiction; Venue. The parties hereto agree to submit to the jurisdiction of and venue in the federal and state courts of San Mateo County, California with respect to the breach or interpretation of this Agreement or the enforcement of any and all rights, duties, liabilities, obligations, powers, and other relations between the parties arising under this Agreement.

7.13 Currency. Any reference to "dollars" or "$" in this Agreement shall refer to the lawful currency of the United States of America.

[Remainder of Page Intentionally Left Blank; Signature Page to Follow]

IN WITNESS WHEREOF, the parties have caused this Convertible Note Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

COMPANY:

Fluidigm Corporation

By: /s/ Gajus V. Worthington
Gajus V. Worthington
Chief Executive Officer

PURCHASER:

Biomedical Sciences Investment Fund Pte Ltd

By: /s/ Chu Swee Yeok

Print Name: Chu Swee Yeok

Title: Director

[SIGNATURE PAGE TO CONVERTIBLE NOTE PURCHASE AGREEMENT]

THIS NOTE AND THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH SECURITIES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY), OR OTHER EVIDENCE, REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT. THIS NOTE MAY ONLY BE TRANSFERRED UPON THE TERMS AND CONDITIONS CONTAINED IN THE NOTE AND IN AN AGREEMENT BETWEEN HOLDER AND THE COMPANY

FLUIDIGM CORPORATION
a California corporation

CONVERTIBLE PROMISSORY NOTE

NOTE NUMBER E-1

US$5,000,000

August ___, 2006
South San Francisco, California

1. Principal and Interest. **FLUIDIGM CORPORATION** (the "Company"), a California corporation, for value received, hereby promises to pay to the order of Biomedical Sciences Investment Fund Pte Ltd (the "Holder") in lawful money of the United States of America, the principal amount of Five Million Dollars (US$5,000,000), or such lesser amount as shall equal the outstanding principal amount hereof, together with interest from the date of this Note on the unpaid principal balance at a rate equal to 8.00% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days, compounded annually.

This Convertible Promissory Note ("Note") is the first Note issued pursuant to that certain Convertible Note Purchase Agreement dated August ___, 2006 (as amended, modified or supplemented, the "Note Purchase Agreement") between the Company and the Holder. Unless defined herein, capitalized terms shall have the same meanings ascribed to them in the Note Purchase Agreement.

Unless converted in accordance with Section 3, this Note shall become due and payable as to both accrued interest and principal on the Payment Date (as defined in Section 3). This Note may be prepaid by Company at any time after January 31, 2007, in accordance with the terms of Section 2 of this Note. Upon payment in full of all principal and interest payable hereunder (including upon any conversion), this Note shall be surrendered to the Company for cancellation. All payments hereon shall be applied first to accrued interest and second to the reduction of principal.

2. Prepayment of Note. At any time after January 31, 2007, upon five days prior written notice to Holder (the "Prepayment Notice"), the Company may prepay this Note in whole or in part; provided that any such prepayment will be applied first to the payment of expenses due under this Note, second to interest accrued on this Note and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of this Note. In the event that the Holder desires to avoid prepayment of the Note by the Company, the Holder must within five days of its receipt of the Prepayment Notice deliver to the Company the Conversion Notice pursuant to Section 3(c)(iii) electing to convert this Note, in which case this Note will not be prepaid as provided in the Prepayment Notice and will instead be converted into shares of Series E Preferred Stock of the Company in accordance with Section 3 of this Note.

3. Conversion.

(a) Conversion Events. Upon the earlier to occur of (i) an Initial Public Offering (as defined below) or (ii) satisfaction of each of the Milestones (as defined below) (either, a "Conversion Event"), all of the then outstanding principal and accrued interest owing under this Note shall convert into that number of shares of Series E Preferred Stock of the Company determined by dividing (i) the aggregate principal and accrued interest owing under this Note as of the date of such Conversion Event by (ii) the Conversion Price (as defined below). Notwithstanding the foregoing, by complying with Section 3(c)(iii) hereof, the Holder may at any time earlier elect to convert this Note into that number of shares of Series E Preferred Stock determined by dividing (i) the aggregate principal and accrued interest owing under this Note as of the date of the Conversion Notice (as defined in Section 3(c)(iii)) by (ii) the Conversion Price (as defined below).

(b) Definitions. For purposes of this Note, the following terms shall have the following meanings:

(i) The term "Change of Control Transaction" shall mean (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(ii) The term "Conversion Price" shall mean US$3.60, subject to adjustment as set forth in Section 5 below.

(iii) The term "Initial Public Offering" shall mean the first sale of securities of the Company pursuant to an effective registration statement under the Securities Act of 1933 (the "Securities Act") after or in connection with which the outstanding shares of Preferred Stock of the

Company have been converted into Common Stock pursuant to the Company's then existing Articles of Incorporation or otherwise.

(iv) Unless otherwise agreed in writing between the Company and the Holder, the term "Milestones" shall mean satisfaction of the following:

(1) The Company will have an approved System Architecture for a BioMark II Chip Loader, as demonstrated by a System Architecture approval form duly signed-off. The approval is typically characterized by the completion of the Product Marketing Specifications and the Product Development Plan (including Budget and Staffing Plans), as well as the development of working breadboards for critical subsystems;

(2) This approved System Architecture will have been reviewed with at least three prospective early adopter customers; and

(3) The Subsidiary will have hired four (4) Research and Development Engineers in conjunction with the BioMark II project. These new employees shall have received training by the Company at its headquarters (or such other facility as may be necessary or appropriate) in accordance with the position and job function of each such employee.

(v) The term "Payment Date" shall mean [INSERT DATE TWO YEARS FROM DATE OF NOTE] or such later date as may be mutually agreed in writing by Holder and the Company.

(c) Conversion Procedure.

(i) Conversion in Connection with Initial Public Offering. Upon the occurrence of an Initial Public Offering as set forth in Section 3(a), this Note shall convert automatically without further action on the part of the Holder hereof. Written notice shall be delivered to Holder at the address last shown on the records of Company for Holder or given by Holder to Company for the purpose of notice notifying Holder of the conversion effected or to be effected, specifying the Conversion Price, the date on which such conversion occurred or is expected to occur and calling upon such Holder to surrender to Company, in the manner and at the place designated, the Note.

(ii) Conversion in Connection with Satisfaction of Milestones. If the Company reasonably believes that it has satisfied all of the Milestones, it may send written notice thereof (the "Milestone Completion Notice") to the Holder (at the address last shown on the records of the Company for the Holder or given by Holder to Company for the purpose of notice) specifying the Conversion Price, the date on which the Company reasonably believes all of the Milestones were satisfied (the "Notified Milestone Completion Date"), together with a duly executed compliance certificate dated as of the Notified Milestone Completion Date substantially in the form attached hereto as Exhibit A (the "Compliance Certificate"), and calling upon Holder to surrender to the Company the Note. In the event that the Holder reasonably believes that any of (i) the Milestones have not been satisfied or (ii) the representations and warranties made in the Compliance Certificate are inaccurate in any material respect, the Holder may provide written notice (the "Milestone

Response Notice") to the Company of such disagreement and/or inaccuracy within 30 days of its receipt of the Milestone Completion Notice. The Milestone Response Notice shall specify in reasonable detail the reasons for such disagreement and/or basis for belief that any of the representations and warranties made in the Compliance Certificate are inaccurate and shall be accompanied by reasonably available support documentation evidencing the basis for such disagreement or belief. If the Holder shall fail to provide the Milestone Response Notice within such time period, the Milestones shall be deemed satisfied as of the Notified Milestone Completion Date and this Note shall be automatically converted as set forth in Section 3(a). If the Holder shall have timely provided the Milestone Response Notice, the Company and the Holder shall in good faith attempt to resolve their disagreement as to the satisfaction of the Milestones and/or the accuracy of the representations and warranties in the Compliance Certificate. If the Company and Holder are unable to resolve their disagreement within 30 days of the Company's receipt of the Milestone Response Notice, the Company may pay to the Holder the principal and interest owing under this Note as of the Notified Milestone Completion Date (in which case the Note shall be cancelled and surrendered) or may pursue any other remedy that may be available to it under applicable law.

(iii) Elective Conversion. If the Holder wishes to voluntarily convert this Note as set forth in Section 3(a) hereof prior to a Conversion Event, the Holder shall surrender this Note to the Company and provide the Company with a written notice (the "Conversion Notice") to that effect.

(iv) Certificate; Time of Conversion. Upon conversion of this Note, the Holder shall promptly surrender this Note, duly endorsed, at the principal office of Company. At its expense, the Company shall, as soon as practicable thereafter, issue and deliver to such Holder at such principal office a certificate or certificates for the number of shares to which Holder shall be entitled upon such conversion (bearing such legends as are required by this Note and the Note Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to Company), together with any other securities and property to which Holder is entitled upon such conversion under the terms of this Note, including a check payable to Holder for any cash amounts payable as described in Section 3(d). Any such conversion of this Note shall be deemed to have been made immediately prior to the Conversion Event as described in Section 3(a) (or in the case of delivery of the Conversion Notice as set forth in Section 3(c)(iii), upon the Company's receipt of such Conversion Notice); provided, however, the Holder shall not be deemed a record holder of such shares or a purchaser of such shares until the Holder has delivered the Note for conversion. On and after such date, the Holder shall be treated as a purchaser of such shares under the Note Purchase Agreement and shall be bound by the applicable terms of this Note and Note Purchase Agreement.

(d) Fractional Shares. No fractional shares will be issued upon any conversion of this Note. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company will pay to the Holder in cash that amount of the unconverted principal and interest balance of this Note.

(e) Reservation of Shares. The Company will at all times reserve and keep available out of its authorized but unissued shares or shares held in treasury, sufficient shares of Series E Preferred Stock or other securities to permit the full conversion of the outstanding principal

and interest of this Note pursuant to the terms of this Note. In the event the Company shall have insufficient shares of Series E Preferred Stock or other securities to permit the full conversion of the outstanding principal and accrued interest of this Note pursuant to the terms hereof, the Company hereby covenants and agrees that the Company shall use its commercially reasonable efforts to seek board and shareholder approval of an amendment to the Company's Articles of Incorporation in order to authorize an increase in the number of authorized shares of Series E Preferred Stock or other securities of the Company in a sufficient amount so that the aggregate number of shares of Series E Preferred Stock or other securities issuable upon conversion of this Note will then be authorized and available for issuance.

4. Change of Control Transaction. The Company shall provide the Holder with 15 days written notice of the closing of a Change of Control Transaction, specifying in reasonable detail the terms of such Change of Control Transaction. If the Holder shall not have voluntarily elected to convert this Note as set forth in Section 3(c)(iii) within such 15 day period, the Company may prepay the entire principal amount and interest owing under this Note as of the date of such prepayment. The Holder shall thereafter promptly return the Note to the Company for cancellation.

5. Change in Series E Preferred Stock.

(a) Split, Subdivision or Combination of Series E Preferred Stock. In the event the Company should at any time or from time to time after the date of issuance hereof split or subdivide the outstanding shares of its Series E Preferred Stock (or other securities issuable upon conversion of this Note) or issue additional shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) to the holders thereof as a dividend or make any other distribution payable in additional shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) to the holders thereof without payment of any consideration by such holder for the additional shares of Series E Preferred Stock (or such other securities), then, as of the date of such dividend, distribution, split or subdivision, the Conversion Price of this Note shall be appropriately decreased so that the number of shares of Series E Preferred Stock or other securities issuable upon conversion of this Note shall be increased in proportion to such increase of outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of this Note, as applicable. If the number of shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) outstanding at any time after the date hereof is decreased by a combination of the outstanding shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note), then, following the record date of such combination, the Conversion Price for this Note shall be appropriately increased so that the number of shares of Series E Preferred Stock or other securities issuable on conversion hereof shall be decreased in proportion to such decrease in outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of this Note, as applicable.

(b) Reclassification etc. In case of any reclassification, capital reorganization, or change in the Series E Preferred Stock (or other securities issuable upon conversion of this Note) of the Company, including conversion of such shares pursuant to the Company's Articles of Incorporation then in effect (other than as a result of a split, subdivision, combination, or stock dividend provided for in Section 5(a) above), then appropriate adjustment shall be made to the Conversion Price and kind of securities or other property issuable upon conversion of this Note so

that this Note shall be convertible upon the terms set forth herein into the kind and amount of shares of stock and other securities and property receivable in connection with such reclassification, reorganization, or change by a holder of the same number of shares of Series E Preferred Stock or other securities as are issuable on conversion of this Note.

(c) Merger or Consolidation. Other than a Change of Control Transaction in connection with which this Note has been converted or prepaid, if at any time there shall be an acquisition of the Company by merger, consolidation or otherwise where the Company is not the surviving corporation or as a result of which all of the outstanding capital stock of the Company is exchanged for capital stock of another corporation, then, as a part of such acquisition, the Conversion Price and kind of securities issuable upon conversion hereof shall be appropriately adjusted so that the Holder shall receive upon conversion of this Note, the number of shares of stock or other securities or property of the surviving or successor corporation resulting from such acquisition (or the corporation the capital stock of which is issued in exchange for the capital stock of the Company), to which a holder of the securities issuable upon conversion of this Note would have been entitled in such acquisition if this Note had been converted immediately before such acquisition.

6. Payment Due Date. If not previously converted into shares of Series E Preferred Stock pursuant to Section 3 hereof and if not sooner prepaid by the Company pursuant to Section 2 hereof or accelerated and declared due and owing by the Holder pursuant to Section 7 hereof, the principal amount and any accrued interest due thereon then outstanding under this Note will become due and payable on the Payment Date.

7. Default. The Company shall be deemed to be in default under this Note in the event (i) the Company shall fail to materially perform any covenant or agreement of the Company contained in Section 4 of the Note Purchase Agreement for a period of 30 days after written notice of such failure from Holder; (ii) the Company shall have failed to make payment of principal or interest due on the Note when such principal and interest becomes due; or (iii) the Company shall commence, whether voluntarily or involuntarily a case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it. In the case of an event of default, the Holder may, by written notice to the Company, declare the unpaid principal amount of this Note, all interest accrued and unpaid hereon, and all other amounts payable hereunder to be immediately due and payable, without presentment, demand, protest, or further notice of any kind, as well as enforce all other rights and remedies available to the Holder under applicable law.

8. Notices. Any notice, request, other communication, or payment required or permitted hereunder shall be in writing and shall be deemed to have been duly given upon delivery, if delivered personally by facsimile, or by recognized overnight courier service, or five days after deposit, if deposited in the United States mail for mailing by registered or certified mail, postage prepaid, and addressed as follows:

If to Holder:	Biomedical Sciences Investment Fund Pte Ltd 20 Biopolis Way #09-01 Centros Singapore 138668 Attention: Chu Swee Yeok Tel: 65-6336-2288 Fax: 65-6334-8478
If to the Company:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, California 94080 Attention: Chief Executive Officer Tel: (650) 266-6000 Fax: (650) 871-7195
	with a copy to:
	Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, California 94304-1050 Attention: Ken Clark and Robert Kornegay Tel: (650) 493-9300 Fax: (650) 493-6811

Each of the above addressees may change its address or facsimile number for purposes of this paragraph by giving to the other addressee notice of such new address in conformity with this paragraph.

9. Amendments. This Note may be amended and any provision hereof waived with the consent of the Company and the Holder.

10. No Rights as Shareholder. Nothing in this Note shall be construed as conferring upon the Holder or any other person the right to vote or to consent or to receive notice as a shareholder in respect of meetings of shareholders for the election of directors of the Company or any other matters or any rights whatsoever as a shareholder of the Company until, and only to the extent that, this Note shall have been converted.

11. Successors and Assigns. Subject to the restrictions on transfer described in Section 12 and in the Note Purchase Agreement, the rights and obligations of the Company and Investor shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

12. Transfer of Note and Securities Issuable on Conversion Hereof. Prior to the conversion of this Note, this Note (or the underlying securities issuable upon conversion hereof) may not be sold, assigned, transferred, pledged or otherwise disposed of by the Holder, in whole or in part, without the prior written consent of the Company. With respect to any sale, assignment,

transfer, pledge or other disposition of the securities into which this Note may be converted after conversion of this Note, the Holder may only transfer such securities pursuant to, and on the conditions set forth in that certain Eighth Amended and Restated Investor Rights Agreement dated June 13, 2006 between the Company and certain investors in the Company (including Holder), as may be amended from time to time (the "Rights Agreement"). The Holder shall cause any proposed purchaser, assignee, transferee or pledgee of such securities to agree in writing to take and hold such securities subject to and upon the conditions specified in this Note, the Note Purchase Agreement, and the Rights Agreement, including, without limitation, Sections 1.2, 1.3, 1.4, and 1.14 of the Rights Agreement.

13. Highest Lawful Rate. Anything herein to the contrary notwithstanding, if during any period for which interest is computed hereunder, the amount of interest computed on the basis provided for in this Note, together will all fees, charges, and other payments or rights which are treated as interest under applicable law, as provided for herein or in any other document executed in connection herewith, would exceed the amount of such interest computed on the basis of the Highest Lawful Rate, the Company shall not be obligated to pay, and the Holder shall not be entitled to charge, collect, receive, reserve, or take, interest in excess of the Highest Lawful Rate, and during any such period the interest payable hereunder shall be computed on the basis of the Highest Lawful Rate. As used herein, "Highest Lawful Rate" means the maximum non-usurious rate of interest, as in effect from time to time, which may be charged, contracted for, reserved, received, or collected by the Holder in connection with this Note under applicable law. In accordance with this section, any amounts received in excess of the Highest Lawful Rate shall be applied towards the prepayment of principal then outstanding.

14. Miscellaneous. The Company agrees to pay on demand all of the losses, costs, and expenses (including, without limitation, attorneys' fees and disbursements) which the Holder incurs in connection with enforcement of this Note, or the protection or preservation of the Holder's rights under this Note, whether by judicial proceeding or otherwise. Such costs and expenses include, without limitation, those incurred in connection with any workout or refinancing, or any bankruptcy, insolvency, liquidation, or similar proceedings. The Company hereby waives presentment, demand for performance, notice of non-performance, protest, notice of protest, and notice of dishonor. No delay on the part of the Holder in exercising any right hereunder shall operate as a waiver of such right or any other right. This Note is being delivered in and shall be construed in accordance with the laws of the State of California without regard to the conflicts of law provisions thereof. Any reference to "dollars" or "$" in this Note shall refer to the lawful money of the United States of America.

[Remainder of Page Left Blank Intentionally]

IN WITNESS WHEREOF, the Company has caused this Convertible Promissory Note to be executed by its officer thereunto duly authorized as of the date first above written.

Dated: August _____, 2006

FLUIDIGM CORPORATION
a California corporation

By: _____

Name: _____

Title: _____

Acknowledged and Agreed:

HOLDER

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: _____

Name: _____

Title: _____

[Convertible Promissory Note Signature Page]

EXHIBIT A

FORM OF COMPLIANCE CERTIFICATE

THIS NOTE AND THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH SECURITIES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY), OR OTHER EVIDENCE, REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT. THIS NOTE MAY ONLY BE TRANSFERRED UPON THE TERMS AND CONDITIONS CONTAINED IN THE NOTE AND IN AN AGREEMENT BETWEEN HOLDER AND THE COMPANY

FLUIDIGM CORPORATION
a California corporation

CONVERTIBLE PROMISSORY NOTE

NOTE NUMBER E-2

US$5,000,000

_____ ___, 20___
South San Francisco, California

1. Principal and Interest. **FLUIDIGM CORPORATION** (the "Company"), a California corporation, for value received, hereby promises to pay to the order of Biomedical Sciences Investment Fund Pte Ltd (the "Holder") in lawful money of the United States of America, the principal amount of Five Million Dollars (US$5,000,000), or such lesser amount as shall equal the outstanding principal amount hereof, together with interest from the date of this Note on the unpaid principal balance at a rate equal to 8.00% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days, compounded annually.

This Convertible Promissory Note ("Note") is the second Note issued pursuant to that certain Convertible Note Purchase Agreement dated August ___, 2006 (as amended, modified or supplemented, the "Note Purchase Agreement") between the Company and the Holder. Unless defined herein, capitalized terms shall have the same meanings ascribed to them in the Note Purchase Agreement.

Unless converted in accordance with Section 3, this Note shall become due and payable as to both accrued interest and principal on the Payment Date (as defined in Section 3). This Note may be prepaid by Company at any time, in accordance with the terms of Section 2 of this Note. Upon payment in full of all principal and interest payable hereunder (including upon any conversion), this Note shall be surrendered to the Company for cancellation. All payments hereon shall be applied first to accrued interest and second to the reduction of principal.

2. Prepayment of Note. Upon five days prior written notice to Holder (the "Prepayment Notice"), the Company may prepay this Note in whole or in part; provided that any such prepayment will be applied first to the payment of expenses due under this Note, second to interest accrued on this Note and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of this Note. In the event that the Holder desires to avoid prepayment of the Note by the Company, the Holder must within five days of its receipt of the Prepayment Notice deliver to the Company the Conversion Notice pursuant to Section 3(c)(iii) electing to convert this Note, in which case this Note will not be prepaid as provided in the Prepayment Notice and will instead be converted into shares of Series E Preferred Stock of the Company in accordance with Section 3 of this Note.

3. Conversion.

(a) Conversion Events. Upon the earlier to occur of (i) an Initial Public Offering (as defined below) or (ii) satisfaction of each of the Milestones (as defined below) (either, a "Conversion Event"), all of the then outstanding principal and accrued interest owing under this Note shall convert into that number of shares of Series E Preferred Stock of the Company determined by dividing (i) the aggregate principal and accrued interest owing under this Note as of the date of such Conversion Event by (ii) the Conversion Price (as defined below). Notwithstanding the foregoing, by complying with Section 3(c)(iii) hereof, the Holder may at any time earlier elect to convert this Note into that number of shares of Series E Preferred Stock determined by dividing (i) the aggregate principal and accrued interest owing under this Note as of the date of the Conversion Notice (as defined in Section 3(c)(iii)) by (ii) the Conversion Price (as defined below).

(b) Definitions. For purposes of this Note, the following terms shall have the following meanings:

(i) The term "Change of Control Transaction" shall mean (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(ii) The term "Conversion Price" shall mean US$3.60, subject to adjustment as set forth in Section 5 below.

(iii) The term "Initial Public Offering" shall mean the first sale of securities of the Company pursuant to an effective registration statement under the Securities Act of 1933 (the "Securities Act") after or in connection with which the outstanding shares of Preferred Stock of the

Company have been converted into Common Stock pursuant to the Company's then existing Articles of Incorporation or otherwise.

(iv) Unless otherwise agreed in writing between the Company and the Holder, the term "Milestones" shall mean satisfaction of the following:

(1) The Company will have an approved System Architecture for a BioMark II Endpoint Reader, as demonstrated by a System Architecture approval form duly signed-off. The approval is typically characterized by the completion of the Product Marketing Specifications and the Product Development Plan (including Budget and Staffing Plans), as well as the development of working breadboards for critical subsystems;

(2) This approved System Architecture will have been represented to at least three (3) target customers; and

(3) The Subsidiary will have hired three (3) more Research and Development Engineers, with at least one (1) being a Software Engineer, in conjunction with the BioMark II project (i.e., 7 total hires based on the satisfaction of the Milestones in the First Note and the Milestones in this Second Note). These new employees shall have received training by the Company at its headquarters (or such other facility as may be necessary or appropriate) in accordance with the position and job function of each such employee.

(v) The term "Payment Date" shall mean [INSERT DATE TWO YEARS FROM DATE OF NOTE] or such later date as may be mutually agreed in writing by Holder and the Company.

(c) Conversion Procedure.

(i) Conversion in Connection with Initial Public Offering. Upon the occurrence of an Initial Public Offering as set forth in Section 3(a), this Note shall convert automatically without further action on the part of the Holder hereof. Written notice shall be delivered to Holder at the address last shown on the records of Company for Holder or given by Holder to Company for the purpose of notice notifying Holder of the conversion effected or to be effected, specifying the Conversion Price, the date on which such conversion occurred or is expected to occur and calling upon such Holder to surrender to Company, in the manner and at the place designated, the Note.

(ii) Conversion in Connection with Satisfaction of Milestones. If the Company reasonably believes that it has satisfied all of the Milestones, it may send written notice thereof (the "Milestone Completion Notice") to the Holder (at the address last shown on the records of the Company for the Holder or given by Holder to Company for the purpose of notice) specifying the Conversion Price, the date on which the Company reasonably believes all of the Milestones were satisfied (the "Notified Milestone Completion Date"), together with a duly executed compliance certificate dated as of the Notified Milestone Completion Date substantially in the form attached hereto as Exhibit A (the "Compliance Certificate"), and calling upon Holder to surrender to the Company the Note. In the event that the Holder reasonably believes that any of (i) the Milestones have not been satisfied or (ii) the representations and warranties made in the Compliance Certificate are inaccurate in any material respect, the Holder may provide written notice (the "Milestone

Response Notice") to the Company of such disagreement and/or inaccuracy within 30 days of its receipt of the Milestone Completion Notice. The Milestone Response Notice shall specify in reasonable detail the reasons for such disagreement and/or basis for belief that any of the representations and warranties made in the Compliance Certificate are inaccurate and shall be accompanied by reasonably available support documentation evidencing the basis for such disagreement or belief. If the Holder shall fail to provide the Milestone Response Notice within such time period, the Milestones shall be deemed satisfied as of the Notified Milestone Completion Date and this Note shall be automatically converted as set forth in Section 3(a). If the Holder shall have timely provided the Milestone Response Notice, the Company and the Holder shall in good faith attempt to resolve their disagreement as to the satisfaction of the Milestones and/or the accuracy of the representations and warranties in the Compliance Certificate. If the Company and Holder are unable to resolve their disagreement within 30 days of the Company's receipt of the Milestone Response Notice, the Company may pay to the Holder the principal and interest owing under this Note as of the Notified Milestone Completion Date (in which case the Note shall be cancelled and surrendered) or may pursue any other remedy that may be available to it under applicable law.

(iii) Elective Conversion. If the Holder wishes to voluntarily convert this Note as set forth in Section 3(a) hereof prior to a Conversion Event, the Holder shall surrender this Note to the Company and provide the Company with a written notice (the "Conversion Notice") to that effect.

(iv) Certificate; Time of Conversion. Upon conversion of this Note, the Holder shall promptly surrender this Note, duly endorsed, at the principal office of Company. At its expense, the Company shall, as soon as practicable thereafter, issue and deliver to such Holder at such principal office a certificate or certificates for the number of shares to which Holder shall be entitled upon such conversion (bearing such legends as are required by this Note and the Note Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to Company), together with any other securities and property to which Holder is entitled upon such conversion under the terms of this Note, including a check payable to Holder for any cash amounts payable as described in Section 3(d). Any such conversion of this Note shall be deemed to have been made immediately prior to the Conversion Event as described in Section 3(a) (or in the case of delivery of the Conversion Notice as set forth in Section 3(c)(iii), upon the Company's receipt of such Conversion Notice); provided, however, the Holder shall not be deemed a record holder of such shares or a purchaser of such shares until the Holder has delivered the Note for conversion. On and after such date, the Holder shall be treated as a purchaser of such shares under the Note Purchase Agreement and shall be bound by the applicable terms of this Note and Note Purchase Agreement.

(d) Fractional Shares. No fractional shares will be issued upon any conversion of this Note. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company will pay to the Holder in cash that amount of the unconverted principal and interest balance of this Note.

(e) Reservation of Shares. The Company will at all times reserve and keep available out of its authorized but unissued shares or shares held in treasury, sufficient shares of Series E Preferred Stock or other securities to permit the full conversion of the outstanding principal

and interest of this Note pursuant to the terms of this Note. In the event the Company shall have insufficient shares of Series E Preferred Stock or other securities to permit the full conversion of the outstanding principal and accrued interest of this Note pursuant to the terms hereof, the Company hereby covenants and agrees that the Company shall use its commercially reasonable efforts to seek board and shareholder approval of an amendment to the Company's Articles of Incorporation in order to authorize an increase in the number of authorized shares of Series E Preferred Stock or other securities of the Company in a sufficient amount so that the aggregate number of shares of Series E Preferred Stock or other securities issuable upon conversion of this Note will then be authorized and available for issuance.

4. Change of Control Transaction. The Company shall provide the Holder with 15 days written notice of the closing of a Change of Control Transaction, specifying in reasonable detail the terms of such Change of Control Transaction. If the Holder shall not have voluntarily elected to convert this Note as set forth in Section 3(c)(iii) within such 15 day period, the Company may prepay the entire principal amount and interest owing under this Note as of the date of such prepayment. The Holder shall thereafter promptly return the Note to the Company for cancellation.

5. Change in Series E Preferred Stock.

(a) Split, Subdivision or Combination of Series E Preferred Stock. In the event the Company should at any time or from time to time after the date of issuance hereof split or subdivide the outstanding shares of its Series E Preferred Stock (or other securities issuable upon conversion of this Note) or issue additional shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) to the holders thereof as a dividend or make any other distribution payable in additional shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) to the holders thereof without payment of any consideration by such holder for the additional shares of Series E Preferred Stock (or such other securities), then, as of the date of such dividend, distribution, split or subdivision, the Conversion Price of this Note shall be appropriately decreased so that the number of shares of Series E Preferred Stock or other securities issuable upon conversion of this Note shall be increased in proportion to such increase of outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of this Note, as applicable. If the number of shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) outstanding at any time after the date hereof is decreased by a combination of the outstanding shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note), then, following the record date of such combination, the Conversion Price for this Note shall be appropriately increased so that the number of shares of Series E Preferred Stock or other securities issuable on conversion hereof shall be decreased in proportion to such decrease in outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of this Note, as applicable.

(b) Reclassification etc. In case of any reclassification, capital reorganization, or change in the Series E Preferred Stock (or other securities issuable upon conversion of this Note) of the Company, including conversion of such shares pursuant to the Company's Articles of Incorporation then in effect (other than as a result of a split, subdivision, combination, or stock dividend provided for in Section 5(a) above), then appropriate adjustment shall be made to the Conversion Price and kind of securities or other property issuable upon conversion of this Note so

that this Note shall be convertible upon the terms set forth herein into the kind and amount of shares of stock and other securities and property receivable in connection with such reclassification, reorganization, or change by a holder of the same number of shares of Series E Preferred Stock or other securities as are issuable on conversion of this Note.

(c) Merger or Consolidation. Other than a Change of Control Transaction in connection with which this Note has been converted or prepaid, if at any time there shall be an acquisition of the Company by merger, consolidation or otherwise where the Company is not the surviving corporation or as a result of which all of the outstanding capital stock of the Company is exchanged for capital stock of another corporation, then, as a part of such acquisition, the Conversion Price and kind of securities issuable upon conversion hereof shall be appropriately adjusted so that the Holder shall receive upon conversion of this Note, the number of shares of stock or other securities or property of the surviving or successor corporation resulting from such acquisition (or the corporation the capital stock of which is issued in exchange for the capital stock of the Company), to which a holder of the securities issuable upon conversion of this Note would have been entitled in such acquisition if this Note had been converted immediately before such acquisition.

6. Payment Due Date. If not previously converted into shares of Series E Preferred Stock pursuant to Section 3 hereof and if not sooner prepaid by the Company pursuant to Section 2 hereof or accelerated and declared due and owing by the Holder pursuant to Section 7 hereof, the principal amount and any accrued interest due thereon then outstanding under this Note will become due and payable on the Payment Date.

7. Default. The Company shall be deemed to be in default under this Note in the event (i) the Company shall fail to materially perform any covenant or agreement of the Company contained in Section 4 of the Note Purchase Agreement for a period of 30 days after written notice of such failure from Holder; (ii) the Company shall have failed to make payment of principal or interest due on the Note when such principal and interest becomes due; or (iii) the Company shall commence, whether voluntarily or involuntarily a case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it. In the case of an event of default, the Holder may, by written notice to the Company, declare the unpaid principal amount of this Note, all interest accrued and unpaid hereon, and all other amounts payable hereunder to be immediately due and payable, without presentment, demand, protest, or further notice of any kind, as well as enforce all other rights and remedies available to the Holder under applicable law.

8. Notices. Any notice, request, other communication, or payment required or permitted hereunder shall be in writing and shall be deemed to have been duly given upon delivery, if delivered personally by facsimile, or by recognized overnight courier service, or five days after deposit, if deposited in the United States mail for mailing by registered or certified mail, postage prepaid, and addressed as follows:

If to Holder:	Biomedical Sciences Investment Fund Pte Ltd 20 Biopolis Way #09-01 Centros Singapore 138668 Attention: Chu Swee Yeok Tel: 65-6336-2288 Fax: 65-6334-8478
If to the Company:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, California 94080 Attention: Chief Executive Officer Tel: (650) 266-6000 Fax: (650) 871-7195
	with a copy to:
	Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, California 94304-1050 Attention: Ken Clark and Robert Kornegay Tel: (650) 493-9300 Fax: (650) 493-6811

Each of the above addressees may change its address or facsimile number for purposes of this paragraph by giving to the other addressee notice of such new address in conformity with this paragraph.

9. Amendments. This Note may be amended and any provision hereof waived with the consent of the Company and the Holder.

10. No Rights as Shareholder. Nothing in this Note shall be construed as conferring upon the Holder or any other person the right to vote or to consent or to receive notice as a shareholder in respect of meetings of shareholders for the election of directors of the Company or any other matters or any rights whatsoever as a shareholder of the Company until, and only to the extent that, this Note shall have been converted.

11. Successors and Assigns. Subject to the restrictions on transfer described in Section 12 and in the Note Purchase Agreement, the rights and obligations of the Company and Investor shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

12. Transfer of Note and Securities Issuable on Conversion Hereof. Prior to the conversion of this Note, this Note (or the underlying securities issuable upon conversion hereof) may not be sold, assigned, transferred, pledged or otherwise disposed of by the Holder, in whole or in part, without the prior written consent of the Company. With respect to any sale, assignment,

transfer, pledge or other disposition of the securities into which this Note may be converted after conversion of this Note, the Holder may only transfer such securities pursuant to, and on the conditions set forth in that certain Eighth Amended and Restated Investor Rights Agreement dated June 13, 2006 between the Company and certain investors in the Company (including Holder), as may be amended from time to time (the "Rights Agreement"). The Holder shall cause any proposed purchaser, assignee, transferee or pledgee of such securities to agree in writing to take and hold such securities subject to and upon the conditions specified in this Note, the Note Purchase Agreement, and the Rights Agreement, including, without limitation, Sections 1.2, 1.3, 1.4, and 1.14 of the Rights Agreement.

13. Highest Lawful Rate. Anything herein to the contrary notwithstanding, if during any period for which interest is computed hereunder, the amount of interest computed on the basis provided for in this Note, together will all fees, charges, and other payments or rights which are treated as interest under applicable law, as provided for herein or in any other document executed in connection herewith, would exceed the amount of such interest computed on the basis of the Highest Lawful Rate, the Company shall not be obligated to pay, and the Holder shall not be entitled to charge, collect, receive, reserve, or take, interest in excess of the Highest Lawful Rate, and during any such period the interest payable hereunder shall be computed on the basis of the Highest Lawful Rate. As used herein, "Highest Lawful Rate" means the maximum non-usurious rate of interest, as in effect from time to time, which may be charged, contracted for, reserved, received, or collected by the Holder in connection with this Note under applicable law. In accordance with this section, any amounts received in excess of the Highest Lawful Rate shall be applied towards the prepayment of principal then outstanding.

14. Miscellaneous. The Company agrees to pay on demand all of the losses, costs, and expenses (including, without limitation, attorneys' fees and disbursements) which the Holder incurs in connection with enforcement of this Note, or the protection or preservation of the Holder's rights under this Note, whether by judicial proceeding or otherwise. Such costs and expenses include, without limitation, those incurred in connection with any workout or refinancing, or any bankruptcy, insolvency, liquidation, or similar proceedings. The Company hereby waives presentment, demand for performance, notice of non-performance, protest, notice of protest, and notice of dishonor. No delay on the part of the Holder in exercising any right hereunder shall operate as a waiver of such right or any other right. This Note is being delivered in and shall be construed in accordance with the laws of the State of California without regard to the conflicts of law provisions thereof. Any reference to "dollars" or "$" in this Note shall refer to the lawful money of the United States of America.

[Remainder of Page Left Blank Intentionally]

IN WITNESS WHEREOF, the Company has caused this Convertible Promissory Note to be executed by its officer thereunto duly authorized as of the date first above written.

Dated: _____ ___, 20___

FLUIDIGM CORPORATION
a California corporation

By: _____

Name: _____

Title: _____

Acknowledged and Agreed:

HOLDER

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: _____

Name: _____

Title: _____

[Convertible Promissory Note Signature Page]

EXHIBIT A

FORM OF COMPLIANCE CERTIFICATE

THIS NOTE AND THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH SECURITIES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY), OR OTHER EVIDENCE, REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT. THIS NOTE MAY ONLY BE TRANSFERRED UPON THE TERMS AND CONDITIONS CONTAINED IN THE NOTE AND IN AN AGREEMENT BETWEEN HOLDER AND THE COMPANY

FLUIDIGM CORPORATION
a California corporation

CONVERTIBLE PROMISSORY NOTE

NOTE NUMBER E-3

US$5,000,000

_____ ___, 20__
South San Francisco, California

1. Principal and Interest. **FLUIDIGM CORPORATION** (the "Company"), a California corporation, for value received, hereby promises to pay to the order of Biomedical Sciences Investment Fund Pte Ltd (the "Holder") in lawful money of the United States of America, the principal amount of Five Million Dollars (US$5,000,000), or such lesser amount as shall equal the outstanding principal amount hereof, together with interest from the date of this Note on the unpaid principal balance at a rate equal to 8.00% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days, compounded annually.

This Convertible Promissory Note ("Note") is the third Note issued pursuant to that certain Convertible Note Purchase Agreement dated August ___, 2006 (as amended, modified or supplemented, the "Note Purchase Agreement") between the Company and the Holder. Unless defined herein, capitalized terms shall have the same meanings ascribed to them in the Note Purchase Agreement.

Unless converted in accordance with Section 3, this Note shall become due and payable as to both accrued interest and principal on the Payment Date (as defined in Section 3). This Note may be prepaid by Company at any time, in accordance with the terms of Section 2 of this Note. Upon payment in full of all principal and interest payable hereunder (including upon any conversion), this Note shall be surrendered to the Company for cancellation. All payments hereon shall be applied first to accrued interest and second to the reduction of principal.

[Convertible Promissory Note Signature Page]

2. Prepayment of Note. Upon five days prior written notice to Holder (the "Prepayment Notice"), the Company may prepay this Note in whole or in part; provided that any such prepayment will be applied first to the payment of expenses due under this Note, second to interest accrued on this Note and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of this Note. In the event that the Holder desires to avoid prepayment of the Note by the Company, the Holder must within five days of its receipt of the Prepayment Notice deliver to the Company the Conversion Notice pursuant to Section 3(c)(iii) electing to convert this Note, in which case this Note will not be prepaid as provided in the Prepayment Notice and will instead be converted into shares of Series E Preferred Stock of the Company in accordance with Section 3 of this Note.

3. Conversion.

(a) Conversion Events. Upon the earlier to occur of (i) an Initial Public Offering (as defined below) or (ii) satisfaction of each of the Milestones pursuant to Section 3(b)(iv) below (either, a "Conversion Event"), all of the then outstanding principal and accrued interest owing under this Note shall convert into that number of shares of Series E Preferred Stock of the Company determined by dividing (i) the aggregate principal and accrued interest owing under this Note as of the date of such Conversion Event by (ii) the Conversion Price (as defined below). Notwithstanding the foregoing, by complying with Section 3(c)(iii) hereof, the Holder may at any time earlier elect to convert this Note into that number of shares of Series E Preferred Stock determined by dividing (i) the aggregate principal and accrued interest owing under this Note as of the date of the Conversion Notice (as defined in Section 3(c)(iii)) by (ii) the Conversion Price (as defined below).

(b) Definitions. For purposes of this Note, the following terms shall have the following meanings:

(i) The term "Change of Control Transaction" shall mean (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(ii) The term "Conversion Price" shall mean US$3.60, subject to adjustment as set forth in Section 5 below.

(iii) The term "Initial Public Offering" shall mean the first sale of securities of the Company pursuant to an effective registration statement under the Securities Act of 1933 (the "Securities Act") after or in connection with which the outstanding shares of Preferred Stock of the

Company have been converted into Common Stock pursuant to the Company's then existing Articles of Incorporation or otherwise.

(iv) Unless otherwise agreed in writing between the Company and the Holder, the term "Milestones" shall mean satisfaction of the following on or before April 30, 2008:

(1) The Company will have released the BioMark II Chip Loader to manufacturing, as demonstrated by a Manufacturing Release approval form duly signed-off. The approval is typically characterized by having completed standard prototype development, including building and testing of suitable prototypes;

(2) The approved BioMark II Chip Loader (or a subsequent version thereof) will be made generally available to customers, as demonstrated by a Company product announcement;

(3) The Subsidiary will also have produced prototype BioMark II End Point Readers and made them available to at least three (3) customers;

(4) The Subsidiary will have at least maintained the number of Research and Development Engineers hired to achieve Milestones in the First Note and the Milestones in the Second Note; and

(5) The Company will be manufacturing the BioMark II Chip Loader through the Subsidiary in Singapore, and the Company's then-current financial and business plan will provide for the manufacturing of the BioMark II End Point Readers through the Subsidiary in Singapore; *provided that* if the Holder provides the Company with a Milestone Response Notice pursuant to Section 3(c)(ii) below, then the Company shall have 30 days following the Company's receipt of the Milestone Response Notice (the "Milestones Cure Period") to cure any failure to satisfy the Milestones identified by the Holder in the Milestone Response Notice.

(v) The term "Payment Date" shall mean [INSERT DATE TWO YEARS FROM DATE OF NOTE] or such later date as may be mutually agreed in writing by Holder and the Company.

(c) Conversion Procedure.

(i) Conversion in Connection with Initial Public Offering. Upon the occurrence of an Initial Public Offering as set forth in Section 3(a), this Note shall convert automatically without further action on the part of the Holder hereof. Written notice shall be delivered to Holder at the address last shown on the records of Company for Holder or given by Holder to Company for the purpose of notice notifying Holder of the conversion effected or to be effected, specifying the Conversion Price, the date on which such conversion occurred or is expected to occur and calling upon such Holder to surrender to Company, in the manner and at the place designated, the Note.

(ii) Conversion in Connection with Satisfaction of Milestones. If the Company reasonably believes that it has satisfied all of the Milestones, it may send written notice thereof (the "Milestone Completion Notice") to the Holder (at the address last shown on the records of the Company for the Holder or given by Holder to Company for the purpose of notice) specifying the Conversion Price, the date on which the Company reasonably believes all of the Milestones were satisfied (the "Notified Milestone Completion Date"), together with a duly executed compliance certificate dated as of the Notified Milestone Completion Date substantially in the form attached hereto as Exhibit A (the "Compliance Certificate"), and calling upon Holder to surrender to the Company the Note. In the event that the Holder reasonably believes that any of (i) the Milestones have not been satisfied or (ii) the representations and warranties made in the Compliance Certificate are inaccurate in any material respect, the Holder may provide written notice (the "Milestone

Response Notice") to the Company of such disagreement and/or inaccuracy within 30 days of its receipt of the Milestone Completion Notice. The Milestone Response Notice shall specify in reasonable detail the reasons for such disagreement and/or basis for belief that any of the representations and warranties made in the Compliance Certificate are inaccurate and shall be accompanied by reasonably available support documentation evidencing the basis for such disagreement or belief. If the Holder shall fail to provide the Milestone Response Notice within such time period, the Milestones shall be deemed satisfied as of the Notified Milestone Completion Date and this Note shall be automatically converted as set forth in Section 3(a). If the Holder shall have timely provided the Milestone Response Notice, the Company and the Holder shall in good faith attempt to resolve their disagreement as to the satisfaction of the Milestones and/or the accuracy of the representations and warranties in the Compliance Certificate. If the Company and Holder are unable to resolve their disagreement within the Milestones Cure Period, the Company may pay to the Holder the principal and interest owing under this Note as of the Notified Milestone Completion Date (in which case the Note shall be cancelled and surrendered) or may pursue any other remedy that may be available to it under applicable law.

(iii) Elective Conversion. If the Holder wishes to voluntarily convert this Note as set forth in Section 3(a) hereof prior to a Conversion Event, the Holder shall surrender this Note to the Company and provide the Company with a written notice (the "Conversion Notice") to that effect.

(iv) Certificate; Time of Conversion. Upon conversion of this Note, the Holder shall promptly surrender this Note, duly endorsed, at the principal office of Company. At its expense, the Company shall, as soon as practicable thereafter, issue and deliver to such Holder at such principal office a certificate or certificates for the number of shares to which Holder shall be entitled upon such conversion (bearing such legends as are required by this Note and the Note Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to Company), together with any other securities and property to which Holder is entitled upon such conversion under the terms of this Note, including a check payable to Holder for any cash amounts payable as described in Section 3(d). Any such conversion of this Note shall be deemed to have been made immediately prior to the Conversion Event as described in Section 3(a) (or in the case of delivery of the Conversion Notice as set forth in Section 3(c)(iii), upon the Company's receipt of such Conversion Notice); provided, however, the Holder shall not be deemed a record holder of such shares or a purchaser of such shares until the Holder has delivered the Note for conversion. On and after such date, the Holder shall be treated as a purchaser of such shares under the Note Purchase Agreement and shall be bound by the applicable terms of this Note and Note Purchase Agreement.

(d) Fractional Shares. No fractional shares will be issued upon any conversion of this Note. In lieu of any fractional share to which the Holder would otherwise be entitled, the Company will pay to the Holder in cash that amount of the unconverted principal and interest balance of this Note.

(e) Reservation of Shares. The Company will at all times reserve and keep available out of its authorized but unissued shares or shares held in treasury, sufficient shares of Series E Preferred Stock or other securities to permit the full conversion of the outstanding principal

and interest of this Note pursuant to the terms of this Note. In the event the Company shall have insufficient shares of Series E Preferred Stock or other securities to permit the full conversion of the outstanding principal and accrued interest of this Note pursuant to the terms hereof, the Company hereby covenants and agrees that the Company shall use its commercially reasonable efforts to seek board and shareholder approval of an amendment to the Company's Articles of Incorporation in order to authorize an increase in the number of authorized shares of Series E Preferred Stock or other securities of the Company in a sufficient amount so that the aggregate number of shares of Series E Preferred Stock or other securities issuable upon conversion of this Note will then be authorized and available for issuance.

4. Change of Control Transaction. The Company shall provide the Holder with 15 days written notice of the closing of a Change of Control Transaction, specifying in reasonable detail the terms of such Change of Control Transaction. If the Holder shall not have voluntarily elected to convert this Note as set forth in Section 3(c)(iii) within such 15 day period, the Company may prepay the entire principal amount and interest owing under this Note as of the date of such prepayment. The Holder shall thereafter promptly return the Note to the Company for cancellation.

5. Change in Series E Preferred Stock.

(a) Split, Subdivision or Combination of Series E Preferred Stock. In the event the Company should at any time or from time to time after the date of issuance hereof split or subdivide the outstanding shares of its Series E Preferred Stock (or other securities issuable upon conversion of this Note) or issue additional shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) to the holders thereof as a dividend or make any other distribution payable in additional shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) to the holders thereof without payment of any consideration by such holder for the additional shares of Series E Preferred Stock (or such other securities), then, as of the date of such dividend, distribution, split or subdivision, the Conversion Price of this Note shall be appropriately decreased so that the number of shares of Series E Preferred Stock or other securities issuable upon conversion of this Note shall be increased in proportion to such increase of outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of this Note, as applicable. If the number of shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note) outstanding at any time after the date hereof is decreased by a combination of the outstanding shares of Series E Preferred Stock (or other securities issuable upon conversion of this Note), then, following the record date of such combination, the Conversion Price for this Note shall be appropriately increased so that the number of shares of Series E Preferred Stock or other securities issuable on conversion hereof shall be decreased in proportion to such decrease in outstanding shares of Series E Preferred Stock or other securities issuable upon conversion of this Note, as applicable.

(b) Reclassification etc. In case of any reclassification, capital reorganization, or change in the Series E Preferred Stock (or other securities issuable upon conversion of this Note) of the Company, including conversion of such shares pursuant to the Company's Articles of Incorporation then in effect (other than as a result of a split, subdivision, combination, or stock dividend provided for in Section 5(a) above), then appropriate adjustment shall be made to the Conversion Price and kind of securities or other property issuable upon conversion of this Note so

that this Note shall be convertible upon the terms set forth herein into the kind and amount of shares of stock and other securities and property receivable in connection with such reclassification, reorganization, or change by a holder of the same number of shares of Series E Preferred Stock or other securities as are issuable on conversion of this Note.

(c) Merger or Consolidation. Other than a Change of Control Transaction in connection with which this Note has been converted or prepaid, if at any time there shall be an acquisition of the Company by merger, consolidation or otherwise where the Company is not the surviving corporation or as a result of which all of the outstanding capital stock of the Company is exchanged for capital stock of another corporation, then, as a part of such acquisition, the Conversion Price and kind of securities issuable upon conversion hereof shall be appropriately adjusted so that the Holder shall receive upon conversion of this Note, the number of shares of stock or other securities or property of the surviving or successor corporation resulting from such acquisition (or the corporation the capital stock of which is issued in exchange for the capital stock of the Company), to which a holder of the securities issuable upon conversion of this Note would have been entitled in such acquisition if this Note had been converted immediately before such acquisition.

6. Payment Due Date. If not previously converted into shares of Series E Preferred Stock pursuant to Section 3 hereof and if not sooner prepaid by the Company pursuant to Section 2 hereof or accelerated and declared due and owing by the Holder pursuant to Section 7 hereof, the principal amount and any accrued interest due thereon then outstanding under this Note will become due and payable on the Payment Date.

7. Default. The Company shall be deemed to be in default under this Note in the event (i) the Company shall fail to materially perform any covenant or agreement of the Company contained in Section 4 of the Note Purchase Agreement for a period of 30 days after written notice of such failure from Holder; (ii) the Company shall have failed to make payment of principal or interest due on the Note when such principal and interest becomes due; or (iii) the Company shall commence, whether voluntarily or involuntarily a case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it. In the case of an event of default, the Holder may, by written notice to the Company, declare the unpaid principal amount of this Note, all interest accrued and unpaid hereon, and all other amounts payable hereunder to be immediately due and payable, without presentment, demand, protest, or further notice of any kind, as well as enforce all other rights and remedies available to the Holder under applicable law.

8. Notices. Any notice, request, other communication, or payment required or permitted hereunder shall be in writing and shall be deemed to have been duly given upon delivery, if delivered personally by facsimile, or by recognized overnight courier service, or five days after deposit, if deposited in the United States mail for mailing by registered or certified mail, postage prepaid, and addressed as follows:

If to Holder:	Biomedical Sciences Investment Fund Pte Ltd 20 Biopolis Way #09-01 Centros Singapore 138668 Attention: Chu Swee Yeok Tel: 65-6336-2288 Fax: 65-6334-8478
If to the Company:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, California 94080 Attention: Chief Executive Officer Tel: (650) 266-6000 Fax: (650) 871-7195
	with a copy to:
	Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, California 94304-1050 Attention: Ken Clark and Robert Kornegay Tel: (650) 493-9300 Fax: (650) 493-6811

Each of the above addressees may change its address or facsimile number for purposes of this paragraph by giving to the other addressee notice of such new address in conformity with this paragraph.

9. Amendments. This Note may be amended and any provision hereof waived with the consent of the Company and the Holder.

10. No Rights as Shareholder. Nothing in this Note shall be construed as conferring upon the Holder or any other person the right to vote or to consent or to receive notice as a shareholder in respect of meetings of shareholders for the election of directors of the Company or any other matters or any rights whatsoever as a shareholder of the Company until, and only to the extent that, this Note shall have been converted.

11. Successors and Assigns. Subject to the restrictions on transfer described in Section 12 and in the Note Purchase Agreement, the rights and obligations of the Company and Investor shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

12. Transfer of Note and Securities Issuable on Conversion Hereof. Prior to the conversion of this Note, this Note (or the underlying securities issuable upon conversion hereof) may not be sold, assigned, transferred, pledged or otherwise disposed of by the Holder, in whole or in part, without the prior written consent of the Company. With respect to any sale, assignment,

transfer, pledge or other disposition of the securities into which this Note may be converted after conversion of this Note, the Holder may only transfer such securities pursuant to, and on the conditions set forth in that certain Eighth Amended and Restated Investor Rights Agreement dated June 13, 2006 between the Company and certain investors in the Company (including Holder), as may be amended from time to time (the "Rights Agreement"). The Holder shall cause any proposed purchaser, assignee, transferee or pledgee of such securities to agree in writing to take and hold such securities subject to and upon the conditions specified in this Note, the Note Purchase Agreement, and the Rights Agreement, including, without limitation, Sections 1.2, 1.3, 1.4, and 1.14 of the Rights Agreement.

13. Highest Lawful Rate. Anything herein to the contrary notwithstanding, if during any period for which interest is computed hereunder, the amount of interest computed on the basis provided for in this Note, together will all fees, charges, and other payments or rights which are treated as interest under applicable law, as provided for herein or in any other document executed in connection herewith, would exceed the amount of such interest computed on the basis of the Highest Lawful Rate, the Company shall not be obligated to pay, and the Holder shall not be entitled to charge, collect, receive, reserve, or take, interest in excess of the Highest Lawful Rate, and during any such period the interest payable hereunder shall be computed on the basis of the Highest Lawful Rate. As used herein, "Highest Lawful Rate" means the maximum non-usurious rate of interest, as in effect from time to time, which may be charged, contracted for, reserved, received, or collected by the Holder in connection with this Note under applicable law. In accordance with this section, any amounts received in excess of the Highest Lawful Rate shall be applied towards the prepayment of principal then outstanding.

14. Miscellaneous. The Company agrees to pay on demand all of the losses, costs, and expenses (including, without limitation, attorneys' fees and disbursements) which the Holder incurs in connection with enforcement of this Note, or the protection or preservation of the Holder's rights under this Note, whether by judicial proceeding or otherwise. Such costs and expenses include, without limitation, those incurred in connection with any workout or refinancing, or any bankruptcy, insolvency, liquidation, or similar proceedings. The Company hereby waives presentment, demand for performance, notice of non-performance, protest, notice of protest, and notice of dishonor. No delay on the part of the Holder in exercising any right hereunder shall operate as a waiver of such right or any other right. This Note is being delivered in and shall be construed in accordance with the laws of the State of California without regard to the conflicts of law provisions thereof. Any reference to "dollars" or "$" in this Note shall refer to the lawful money of the United States of America.

IN WITNESS WHEREOF, the Company has caused this Convertible Promissory Note to be executed by its officer thereunto duly authorized as of the date first above written.

Dated: _____ ___, 20___

FLUIDIGM CORPORATION
a California corporation

By: _____

Name: _____

Title: _____

Acknowledged and Agreed:

HOLDER

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: _____

Name: _____

Title: _____

[Convertible Promissory Note Signature Page]

EXHIBIT A

FORM OF COMPLIANCE CERTIFICATE

EXHIBIT D

FLUIDIGM CORPORATION

COMPLIANCE CERTIFICATE

(Issuance of First Note)

Fluidigm Corporation, a California corporation (the "Company"), hereby represents and warrants to Biomedical Sciences Investment Fund Pte Ltd (the "Purchaser") as follows, effective as August 7, 2006. This Compliance Certificate is delivered in connection with the sale and issuance to the Purchaser of the Company's Convertible Promissory Note dated as of August 7, 2006 in the principal amount of $5,000,000.00 (the "Convertible Note") and issued pursuant to the Convertible Note Purchase Agreement dated as of August 7, 2006, (the "Purchase Agreement").

1. The Company is a corporation duly organized, validly existing, and in good standing under the laws of the State of California and has all requisite corporate power and authority to carry on its business as currently conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a material adverse effect on its business (as now conducted), properties, or financial condition.

2. The Company has all requisite legal and corporate power and authority to (i) execute and deliver this Compliance Certificate; (ii) sell and issue the Convertible Note; (iii) issue the shares of Series E Preferred Stock issuable upon conversion of the Convertible Note (the "Series E Shares") and the Common Stock issuable upon conversion of such Series E Shares (the "Common Conversion Shares"); and (iv) carry out and perform its obligations under the terms of this Compliance Certificate, the Convertible Note, and the Purchase Agreement.

3. All corporate action on the part of the Company, its officers, directors, and shareholders necessary for the authorization, execution, and delivery of this Compliance Certificate, the performance of all obligations of the Company under this Compliance Certificate, the Convertible Note, and the Purchase Agreement, the sale and delivery of the Convertible Note, and the authorization and issuance of the Series E Shares and the Common Conversion Shares has been taken. Each of the Eighth Amended and Restated Investor Rights Agreement dated as of June 13, 2006 among the Company and certain of its shareholders (as amended to date, the "Rights Agreement") and the Second Amended and Restated Voting Agreement dated as of August 16, 2005 (as amended to date, the "Voting Agreement") remain effective, subject only to such amendments as to which the Purchaser has been previously notified in writing and unless earlier terminated in accordance with their terms (for which the Company has also provided the Purchaser notice in writing). Each of this Compliance Certificate, the Purchase Agreement, the Convertible Note and to the extent not terminated in accordance with its terms, each of the Rights Agreement and the Voting Agreement, constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to (i) judicial principles limiting the availability of specific performance, injunctive relief, and other equitable remedies; (ii) bankruptcy, insolvency, reorganization, moratorium and other similar laws now or hereafter in effect generally relating to or affecting creditors' rights; and (iii) limitations on the enforceability of the indemnification provisions of the Rights Agreement.

4. The Convertible Note, when issued, sold and delivered in accordance with the terms of the Purchase Agreement will be free of restrictions on transfer other than restrictions on transfer under the Purchase Agreement, the Convertible Note, the Rights Agreement and the Voting Agreement and under applicable state and federal securities laws. The Series E Shares, when issued upon conversion of the Convertible Note, in accordance with the Convertible Note and the Purchase Agreement, will be duly and

validly issued, fully paid, and nonassessable, and will be free of restrictions on transfer other than restrictions on transfer under the Purchase Agreement, the Rights Agreement, and the Voting Agreement and under applicable state and federal securities laws. The Common Conversion Shares, when issued upon conversion of the Series E Shares in accordance with the terms of the Company's Articles of Incorporation as currently in effect, will be duly and validly issued, fully paid, and nonassessable, and will be free of restrictions on transfer other than restrictions on transfer under the Purchase Agreement, the Rights Agreement, and the Voting Agreement, and under applicable state and federal securities laws. The Series E Shares and the Common Conversion Shares may, subject to the continued accuracy of the representations and warranties provided by Purchaser pursuant to the Purchase Agreement, be issued without any registration or qualification under state and federal securities laws as such laws are currently in effect.

5. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required in connection with the offer and sale of the Convertible Note or the issuance of the Series E Shares or the Common Conversion Shares or the consummation of any other transaction contemplated by the Convertible Note or the Purchase Agreement, except for filings required pursuant to applicable federal and state securities laws and blue sky laws, which filings the Company covenants to complete within the required statutory period.

6. The Company is not in violation or default of any provision of its Articles of Incorporation or Bylaws, each as amended and in effect as of the date hereof. The Company is not in violation or default of any provision of any instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order, or obligation to which it is a party or by which it or any of its properties or assets is bound or, to the best of its knowledge, of any provision of any federal, state, or local statute, rule, or governmental regulation, except to the extent such violations or defaults would not reasonably be expected, individually or in the aggregate, to have a material adverse effect on the Company's business (as now conducted), properties, or financial condition or an adverse effect on the Company's ability to consummate the transactions contemplated by this Compliance Certificate, the Convertible Note, and the Purchase Agreement. None of the execution, delivery, and performance of and compliance with this Compliance Certificate, the continued performance by the Company under the Purchase Agreement, the Rights Agreement (unless terminated prior to the date hereof) and the Voting Agreement (unless terminated prior to the date hereof), the sale and issuance of the Convertible Note, or the issuance of the Series E Shares or the Common Conversion Shares will (i) result in any violation, be in conflict with, or constitute, with or without the passage of time, or giving of notice, a default under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order, or obligation, except where such violation or conflict would not reasonably be expected to have a material adverse effect on the Company's business (as now conducted), properties, or financial condition or an adverse effect on the Company's ability to consummate the transactions contemplated by this Compliance Certificate, the Convertible Note, and the Purchase Agreement; (ii) require any consent or waiver under any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order, or obligation (other than such consents or waivers that have been obtained or such consents or waivers that if not obtained would not reasonably be expected to have a material adverse effect on the Company's business (as now conducted), properties, or financial condition or an adverse effect on the Company's ability to consummate the transactions contemplated by this Compliance Certificate, the Convertible Note, and the Purchase Agreement; or (iii) result in the creation of any mortgage, pledge, lien, encumbrance, or charge upon any of the properties or assets of the Company pursuant to any such provision, license, indenture, instrument, mortgage, deed of trust, loan, contract, commitment, judgment, decree, order, or obligation (other than such mortgages, pledges, liens, encumbrances, or charges as would not reasonably be expected to have a material adverse effect on the Company's business (as now conducted), properties, or financial condition or an adverse effect on the Company's ability to consummate the transactions contemplated by this Compliance Certificate, the Convertible Note, and the Purchase Agreement).

7. The representations and warranties of the Company contained in Section 2 of the Purchase Agreement were true in all material respects on and as of the Closing (as defined in the Purchase Agreement) of the sale of the First Note (as defined in the Purchase Agreement) on August 7, 2006.

8. This Compliance Certificate shall be governed by the laws of the State of California, without reference to the conflicts of law provisions thereof.

Executed as of August 7, 2006.

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington
Print Name: Gajus Worthington
Title: CEO

[Signature Page to Compliance Certificate]

EXHIBIT E

INVESTMENT REPRESENTATION STATEMENT

PURCHASER: Biomedical Sciences Investment Fund Pte Ltd (the "Purchaser")

COMPANY: Fluidigm Corporation (the "Company")

SECURITY: Convertible Promissory Note (US$5,000,000 in principal amount) (the "Additional Note") the principal and accrued interest on which are convertible into shares of Series E Preferred Stock of the Company

DATE:: August 7, 2006

This Investment Representation Statement is entered into in connection with the sale by the Company of an Additional Note to Purchaser as set forth in that certain Convertible Promissory Note Purchase Agreement between the Company and Purchaser dated August 7, 2006 (the "Note Purchase Agreement"). Capitalized terms used but not otherwise defined herein have the meanings given to such terms in the Note Purchase Agreement. In connection with the purchase of the Second Note and the securities issued or issuable upon conversion thereof (the "Conversion Securities"), the undersigned Purchaser represents to the Company the following:

1. Experience. Purchaser is experienced in evaluating start-up companies such as the Company, is able to evaluate and represent its own interests in transactions such as the purchase of the Additional Note and the Conversion Securities, has such knowledge and experience in financial and business matters such that Purchaser is capable of evaluating the merits and risks of Purchaser's investment in the Company, and has the ability to bear the economic risks of its investment.

2. Investment. Purchaser is acquiring and will acquire, the Additional Note and the Conversion Securities, for investment for Purchaser's own account and not with the view to, or for resale in connection with, any distribution thereof. Purchaser understands that the Additional Note and the Conversion Securities have not been registered under the Securities Act of 1933, as amended (the "Securities Act") by reason of a specific exemption from the registration provisions of the Securities Act, which depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein. Purchaser further represents that it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to any of the Additional Note or Conversion Securities other than a transfer not involving a change of beneficial ownership. Purchaser understands and acknowledges that the offering of the Additional Note and Conversion Securities will not be registered under the Securities Act on the ground that the sale provided for is exempt from the registration requirements of the Securities Act.

3. Rule 144. Purchaser acknowledges that the Additional Note and Conversion Securities must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser is aware of the provisions of Rule 144 promulgated under the Securities Act, which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions. Purchaser covenants that, in the absence of an effective registration statement covering the securities in question, Purchaser will sell, transfer,

or otherwise dispose of the Additional Note and the Conversion Securities only in accordance with applicable securities laws and in a manner consistent with Purchaser's representations and covenants set forth herein and in the Note Purchase Agreement between Holder and the Company and the Additional Note. In connection therewith, Purchaser acknowledges that the Company will make a notation on its stock books regarding the restrictions on transfer set forth herein, in the Note Purchase Agreement and the Additional Note and will transfer securities on the books of the Company only to the extent not inconsistent therewith.

4. No Public Market. Purchaser understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Second Note or the Conversion Securities.

5. Access to Data. Purchaser has received and reviewed information about the Company and has had an opportunity to discuss the Company's business, management and financial affairs with its management and to review the Company's facilities.

6. Authorization. This Investment Representation Statement when executed and delivered by the Purchaser will constitute a valid and legally binding obligation of the Purchaser, enforceable against the Purchaser in accordance with its terms, subject to: (i) judicial principles respecting election of remedies or limiting the availability of specific performance, injunctive relief, and other equitable remedies; and (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights.

7. Accredited Investor. Purchaser acknowledges that it is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated by the United States Securities and Exchange Commission (the "Commission") under the Securities Act and shall submit to the Company such further assurances of such status as may be reasonably requested by the Company. The principal address of such Purchaser is as set forth on the signature page hereto.

8. Tax Advisors. Purchaser has reviewed with its own tax advisors the tax consequences of the purchase of the Additional Note and the Conversion Securities. Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents and understands that Purchaser (and not the Company) shall be responsible for the Purchaser's own tax liability that may arise as a result of the Purchase of the Additional Note and the Conversion Securities.

9. Brokers or Finders. The Company has not incurred and will not incur, directly or indirectly, as a result of any action taken by such Purchaser, any liability for brokerage or finders' fees or agents' commissions or any similar changes in connection with the Note Purchase Agreement or the Additional Note.

10. Non-United States Persons. Purchaser hereby represents that Purchaser is satisfied as to the full observance of the laws of Purchaser's jurisdiction in connection with any invitation to subscribe for the Additional Note and the Conversion Securities or any use of the Note Purchase Agreement, including (i) the legal requirements within Purchaser's jurisdiction for the purchase of the Additional Note and the Conversion Securities, (ii) any foreign exchange restrictions applicable

to such purchase, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of such securities. Purchaser's subscription and payment for, and Purchaser's continued beneficial ownership of, the Additional Note and the Conversion Securities will not violate any applicable securities or other laws of Purchaser's jurisdiction.

11. Other Agreements. Purchaser acknowledges and agrees that Purchaser and the Additional Note and the Conversion Securities are subject to the Additional Note, and Investor Rights Agreement and the restrictions on transfer set forth therein and in the Note Purchase Agreement.

[Remainder of Page Left Blank Intentionally]

IN WITNESS WHEREOF, the Purchaser has caused this Investment Representation Statement to be executed by its officer thereunto duly authorized as of the date first above written.

PURCHASER:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Swee Yeok
Name: Chu Swee Yeok
Title: Director

EXHIBIT F
LEGAL OPINION

August __, 2006

Biomedical Sciences Investment Fund Pte. Ltd.
20 Biopolis Way
#09-01 Centros
Singapore 138668

Re: **Convertible Note Purchase Agreement**

Ladies and Gentlemen:

Reference is made to the Convertible Note Purchase Agreement dated as of August ___, 2006 (the "**Agreement**") by and among Fluidigm Corporation, a California corporation (the "**Company**"), and Biomedical Sciences Investment Fund Pte. Ltd. (the "**Purchaser**"), which provides for the sale and issuance by the Company to the Purchaser of the First Note, the Second Note and the Third Note (each as defined in the Agreement). This opinion is rendered to the Purchaser pursuant to Section 4.9 of the Agreement, and all terms used herein have the meanings defined for them in the Agreement and/or the First Note, unless otherwise defined herein. Reference in this opinion to the Agreement excludes any schedule or substantive agreement attached as an exhibit to the Agreement, unless otherwise indicated herein.

We have acted as counsel for the Company in connection with the negotiation of the Agreement and the issuance of the First Note. As such counsel, we have made such legal and factual examinations and inquiries as we have deemed advisable or necessary for the purpose of rendering this opinion. In addition, we have examined originals or copies of such corporate records of the Company, certificates of public officials and such other documents which we consider necessary or advisable for the purpose of rendering this opinion. In such examination we have assumed the genuineness of all signatures on original documents, the authenticity and completeness of all documents submitted to us as originals, the conformity to original documents of all copies submitted to us and the due execution and delivery of all documents (except as to due execution and delivery by the Company) where due execution and delivery are a prerequisite to the effectiveness thereof.

In our examination of the documents identified above and for purposes of this opinion, we have relied solely upon and assumed, and express no opinion as to, the current accuracy and completeness of (i) the information obtained from public officials; (ii) the representations and warranties of the Company and the Purchaser as to factual and other matters set forth in the Agreement and in any certificate delivered pursuant thereto or any ancillary agreement

referenced therein; and (iii) the representations and warranties as to factual and other matters made by representatives of the Company to us, including without limitation, those set forth in a management certificate executed by an executive of the Company.

As used in this opinion, the expression "to our knowledge," "known to us" or similar language with reference to matters of fact means that, after an examination of documents made available to us by the Company, and after inquiries of officers of the Company, but without any further independent factual investigation, we find no reason to believe that the opinions expressed herein are factually incorrect. Further, the expression "to our knowledge," "known to us" or similar language with reference to matters of fact refers to the current actual knowledge of the attorneys of this firm who provided material legal representation to the Company in connection with the Agreement and the transactions contemplated thereby. Except to the extent expressly set forth herein or as we otherwise believe to be necessary to our opinion, we have not undertaken any independent investigation to determine the existence or absence of any fact, and no inference as to our knowledge of the existence or absence of any fact should be drawn from our representation of the Company or the rendering of the opinions set forth below.

For purposes of this opinion, we are assuming that the Purchaser has all requisite power and authority, and has taken any and all necessary corporate or partnership action, to execute and deliver the Agreement and the First Note and to effect any and all transactions related to or contemplated thereby. In addition, we are assuming that the representations and warranties made by the Purchaser in the Agreement and pursuant thereto are true and correct. We are also assuming that the Purchaser has purchased the First Note (and the Note Shares issuable upon conversion thereof) for value, in good faith and without notice of any adverse claims within the meaning of the California Uniform Commercial Code.

We are members of the Bar of the State of California, and we express no opinion as to any matter relating to the laws of any jurisdiction other than the federal laws of the United States of America and the laws of the State of California.

The opinions hereinafter expressed are subject to the following additional qualifications:

(a) We express no opinion as to the effect of applicable bankruptcy, insolvency, reorganization, moratorium or other similar federal or state laws affecting the rights of creditors.

(b) We express no opinion as to the effect or availability of rules of law governing specific performance, injunctive relief or other equitable remedies (regardless of whether any such remedy is considered in a proceeding at law or in equity).

(c) This opinion is qualified by the limitations imposed by statutes and principles of law and equity that provide that certain covenants and provisions of agreements are unenforceable where such covenants or provisions are unconscionable or contrary to public policy or where enforcement of such covenants or provisions under the circumstances would violate the enforcing party's implied covenant of good faith and fair dealing.

(d) We express no opinion regarding any of (i) the rights or remedies available to any party for violations or breaches of any provisions which are immaterial or the enforcement of which would be unreasonable under the then-existing circumstances; (ii) the rights or remedies available to any party for material violations or breaches which are the proximate result of actions taken by any party to the Agreement or the First Note other than the party against whom enforcement is sought, which actions such other party is not entitled to take pursuant to the Agreement or the First Note or which otherwise violate applicable laws; (iii) the rights or remedies available to any party which takes discretionary action which is arbitrary, unreasonable or capricious, or is not taken in good faith or in a commercially reasonable manner, whether or not the Agreement or the First Note permits such action; (iv) the effect of the exercise of judicial discretion, whether in a proceeding in equity or at law; (v) the enforceability of any provision deemed to be "unconscionable" within the meaning of Section 1670.5 of the California Civil Code; (vi) the enforceability of any provision authorizing the exercise of any remedy without reasonable notice and opportunity to cure; or (vii) the effect of any provision of the Agreement or the First Note purporting to give the Purchaser the right to make any conclusive determination in its sole discretion.

(e) We express no opinion as to the legality, validity, binding nature or enforceability of (i) any provisions in the Agreement or the First Note providing for the payment or reimbursement of costs or expenses or indemnifying a party, to the extent such provisions may be held unenforceable as contrary to public policy; (ii) any provision of the Agreement or the First Note insofar as it provides for the payment or reimbursement of costs and expenses or indemnification for claims, losses or liabilities in excess of a reasonable amount determined by any court or other tribunal; (iii) any provisions regarding the Purchaser's (or its agent's) ability to collect attorneys' fees and costs in an action involving the Agreement or the First Note, if the Purchaser (or such agent) is not the prevailing party in such action (we call your attention to the effect of Section 1717 of the California Civil Code, which provides that, where a contract permits one party thereto to recover attorneys' fees, the prevailing party in any action to enforce any provision of the contract shall be entitled to recover its reasonable attorneys' fees); (iv) any provisions of the Agreement or the First Note imposing penalties or forfeitures, late payment charges or any increase in interest rate, upon delinquency in payment or the occurrence of a default to the extent they constitute a penalty or forfeiture or are otherwise contrary to public policy; (v) any rights of set-off; (vi) any provision of the Agreement or the First Note to the

effect that a statement, certificate, determination or record shall be deemed conclusive absent manifest error (or similar effect), including, without limitation, that any such statement, certificate, determination or record shall be *prima facie* evidence of a fact; or (vii) any provision of the Agreement or the First Note which provides that notice not actually received may be binding on any party.

(f) We express no opinion with respect to the legality, validity, binding nature or enforceability of (i) any vague or broadly stated waiver, including without limitation, the waivers of diligence, presentment, demand, protest or notice; (ii) any waivers or consents (whether or not characterized as a waiver or consent in the Agreement or the First Note) relating to the rights of the Purchaser or duties owing to them existing as a matter of law, including, without limitation, waivers of the benefits of statutory or constitutional provisions, to the extent such waivers or consents are found by courts to be against public policy or which are ineffective pursuant to California statutes and judicial decisions; (iii) any waivers of any statute of limitations; or (iv) covenants to the extent they are to be enforced as independent requirements as distinguished from conditions that may trigger an event of default.

(g) We express no opinion with respect to the legality, validity, binding nature or enforceability of any provision of the Agreement or the First Note to the effect that rights or remedies are not exclusive, that every right or remedy is cumulative and may be exercised in addition to any other right or remedy, that the election of some particular remedy or remedies does not preclude recourse to one or more other remedies or that failure to exercise or delay in exercising rights or remedies will not operate as a waiver of any such right or remedy.

(h) We note the obligations of the Company under the Agreement and the First Note relating to the Business Plan and the Milestones and the effects of deemed satisfaction of the Milestones on the conversion of the First Note. We express no opinion as to the enforceability of these provisions to the extent that they may be deemed vague or overly broad.

(i) We express no opinion as to any provision of the Agreement or the First Note requiring written amendments or waivers of such documents insofar as it suggests that oral or other modifications, amendments or waivers could not be effectively agreed upon by the parties or that the doctrine of promissory estoppel might not apply.

(j) We express no opinion as to compliance with the anti-fraud provisions of applicable securities laws.

(k) We express no opinion as to the enforceability of any indemnification or contribution provision to the extent the provisions thereof may be subject to limitations of public policy and the effect of applicable statutes and judicial decisions.

(l) We express no opinion as to the enforceability of choice of law provisions, waivers of jury trial or provisions relating to venue or jurisdiction.

(m) We have made no inquiry into, and express no opinion with respect to, any federal or state statute, rule, or regulation relating to any tax, antitrust, land use, safety, environmental, hazardous material, patent, copyright, trademark or trade name matter, as to the statutes, regulations, treaties or common laws of any other nation (other than the United States), state or jurisdiction (other than the State of California), or the effect on the transactions contemplated in the Agreement or the First Note of noncompliance under any such statues, regulations, treaties, or common laws. Without limiting the foregoing, we express no opinion as to the effect of, or compliance with, the Investment Advisors Act of 1940, as amended, the Employee Retirement Income Security Act of 1974, as amended, or the California Finance Lenders Law. We further disclaim any opinion as to any statute, rule, regulation, ordinance, order, or other promulgation of any regional or local governmental body or as to any related judicial or administrative opinion.

(n) Our opinions relate solely to the express written provisions of the Agreement and the First Note, and we express no opinion as to any other oral or written agreements or understandings between the Company and the Purchaser.

(o) Our opinion set forth in paragraph 1 below is based solely on the certificates of certain state authorities and filing officers referenced above as to the legal existence and corporate good standing of the Company in the State of California.

Based upon and subject to the foregoing, and except as set forth in the Schedule of Exceptions to the Agreement, we are of the opinion that:

1. The Company is a corporation duly incorporated and validly existing under, and by virtue of, the laws of the State of California and is in good standing under such laws.

2. The Company has all requisite legal and corporate power to execute and deliver the Agreement and the First Note, to sell and issue the First Note under the Agreement, to issue the Note Shares issuable upon conversion of the First Note and the Common Stock issuable upon conversion of the Note Shares, and to carry out and perform its obligations under the terms of the Agreement and the First Note.

3. All corporate action on the part of the Company, its directors and shareholders necessary for the authorization, execution and delivery of the Agreement and the First Note by the Company, the authorization, sale, issuance and delivery of the First Note (and the Note Shares issuable upon conversion of the First Note and the Common Stock issuable upon

conversion thereof) and the performance by the Company of its obligations under the Agreement and the First Note has been taken. Each of the Agreement and the First Note has been duly and validly executed and delivered by the Company and constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

This opinion is furnished to the Purchaser solely for its benefit in connection with the purchase of the First Note, and may not be relied upon by any other person or for any other purpose without our prior written consent. We assume no obligation to inform you of any facts, circumstances, events or changes in the law that may arise or be brought to our attention after the date of this opinion that may alter, affect or modify the opinions expressed herein.

Very truly yours,

Exhibit 4.6

ACTION BY WRITTEN CONSENT

OF THE STOCKHOLDERS OF

FLUIDIGM CORPORATION

Effective as of August 25, 2008

In accordance with Section 228 of the Delaware General Corporation Law and the Bylaws of Fluidigm Corporation, a Delaware corporation (the "Company"), the undersigned, constituting the holders of outstanding shares of stock of the Company having not less than the minimum number of votes that would be necessary to authorize or take action at a meeting at which all shares of the Company entitled to vote thereon were present and voted, hereby adopt the following resolutions which shall be effective as of the date that the minimum number of votes necessary to effect the following resolutions are received by the Company:

Consent to Automatic Conversion of Preferred Stock

WHEREAS: Section 4(b) of the Company's Amended and Restated Certificate of Incorporation (the "Current Certificate") provides as follows:

"Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share:

(x) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S 1 (or successor form) filed under the Securities Act of 1933, as amended (the "Securities Act"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $5.69 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 4(e) and 4(g)) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or

(y) upon the receipt by the Corporation of a written consent or request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests.

WHEREAS: The Company is currently in the process of completing an initial public offering of its Common Stock, as described in the Company's Registration Statement on Form S-1 (Registration No. 333-150227) (the "Offering").

WHEREAS: The undersigned holders collectively hold at least two-thirds of the shares of Preferred Stock now outstanding.

WHEREAS: The undersigned holders of Preferred Stock of the Company believe it to be in the best interests of the Company and its stockholders for all outstanding shares of Preferred Stock to be converted to Common Stock at the then applicable Conversion Rate (as defined in the Current Certificate) prior to the closing of the Offering, subject only to the conditions set forth herein.

NOW, THEREFORE, BE IT RESOLVED: That, effective at 9:00 am Eastern on the third business day prior to the closing of the first sale of Common Stock in the Offering, and subject only to the approval of the price per share at which Common Stock is to be sold in the Offering by at least 75% of the members of the Board of Directors of the Company, all outstanding shares of Preferred Stock of the Company shall automatically and without further action on the part of the holders of such Preferred Stock be converted into shares of Common Stock of the Company in accordance with Section 4(b)(y) of the Current Certificate.

RESOLVED FURTHER: That any and all actions taken by the directors and officers of the Company to carry out the purposes and intent of the foregoing resolutions prior to, on or after their adoption are authorized, approved, ratified and confirmed.

* * * * *

This action by written consent shall be effective as of the date the Company receives the requisite consent of the Company's stockholders. By executing this action by written consent, each undersigned stockholder is giving written consent with respect to all shares of the Company's preferred stock held by such stockholder in favor of the above resolutions. This action by written consent may be executed in any number of counterparts, each of which shall constitute an original and all of which together shall constitute one action. Any copy, facsimile or other reliable reproduction of this action by written consent may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reliable reproduction is a complete reproduction of the entire original writing. This action by written consent shall be filed with the minutes of the proceedings of the stockholders of the Company.

STOCKHOLDERS:

Date: 8/14/08

ALLIANCEBERNSTEIN VENTURE FUND I, L.P.

By: AllianceBernstein ESG Venture Management, L.P., its general partner
By: AllianceBernstein Global Derivatives Corporation, its general partner
By: /s/ Mona Bhalla
Name: Mona Bhalla
Title: Vice President

STOCKHOLDERS:

Date: 8/12/08

ALLOY VENTURES 2005, L.P.

By: Alloy Ventures 2005, LLC
its General Partner
By: /s/ Craig C. Taylor
Name: Craig C. Taylor
Title: Managing Member of Alloy Ventures 2005 LLC
Managing Member of Alloy Ventures 2005, L.P.

ALLOY VENTURES 2002, L.P.
ALLOY PARTNERS 2002, L.P.

Date: 8/12/08

By: Alloy Ventures 2002, LLC
its General Partner
By: /s/ Craig C. Taylor
Name: Craig C. Taylor
Title: Managing Member of Alloy Ventures 2002 LLC
Managing Member of Alloy Partners 2002, L.P. and Alloy Ventures 2002, L.P.

STOCKHOLDERS:

Date: 8-14-08

/s/ Bruce Burrows
BRUCE BURROWS

STOCKHOLDERS:

Date: August 12, 2008

EUCLIDSR PARTNERS, L.P.

By: EuclidSR Associates, L.P.
its General Partner
By: /s/ Elaine V. Jones
Name: Elaine V. Jones
Title: General Partner

Date: August 12, 2008

EUCLIDSR BIOTECHNOLOGY PARTNERS, L.P.

By: EuclidSR Biotechnology Associates, L.P.
its General Partner
By: /s/ Elaine V. Jones
Name: Elaine V. Jones
Title: General Partner

STOCKHOLDERS:

Date: 8/25/08

FIDELITY CONTRAFUND:
FIDELITY ADVISOR NEW INSIGHTS FUND

By: /s/ Paul M. Murphy
Name: Paul M. Murphy
Title: Assistant Treasurer

Date: 8/25/08

FIDELITY CONTRAFUND:
FIDELITY CONTRAFUND

By: /s/ Paul M. Murphy
Name: Paul M. Murphy
Title: Assistant Treasurer

Date: 8/25/08

VARIABLE INSURANCE PRODUCTS FUND II:
CONTRAFUND PORTFOLIO

By: /s/ Paul M. Murphy
Name: Paul M. Murphy
Title: Assistant Treasurer

STOCKHOLDERS:

Date: 8-12-08

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC
its General Partner
By: /s/ Michael Sweeney
Name: Michael Sweeney
Title: As agent for the general partner

Date: 8-12-08

INTERWEST PARTNERS VII, L.P.

By: InterWest Management Partners VII, LLC
its General Partner
By: /s/ Michael Sweeney
Name: Michael Sweeney
Title: As agent for the general partner

STOCKHOLDERS:

Date: Aug 14, 2008

LEHMAN BROTHERS HEALTHCARE VENTURE CAPITAL, L.P.

By: Lehman Brothers HealthCare Venture Capital Associates L.P.,
its General Partner
By: LB I Group Inc., its General Partner
By: /s/ Deborah Nordell
Name: Deborah Nordell
Its: Senior Vice President

Date: Aug 14, 2008

LEHMAN BROTHERS P.A., LLC

By: /s/ Deborah Nordell
Name: Deborah Nordell
Its: Senior Vice President

STOCKHOLDERS:

Date: Aug 14, 2008

LEHMAN BROTHERS PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Group Inc., its General Partner
By: /s/ Deborah Nordell
Name: Deborah Nordell
Its: Senior Vice President

Date: Aug 14, 2008

LEHMAN BROTHERS OFFSHORE PARTNERSHIP ACCOUNT 2000/2001, L.P.

By: LB I Offshore Partners Group Ltd., its General Partner
By: /s/ Deborah Nordell
Name: Deborah Nordell
Its: Senior Vice President

STOCKHOLDERS:

Date: 19 Aug 08

LILLY BIOVENTURES, ELI LILLY & COMPANY

By: /s/ Darren J. Carroll
By: Darren J. Carroll
Title: Executive Director
Eli Lilly and Company

STOCKHOLDERS:

Date: 8-13-08

SIGHTLINE HEALTHCARE FUND III, L.P.

By: SightLine Healthcare Management III, LP, its GP
By: /s/ Maureen Harder
Name: Maureen Harder
Title: Managing Director of SightLine Partners LLC, its GP

STOCKHOLDERS:

Date: 8/22/08

SMALLCAP WORLD FUND, INC.

By: Capital Research and Management Company
Its investment adviser
By: /s/ Michael J. Downer
Name: Michael J. Downer
Title: Vice President and Secretary

STOCKHOLDERS:

VERSANT AFFILIATES FUND 1-A, L.P.
VERSANT AFFILIATES FUND 1-B, L.P.
VERSANT SIDE FUND I, L.P.
VERSANT VENTURE CAPITAL I, L.P.

Date: 8/13/08

By: Versant Ventures I, LLC
its General Partner
By: /s/ Samuel D. Colella
Name: Samuel D. Colella
Title: Managing Director

STOCKHOLDERS:

Date: 8-14-08

CROSS CREEK CAPITAL, L.P.

By: Cross Creek Capital GP, L.P.
its Sole General Partner
By: Cross Creek Capital, LLC
Its Sole General Partner
By: Wasatch Advisors, Inc.
Its Sole Member
By: /s/ Daniel Thurber
Name: Daniel Thurber
Title: Vice President

STOCKHOLDERS:

Date: 8-14-08

CROSS CREEK CAPITAL EMPLOYEE'S FUND, L.P.

By: Cross Creek Capital GP, L.P.
Its Sole General Partner
By: Cross Creek Capital, LLC
Its Sole General Partner
By: Wasatch Advisors, Inc.
Its Sole Member
By: /s/ Daniel Thurber
Name: Daniel Thurber
Title: Vice President

STOCKHOLDERS:

WASATCH FUNDS, INC.
Wasatch Small Cap Growth Fund

Date: 8-14-08

By: Wasatch Advisors, Inc.
Its: Investment Advisor
By: /s/ Daniel Thurber
Name: Daniel Thurber
Title: Vice President

September 16, 2008

Fluidigm Corporation
7000 Shoreline Court, Suite 100
South San Francisco, CA 94080

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We are acting as counsel to Fluidigm Corporation, a Delaware corporation (the "Company"), in connection with the registration of 6,095,000 shares of the Company's Common Stock, par value $0.001 per share, including 795,000 shares subject to an over-allotment option (collectively, the "Shares"), pursuant to a Registration Statement on Form S-1 (Registration No. 333-150227), as amended (the "Registration Statement"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended.

As counsel for the Company, we have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials and other instruments as we have deemed necessary for the purposes of rendering this opinion. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the originals of all documents submitted to us as copies.

Based upon the foregoing, we are of the opinion that the Shares to be registered for sale by the Company have been duly authorized by the Company and, when issued, delivered and paid for in accordance with the terms of the underwriting agreement referred to in the Registration Statement, will be, validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement, and we consent to the reference of our name under the caption "Legal Matters" in the Prospectus forming a part of the Registration Statement.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Wilson Sonsini Goodrich & Rosati, P.C.

[***] Indicates text has been omitted from this Exhibit pursuant to a confidential treatment request and has been filed separately with the Securities and Exchange Commission.

Exhibit 10.9

MASTER CLOSING AGREEMENT

By and Among

FLUIDIGM CORPORATION,
a California corporation,

OCULUS PHARMACEUTICALS, INC.,
a Delaware corporation,

and

THE UAB RESEARCH FOUNDATION

dated

March 7, 2003

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EXHIBITS AND SCHEDULES

Exhibit	Description
A	Amended and Restated Articles of Incorporation of Fluidigm
B	Form of New License Agreement
C	Form of Sponsored Research Agreement
D	Description of Technology

Schedule	Description
4.6	Pending Litigation

MASTER CLOSING AGREEMENT

THIS MASTER CLOSING AGREEMENT is entered into as of March 7, 2003 by and among FLUIDIGM CORPORATION, a California corporation ("Fluidigm"), OCULUS PHARMACEUTICALS, INC., a Delaware corporation ("Oculus"), and THE UAB RESEARCH FOUNDATION ("UABRF").

RECITALS

A. Oculus and UABRF have entered into a license agreement dated September 21, 2001 (together with all amendments and modifications thereto, the "License Agreement") under which Oculus was granted an exclusive license to practice the intellectual property and technology relating to nanovolume crystallization arrays described in Schedule A to the License Agreement.

B. The parties hereto have entered into a binding letter agreement dated December 19, 2002 (the "Letter Agreement") under which Oculus and UABRF have agreed to terminate the License Agreement, UABRF has agreed to grant to Fluidigm an exclusive license to practice the intellectual property and technology relating to nanovolume crystallization arrays covered by the License Agreement, and Fluidigm and UABRF have agreed to enter into a sponsored research agreement. In exchange for the rights to be acquired by Fluidigm as contemplated by the Letter Agreement, Fluidigm has paid cash in the amount of [***] pursuant to the Letter Agreement and has agreed to the payment of additional cash and securities as specified in the Letter Agreement.

C. The parties desire to enter into this Agreement to set out additional terms and conditions related to the closing of the transactions, and the payments to be made by Fluidigm, contemplated by the Letter Agreement.

NOW, THEREFORE, in consideration of the representations, warranties and agreements herein contained, the parties agree as follows:

ARTICLE I

DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth or referenced below:

1.1 "Affiliate" of any specified person shall mean any other person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified person. For purposes of this definition, "control" when used with respect to any specified person means the power to direct or cause the direction of the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

1.2 "Ancillary Documents" shall mean all documents or agreements required by this Agreement to be executed or delivered by any party hereto.

1.3 "Assigned Rights" shall mean any intellectual property rights owned by Oculus that pertain in any way to the Technology, including without limitation any Inventions (as such term is defined in Section 11 of the License Agreement) and any other patent rights and other intellectual property rights therein owned by Oculus.

1.4 "Cash Consideration" shall mean the sum of cash in the amount of [***] paid in accordance with the Letter Agreement and the Closing Cash Consolidation.

1.5 "Closing" shall mean the closing of the transactions contemplated by this Agreement.

1.6 "Closing Cash Consideration" shall mean cash in the amount of [***].

1.7 "Closing Date" shall mean March 7, 2003, or such other date to which the parties shall mutually agree in writing.

1.8 "Encumbrances" shall mean restrictions on or conditions to transfer or assignment, claims, liabilities, licenses, immunities from lawsuits to third parties, liens, pledges, mortgages or security interests of any kind, whether accrued, absolute, contingent, or otherwise.

1.9 "Fluidigm Series C Preferred Stock" shall mean the Series C Preferred Stock of Fluidigm having the rights, preferences and privileges set forth in Fluidigm's Articles of Incorporation attached hereto as Exhibit A.

1.10 "License Agreement" shall mean the license agreement between Oculus and UABRF as described in Recital A.

1.11 "New License Agreement" shall mean the license agreement between Fluidigm and UABRF in the form of Exhibit B attached hereto.

1.12 "Sponsored Research Agreement" shall mean the sponsored research agreement between Fluidigm and UABRF in the form of Exhibit C attached hereto.

1.13 "Technology" shall mean all intellectual property and other rights relating to nanovolume crystallization arrays described in Exhibit D attached hereto.

1.14 "Transfer Taxes" shall mean all sales taxes, use taxes, conveyance taxes, transfer taxes, filing fees, recording fees, reporting fees and other similar duties, taxes and fees, if any, imposed upon, or resulting from, the transfer of the Assigned Rights hereunder, except federal, state or local income or similar taxes based upon or measured by revenue, income, profit or gain from the transfer of the Assigned Rights or the operation of Oculus' business prior to the Closing or by any increase in the value of any of the Assigned Rights through the Closing Date.

ARTICLE II

TRANSFER OF ASSIGNED RIGHTS AND LICENSE OF TECHNOLOGY

2.1 Transfer of Rights and License of Technology. Oculus and UABRF have mutually terminated the License Agreement as of January 30, 2003 and Oculus has surrendered all rights under the License Agreement to UABRF. Subject to and upon the terms and conditions of this Agreement, effective as of the Closing, Fluidigm and UABRF will enter into the New License Agreement. It is the intent of the parties that all intellectual property rights subject to the License Agreement as of November 27, 2002 shall be transferred and/or assigned to Fluidigm, and that all such rights owned by UABRF shall be licensed to Fluidigm under the New License Agreement, subject to the reservation by UABRF of certain rights as set forth in the License Agreement.

2.2 Excluded Assets and Liabilities. Notwithstanding the provisions of Section 2.1, (a) Fluidigm and Oculus expressly acknowledge and agree that Oculus shall not sell, transfer, assign, convey or deliver to Fluidigm, and Fluidigm shall not purchase, acquire or accept from Oculus, any right, title or interest of Oculus in or to any other property or assets of Oculus, and (b) Fluidigm does not assume, and Oculus does not transfer or assign, any liabilities or obligations, whether presently fixed and determined, contingent or otherwise, of Oculus.

2.3 Payment. In consideration of the execution of the New License Agreement and the transfer of the rights thereunder, Fluidigm will deliver to UABRF the Closing Cash Consideration and [* * *] shares of Fluidigm Series C Preferred Stock valued at 2.58 per share, the price at which Fluidigm sold and issued shares of its Series C Preferred Stock to other investors.

2.4 Taxes. Fluidigm and Oculus shall each pay (or reimburse the other for) one-half of all Transfer Taxes, whether imposed by law on Fluidigm and Oculus or otherwise.

2.5 Assigned Rights. Oculus hereby sells, assigns and transfers to Fluidigm all Assigned Rights, free and clear of all Encumbrances (except to the extent that the settlement agreement pertaining to the Lawsuit (as such term is defined in Section 6.3) may include an immunity from lawsuits for conduct arising prior to the date of the settlement agreement).

2.6 Unassignable Rights.

(a) Notwithstanding any provision of this Agreement or any of the Ancillary Documents, but subject to Section 11.3(c), to the extent that any of the Assigned Rights are not assignable or otherwise transferable to Fluidigm, or if such assignment or transfer would constitute a breach thereof or a violation of any applicable law, then neither this Agreement nor such Ancillary Documents shall constitute an assignment or transfer (or an attempted assignment or transfer) thereof until such consent, approval or waiver of such party or parties has been duly obtained.

(b) If any consent required to transfer the Assigned Rights to Fluidigm has not been obtained as of the Closing Date and Fluidigm nevertheless determines to proceed with the

Closing, Oculus and UABRF shall, at their own expense, continue to cooperate with Fluidigm and use commercially reasonable efforts to obtain such consent after the Closing.

(c) If any Assigned Right is not transferred to Fluidigm at the Closing pursuant to this Agreement, Oculus and Fluidigm shall cooperate with each other in any reasonable arrangement designed to provide for Fluidigm all of the benefits of such Assigned Rights. At Fluidigm's request, Oculus shall take all reasonable actions requested by Fluidigm to enforce for the benefit of Fluidigm any and all rights of Oculus with respect to any such Assigned Right that is not otherwise transferred pursuant to the provisions of this Agreement. Oculus agrees to hold in trust for, and remit promptly to, Fluidigm all future collections or payments received by Oculus in respect of all such Assigned Rights (net of all costs and expenses incurred by Oculus in respect thereto); provided, however, that nothing herein shall create or provide any rights or benefits in or to third parties.

(d) If any intellectual property rights that are described in the New License Agreement cannot be licensed to Fluidigm by UABRF under the New License Agreement without the consent of any third party or without resulting in a breach or default of any agreement affecting such rights, UABRF covenants and agrees that it shall not sue or otherwise take any legal action to restrict or prevent Fluidigm and Fluidigm's permitted assignees and sublicensees from practicing such intellectual property rights as purported to be granted under the terms of the New License Agreement.

(e) If, subsequent to the Closing, a claim brought by any party challenging any of the transactions contemplated hereby results in any ruling or order which has the result of frustrating in a material way the transfer of any of the Assigned Rights hereunder to Fluidigm or the grant of rights to Fluidigm under the New License Agreement or Fluidigm's use thereof as provided herein, Oculus and UABRF shall cooperate with Fluidigm in any reasonable arrangement designed to give Fluidigm, as nearly as practicable, the same economic benefits as if such transfer or license, as the case may be, had been consummated in accordance with the provisions hereof.

(f) Nothing in this Section 2.6 shall be deemed to modify in any respect any of the representations or warranties of Oculus and UABRF set forth herein or the conditions to Fluidigm's obligations contained in this Agreement, be deemed a waiver by Fluidigm of its right to have received on or before the Closing Date an effective assignment of all of the Assigned Rights or be deemed to constitute an agreement to exclude any assets from the Assigned Rights.

ARTICLE III

THE CLOSING

3.1 The Closing. The Closing shall take place at the offices of Gray Cary Ware & Freidenrich LLP, 400 Hamilton Avenue, Palo Alto, California, at 11:00 a.m., Pacific Time, on the Closing Date, or at such other time and place as Oculus, Fluidigm and UABRF may agree.

3.2 Termination of License Agreement. On or before the Closing, Oculus and UABRF shall deliver to Fluidigm an agreement and acknowledgment that the License

Agreement has been terminated and such other agreements and instruments as may be necessary or appropriate to evidence the return by Oculus to UABRF of all rights under the License Agreement.

3.3 Agreements Between Fluidigm and UABRF. At the Closing, Fluidigm and UABRF shall execute and deliver the New License Agreement and the Sponsored Research Agreement.

3.4 Other Documents. Each party shall deliver to the other at the Closing such other documents, certificates, schedules, agreements and instruments required by this Agreement to be delivered at such time.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES OF OCULUS

Oculus hereby represents and warrants to Fluidigm as follows:

4.1 Organization. Oculus is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power to own, lease and operate its properties and to conduct its business as it is currently being conducted. Oculus is duly qualified or licensed to do business as a foreign corporation in each jurisdiction in which the failure to be so qualified or licensed would have a material adverse effect on Oculus.

4.2 Authorization. This Agreement and all of the Ancillary Documents to which Oculus is or will be a party have been, or upon their execution and delivery hereunder will have been, duly and validly executed and delivered by Oculus and constitute, or will constitute, valid and binding agreements of Oculus, enforceable against Oculus in accordance with their respective terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by principles of public policy or general equitable principles or the exercise of judicial discretion in accordance with such principles. Oculus has the requisite corporate power and authority to execute and deliver this Agreement and the Ancillary Documents to which Oculus is or will be a party and, at the time of the Closing, will have the requisite corporate power and authority to carry out the transactions contemplated by this Agreement and the Ancillary Documents. The execution, delivery and performance by Oculus of this Agreement and the Ancillary Documents have been duly and validly approved and authorized by the Board of Directors and shareholders of Oculus.

4.3 No Conflicts; Consents. The execution and delivery by Oculus of this Agreement and the Ancillary Documents to which Oculus is or will be a party do not, and the consummation of the transactions contemplated hereby and thereby and compliance by Oculus with the provisions hereof and thereof will not, contravene, conflict with, result in a breach of, constitute a default (with or without notice or lapse of time, or both) under or violation of, or result in the creation of any Encumbrance pursuant to, (i) any provision of the Certificate of Incorporation or Bylaws of Oculus, (ii) any judgment, order, decree, rule, law or regulation of any court or

governmental authority, foreign or domestic, applicable to Oculus or to any of the Assigned Rights, except where any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's ownership of the Assigned Rights, or (iii) any provision of any material agreement, instrument or understanding to which Oculus is a party or by which Oculus is bound or any of the Assigned Rights are affected, except where any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's ownership of the Assigned Rights, nor will such actions give to any other person or entity any interests or rights of any kind, including rights of termination, acceleration or cancellation, in or with respect to any of the Assigned Rights, or result in the creation of any Encumbrance on any of the Assigned Rights. No consent, approval, order or authorization of, or registration, declaration or filing with, any third party or any governmental authority is required to be obtained on the part of Oculus to permit the consummation of the transactions contemplated by this Agreement or the Ancillary Documents.

4.4 Title to Assigned Rights. Oculus has good and marketable title to all of the Assigned Rights. All of the Assigned Rights are free and clear of any Encumbrances (except to the extent that the settlement agreement pertaining to the Lawsuit (as such term is defined in Section 6.3) may include an immunity from lawsuits for conduct arising prior to the date of the settlement agreement). At the Closing, Oculus will sell, convey, assign, transfer and deliver to Fluidigm good, valid and marketable title and all right and interest in and to all of the Assigned Rights, free and clear of any Encumbrances.

4.5 No Assignment. Oculus has not sublicensed or otherwise transferred any material rights under the License Agreement to any third party. As of December 19, 2002, the License Agreement was in full force and effect in accordance with its terms. Prior to the termination of the License Agreement, no provisions of the License Agreement had been waived in any material respect. Exhibit D lists all of the patent filings subject to the License Agreement. To the knowledge of Oculus, UABRF is the owner of the patent rights within the technology and inventions subject to the License Agreement and has not granted a license to such technology and inventions to any person or entity other than Oculus.

4.6 Litigation and Claims. Except as set forth on Schedule 4.6 attached hereto, there are no claims, actions, suits, proceedings arbitrations or investigations in progress or pending (or, to the knowledge of Oculus, threatened) before any court, tribunal or governmental agency against Oculus that relate to any of the Assigned Rights. Oculus is not a party to any judgment, decree, order or arbitration award (or agreement entered into in any administrative, judicial or arbitration proceeding with any governmental authority) with respect to any of the Assigned Rights.

4.7 Distribution Agreement. Oculus has entered into a mutually acceptable agreement with UABRF regarding the distribution of any and all consideration to be paid by Fluidigm in connection with the transactions contemplated by this Agreement.

ARTICLE V

REPRESENTATIONS AND WARRANTIES OF FLUIDIGM

Fluidigm hereby represents and warrants to Oculus and UABRF as follows:

5.1 Organization. Fluidigm is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has all requisite corporate power to own, lease and operate its properties, to conduct its business as it is currently being conducted. Fluidigm is duly qualified or licensed to do business as a foreign corporation in each jurisdiction in which the failure to be so qualified or licensed would have a material adverse effect on Fluidigm.

5.2 Authorization. This Agreement and all of the Ancillary Documents to which Fluidigm is or will be a party have been, or upon their execution and delivery hereunder will have been, duly and validly executed by Fluidigm and constitute, or will constitute, valid and binding agreements of Fluidigm, enforceable against Fluidigm in accordance with their respective terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by principles of public policy or general equitable principles or the exercise of judicial discretion in accordance with such principles. Fluidigm has the requisite corporate power and authority to execute and deliver this Agreement and the Ancillary Documents to which Fluidigm is or will be a party and, at the time of the Closing, will have the requisite corporate power and authority to sell, issue and deliver the Securities pursuant to this Agreement and to carry out the other transactions contemplated by this Agreement and the Ancillary Documents. The execution, delivery and performance by Fluidigm of this Agreement and the Ancillary Documents have been duly and validly approved and authorized by Fluidigm's Board of Directors and by all requisite action of Fluidigm's stockholders.

5.3 No Conflicts; Consents. The execution and delivery by Fluidigm of this Agreement and the Ancillary Documents to which Fluidigm is or will be a party do not, and the consummation of the transactions contemplated hereby and thereby and compliance by Fluidigm with the provisions hereof and thereof will not, contravene, conflict with, result in a breach of, constitute a default (with or without notice or lapse of time, or both) under or violation of, or result in the creation of any Encumbrance pursuant to, (i) any provision of the Articles of Incorporation or Bylaws of Fluidigm, (ii) any judgment, order, decree, rule, law or regulation of any court or governmental authority, foreign or domestic, applicable to Fluidigm except where such any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on the consummation of the transactions contemplated hereby, or (iii) any provision of any agreement, instrument or understanding to which Fluidigm is a party or by which Fluidigm is bound, except where such any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on the consummation of the transactions contemplated hereby. No consent, approval, order or authorization of, or registration, declaration or filing with, any third party or any governmental authority is required to be obtained on the part of Fluidigm to permit the consummation of the transactions contemplated by this Agreement or the Ancillary Documents.

5.4 Litigation and Claims. There are no claims, actions, suits, proceedings, arbitrations or investigations in progress or pending (or, to Fluidigm's knowledge, threatened, other than potential claims relating to the Interfering Patent (as such term is defined in Section 12.1(a) below), including, but not limited to, a possible interference) before any court, tribunal or governmental agency, against or relating to Fluidigm, which, if determined adversely to Fluidigm, would be likely to have a material adverse effect upon Fluidigm's financial condition or materially impair its ability to carry out and perform its obligations hereunder.

5.5 Securities Laws Exemptions. Based in part on the representations of UABRF contained in Section 6.5, the issuance of the Securities pursuant to the terms of this Agreement will be exempt from the registration requirements of the Securities Act and the regulations thereunder, and the registration, permit or qualification requirements of any applicable state securities laws.

ARTICLE VI

REPRESENTATIONS AND WARRANTIES OF UABRF

To the best knowledge of the UABRF Director and Dr. Larry DeLucas, UABRF hereby represents to Fluidigm as follows:

6.1 Authorization. This Agreement and the Ancillary Documents to which UABRF is or will be a party have been, or upon their execution and delivery hereunder will have been, duly and validly executed and delivered by UABRF and constitute, or will constitute, valid and binding agreements of UABRF, enforceable against UABRF in accordance with their respective terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by principles of public policy or general equitable principles or the exercise of judicial discretion in accordance with such principles. UABRF has full power and authority to execute and deliver this Agreement and the Ancillary Documents to which UABRF is or will be a party and, at the time of the Closing, will have all requisite power and authority to carry out the transactions contemplated by this Agreement and the Ancillary Documents. All university, foundation and other internal approvals necessary for UABRF to consummate the transactions contemplated by this Agreement and the Ancillary Documents to which UABRF is or will be a party have been obtained.

6.2 No Conflicts; Consents. The execution and delivery by UABRF of this Agreement and the Ancillary Documents to which UABRF is or will be a party do not, and the consummation of the transactions contemplated hereby and thereby and compliance by UABRF with the provisions hereof and thereof will not, contravene, conflict with, result in a breach of, constitute a default (with or without notice or lapse of time, or both) under or violation of, or result in the creation of any Encumbrance pursuant to, (i) any provision of the charter documents of UABRF, (ii) any judgment, order, decree, rule, law or regulation of any court or governmental authority, foreign or domestic, applicable to UABRF or to the Technology, except where any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's rights under the New License Agreement or the consummation of the transactions contemplated hereby, or (iii) any provision of any agreement, instrument or understanding to which UABRF is a party or by which UABRF is bound or any of

the Technology is affected, except where such any such contravention, conflict, breach or default could not reasonably be expected to have a material adverse effect on Fluidigm's rights under the New License Agreement or the consummation of the transactions contemplated hereby, nor will such actions give to any other person or entity any interests or rights of any kind, including rights of termination, acceleration or cancellation, in or with respect to any of the Technology, or result in the creation of any Encumbrance on any of the Technology. No consent, approval, order or authorization of, or registration, declaration or filing with, any third party or any governmental authority is required to be obtained on the part of the UABRF to permit the consummation of the transactions contemplated by this Agreement or the Ancillary Documents.

6.3 Title to Technology. UABRF is the sole owner of the technology, inventions and patent rights in the Technology and subject to the License Agreement and has not granted a license to such technology, inventions and patent rights to any person or entity other than Oculus. The License Agreement has been mutually terminated by UABRF and Oculus and neither Oculus nor any other party has any rights thereunder. UABRF has the right to grant an exclusive license to the technology, inventions, patent rights and other rights under the New License Agreement to Fluidigm, free and clear of any Encumbrances of any nature whatsoever, subject to those liens, encumbrances or restrictions which may arise as a result of the settlement of the litigation between Oculus and Syrrx, Inc. ("Syrrx") described in Schedule 4.6 (the "Lawsuit"), provided that Syrrx shall have no rights that may be exercised after the Closing to practice the technology, inventions, patent rights and other rights subject to the New License Agreement, and the potential infringement by Diversified Scientific, Inc. of the Licensed IP Rights (as such term is defined in the New License Agreement) described in Section 2.2.3 of the New License Agreement. Exhibit D lists all of the patent filings subject to the License Agreement. UABRF is not aware of any third-party challenges to the ownership, validity or entitlement to priority date of any of the patent filings subject to the License Agreement or the New License Agreement, except for the Lawsuit between Oculus and Syrrx and the settlement agreement related to said Lawsuit provided to Fluidigm pursuant to Section 7.2 of this Agreement.

6.4 Litigation and Claims. Except as set forth on Schedule 4.6 attached hereto, there are no claims, actions, suits, proceedings, arbitrations or investigations in progress or pending (or, to the knowledge of UABRF, threatened) before any court, tribunal or governmental agency
against UABRF that relate to any of the Technology. UABRF is not a party to any judgment, decree, order or arbitration award (or agreement entered into in any administrative, judicial or arbitration proceeding with any governmental authority) with respect to any of the Technology, except to the extent that UABRF may be deemed to be a party thereto as a result of UABRF's status as a shareholder of Oculus and having a member on the Board of Directors of Oculus as well as the status of Dr. Larry DeLucas as a member of the Board of Directors of Oculus and a shareholder of Oculus.

6.5 Distribution Agreement. UABRF has entered into a mutually acceptable agreement with Oculus regarding the distribution of any and all consideration to be paid by Fluidigm in connection with the transactions contemplated by this Agreement.

6.6 Investment Representations

(a) UABRF is acquiring the shares of Fluidigm capital stock to be issued hereunder (the "Securities") for investment and not with the view to the public resale or distribution thereof, and UABRF has no present intention of selling, granting any participation in, or otherwise distributing the Securities, other than in accordance with the terms of a Termination Agreement dated as of ____, 2003 between UABRF and Oculus. UABRF understands that the Securities have not been registered under the Securities Act by reason of a specific exemption thereunder, which depends upon, among other things, the bona fide nature of UABRF's investment intent as expressed herein.

(b) UABRF acknowledges that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or Fluidigm receives an opinion of counsel satisfactory to Fluidigm that such registration is not required. UABRF is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of stock purchased in a private placement subject to the satisfaction of certain conditions.

(c) UABRF understands that no public market now exists for the Securities and that there can be no assurance that a public market will ever exist for the Securities.

(d) UABRF is an "accredited investor" as defined in the Securities Act, and has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the investment in the Securities.

(e) UABRF has been given the opportunity to obtain any information or documents related to, and ask questions and receive answers about Fluidigm and its business, prospects and risks which UABRF deems necessary, to evaluate the merits and risks related to UABRF's investment in the Securities and to verify the information UABRF received.

(f) UABRF's financial condition is such that it can afford to bear the economic risk of holding the Securities for an indefinite period of time, and it has adequate means of providing for its current needs and contingencies and to suffer a complete loss of its investment in such Securities.

6.7 Restrictions. No Securities shall be sold, assigned, transferred or pledged except upon the conditions specified in this Agreement. UABRF will cause any proposed purchaser, assignee, transferee or pledgee of the Securities to agree in writing to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

6.8 Restrictive Legend. Each certificate representing the Securities shall (unless otherwise permitted by the provisions of Section 6.9 below) be stamped or otherwise imprinted with a legend in the following form (in addition to any legend required under applicable state securities laws):

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). SUCH

SECURITIES MAY NOT BE SOLD, TRANSFERRED OR PLEDGED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY) OR OTHER EVIDENCE REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE SECURITIES ACT."

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A MARKET STAND-OFF AGREEMENT IN THE EVENT OF A PUBLIC OFFERING, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY."

UABRF consents to Fluidigm making a notation on its records and giving instructions to any transfer agent of the Securities in order to implement the restrictions on transfer established in Sections 6.7 through 6.10 of this Agreement.

6.9 Notice of Proposed Transfers. UABRF and any transferee of any certificate representing the Securities, by acceptance thereof, agrees to comply in all respects with the restrictions on transfer contained in Sections 6.7 through 6.10 of this Agreement. Prior to any proposed sale, assignment, transfer or pledge of any Securities (other than any transfer not involving a change in beneficial ownership), unless there is in effect a registration statement under the Securities Act covering the proposed transfer, the holder thereof shall give written notice to Fluidigm of such holder's intention to effect such transfer, sale, assignment or pledge. Each such notice shall describe the manner and circumstances of the proposed transfer, sale, assignment or pledge in sufficient detail, and shall be accompanied at such holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall be, reasonably satisfactory to Fluidigm, addressed to Fluidigm, to the effect that the proposed transfer of the Securities may be effected without registration under the Securities Act, or (ii) a "no action" letter from the Securities and Exchange Commission (the "Commission") to the effect that the transfer of such Securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, or (iii) any other evidence reasonably satisfactory to counsel to Fluidigm, whereupon the holder of such Securities shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the holder to Fluidigm; provided, however, that no such legal opinion, "no action" letter or other evidence shall be required with respect to a transfer to an affiliate of the holder. Each certificate evidencing the Securities transferred as above provided shall bear, except if such transfer is made pursuant to Rule 144, the appropriate restrictive legend set forth in Section 6.8 above, except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such holder and Fluidigm, such legend is not required in order to establish compliance with any provisions of the Securities Act or this Agreement.

6.10 Standoff Agreement. UABRF agrees in connection with Fluidigm's initial sale of securities pursuant to an effective registration statement, upon notice by Fluidigm or the underwriters managing such offering, not to sell, make any short sale of, loan, pledge (or

otherwise encumber or hypothecate), grant any option for the purchase of, or otherwise directly or indirectly dispose of any Securities (other than those included in the registration) without the prior written consent of Fluidigm and such managing underwriters for such period of time as Fluidigm's Board of Directors establishes pursuant to its good faith negotiations with such managing underwriters; provided, however that:

(i) such agreement shall not exceed one hundred eighty (180) days;

(ii) such agreement shall not apply to transfers to an affiliate, provided that such affiliate agrees to be bound by the terms of such agreement, to the same extent as if such transferee were the original party thereunder;

(iii) UABRF shall not be subject to such agreement unless (A) all executive officers and directors of Fluidigm, (B) all shareholders of Fluidigm holding more than 1% of Fluidigm's outstanding capital stock and (C) all holders of registration rights, are subject to or obligated to enter into similar agreements; and

(iv) if and when any person identified in clause (iii) is released, in whole or in part, from such agreement (whether or not such release is contemplated at the time of the offering) or if any such agreement is terminated, UABRF shall be concurrently released on a pro rata basis based on the number of Securities held by such person and UABRF.

(b) UABRF agrees that prior to the initial public offering it will not transfer securities of Fluidigm unless each transferee agrees in writing to be bound by all of the provisions of this Section 6.10, provided that this Section 6.10 shall not apply to transfers pursuant to a registration statement.

UABRF hereby consents to the placement of stop transfer orders with Fluidigm's transfer agent in order to enforce the foregoing provision and agrees to execute a market standoff agreement with said underwriters in customary form consistent with the provisions of this Section 6.10.

ARTICLE VII

COVENANTS OF OCULUS

7.1 Conduct of Business. During the period from the date of this Agreement to the Closing, Oculus will conduct its business in the ordinary course consistent with past practices. During the period from the date of this Agreement to the Closing, Oculus will not without the prior written consent of Fluidigm:

(a) encumber or permit to be encumbered any of the Technology or Assigned Rights;

(b) dispose of any of the Technology or Assigned Rights;

(c) waive or release any right or claim relating to any Technology or Assigned Rights; or

(d) agree to do any of the things described in the preceding clauses of this Section 7.1.

Fluidigm agrees that the foregoing restrictions will not prevent Oculus from entering into a settlement agreement with Syrrx to settle the Lawsuit, provided that such settlement does not involve the sale, transfer or assignment of the Technology or the Assigned Rights, or any rights in any of the foregoing, or result in the creation of any Encumbrance on the Technology, the Assigned Rights, or any rights in any of the foregoing.

7.2 Access to Information. Until the earlier of the termination of this Agreement or the Closing, Oculus will allow Fluidigm and its agents reasonable access upon reasonable notice and during normal working hours to its files, books, records, and offices relating to the Technology and Assigned Rights, except where prohibited by contract or protected by privilege. In furtherance of the above, Fluidigm and its counsel and advisors shall have reasonable access during normal business hours to pertinent contracts of Oculus, including an unsigned final version of the settlement agreement between Oculus and Syrrx related to the Lawsuit, and drafts of such settlement agreement (to the extent it is permissible under applicable confidentiality terms and with the understanding that Oculus may be required to obtain the return or destruction by Fluidigm of the final version and drafts of such settlement agreement prior to its execution), as well as all scientific notebooks, invention records and other documents related to the conception and reduction to practice and prosecution of the patent filings listed on Exhibit D, including, without limitation, all patent searches, patent file wrappers, legal and scientific investigations and research related to the Technology, the License Agreement and the New License Agreement.

7.3 Regulatory Approvals. Prior to the Closing, Oculus will execute and file, or join in the execution and filing of, any application or other document that may be reasonably necessary in order to obtain the authorization, approval or consent of any governmental entity that may be required in connection with the consummation of the transactions contemplated by this Agreement. Oculus will use commercially reasonable efforts to obtain all such authorizations, approvals and consents.

7.4 Satisfaction of Conditions Precedent. Oculus will use commercially reasonable efforts to satisfy or cause to be satisfied all the conditions precedent to the Closing hereunder, and to cause the transactions contemplated hereby to be consummated, and, without limiting the generality of the foregoing, to obtain all consents and authorizations of third parties and to make all filings with, and give all notices to, third parties which may be necessary or reasonably required on its part in order to effect the transactions contemplated hereby.

ARTICLE VIII

COVENANTS OF UABRF

8.1 Conduct of Business. During the period from the date of this Agreement to the Closing, UABRF will not without the prior written consent of Fluidigm:

(a) encumber or permit to be encumbered any of the Technology;

(b) dispose of any of the Technology;

(c) waive or release any right or claim relating to any Technology; or

(d) agree to do any of the things described in the preceding clauses of this Section 8.1.

Fluidigm agrees that the foregoing restrictions will not prevent UABRF from consenting to a settlement agreement between Oculus and Syrrx to settle the Lawsuit, provided that such settlement does not involve the sale, transfer or assignment of the Technology or the Assigned Rights, or any rights in any of the foregoing, or result in the creation of any Encumbrance on the Technology, the Assigned Rights, or any rights in any of the foregoing.

8.2 Access to Information. Until the earlier of the termination of this Agreement or the Closing, UABRF will allow Fluidigm and its agents reasonable access upon reasonable notice and during normal working hours to its files, books, records, and offices relating to the Technology and Assigned Rights, except where prohibited by contract or protected by privilege. In furtherance of the above, Fluidigm and its counsel and advisors shall have reasonable access during normal business hours to pertinent scientific notebooks, invention records and other documents related to the conception and reduction to practice and prosecution of the patent filings listed on Exhibit D, including, without limitation, all patent searches, patent file wrappers, legal and scientific investigations and research related to the Technology, the License Agreement and the New License Agreement.

8.3 Regulatory Approvals. Prior to the Closing, UABRF will execute and file, or join in the execution and filing of, any application or other document that may be reasonably necessary in order to obtain the authorization, approval or consent of any governmental entity that may be required in connection with the consummation of the transactions contemplated by this Agreement. UABRF will use commercially reasonable efforts to obtain all such authorizations, approvals and consents.

8.4 Satisfaction of Conditions Precedent. UABRF will use commercially reasonable efforts to satisfy or cause to be satisfied all the conditions precedent to the Closing hereunder, and to cause the transactions contemplated hereby to be consummated, and, without limiting the generality of the foregoing, to obtain all consents and authorizations of third parties and to make all filings with, and give all notices to, third parties which may be necessary or reasonably required on its part in order to effect the transactions contemplated hereby.

ARTICLE IX

COVENANTS OF FLUIDIGM

9.1 Regulatory Approvals. Prior to the Closing, Fluidigm will execute and file, or join in the execution and filing of, any application or other document that may be reasonably necessary in order to obtain the authorization, approval or consent of any governmental entity that may be required in connection with the consummation of the transactions contemplated by this Agreement. Fluidigm will use its commercially reasonable efforts to obtain all such authorizations, approvals and consents.

9.2 Satisfaction of Conditions Precedent. Fluidigm will use commercially reasonable efforts to satisfy or cause to be satisfied all the conditions precedent to the Closing hereunder, and to cause the transactions contemplated hereby to be consummated, and, without limiting the generality of the foregoing, to obtain all consents and authorizations of third parties and to make all filings with, and give all notices to, third parties which may be necessary or reasonably required on its part in order to effect the transaction contemplated hereby.

ARTICLE X

MUTUAL COVENANTS

10.1 Confidentiality. The parties acknowledge that the Confidential Disclosure Agreement dated as of October 8, 2002 between Fluidigm and Oculus and the Confidential Disclosure Agreement dated December 19, 2002 between Fluidigm, Oculus and UABRF are binding upon the parties hereto and in full force and effect, except to the extent that the provisions hereof supersede provisions to similar effect contained in the Confidential Disclosure Agreements. The terms of the Confidential Disclosure Agreements (exclusive of such superseded provisions) are incorporated in this Agreement by this reference.

10.2 Publicity. Except as may otherwise be required by law, none of the parties hereto shall make or cause to be made any public announcements in respect of this Agreement or the transactions contemplated herein or otherwise communicate with any news media without the prior written consent of the other party, provided, however, that following the Closing Fluidigm may issue a press release to announce the closing of the transactions contemplated hereby and the execution and delivery of the New License Agreement and Sponsored Research Agreement with UABRF provided that such press release shall not be issued prior to the execution by Syrrx of a settlement agreement with Oculus to settle the litigation described in Schedule 4.6 but in any event the press release may be issued no later than 30 days from the execution date of the New License Agreement. Except for the press release issued by Fluidigm, none of the parties hereto will make any public disclosure prior to the Closing or with respect to the Closing unless all parties agree on the text and timing of such public disclosure, except as required by law. Nothing contained in this Section shall prevent any party at any time from furnishing any information pursuant to the requirements of any governmental entity; provided, however, that if such party is required to furnish such information, it will provide a copy to the other parties.

10.3 Governmental Filings. As promptly as practicable after the execution of this Agreement, each party shall make any and all governmental filings required with respect to the transactions contemplated in this Agreement and the Ancillary Documents.

ARTICLE XI

CONDITIONS TO CLOSING

11.1 Conditions to Each Party's Obligations. The respective obligations of each party to effect the transactions to be performed by such party at the Closing are subject to the satisfaction at or prior to the Closing of the following conditions any of which may be waived in writing by each party:

(a) No order shall have been entered, and not vacated, by a court or administrative agency of competent jurisdiction, in any action or proceeding which enjoins, restrains or prohibits the sale of the Assigned Rights, the grant of rights under the New License Agreement or the consummation of any other transaction contemplated hereby.

(b) All permits, authorizations, approvals and orders required to be obtained under all applicable statutes, codes, ordinances, rules and regulations in connection with the transactions contemplated hereby shall have been obtained and shall be in full force and effect at the Closing Date.

(c) There shall be no litigation pending or threatened by any regulatory body or private party in which (i) an injunction is or may be sought against the transactions contemplated hereby, or (ii) relief is or may be sought against any party hereto as a result of this Agreement and in which, in the good faith judgment of the Board of Directors of either Fluidigm, Oculus or UABRF (relying on the advice of their respective legal counsel), such regulatory body or private party has the probability of prevailing and such relief would have a material adverse affect upon such party.

11.2 Conditions to Obligations of Oculus and UABRF. The obligations of Oculus and UABRF to effect the transactions to be performed by Oculus and UABRF at the Closing are subject to the satisfaction at or prior to the Closing of the following additional conditions any of which may be waived in writing by Oculus and UABRF:

(a) All of the representations and warranties of Fluidigm set forth in Article V hereof shall be true in all material respects on and as of the Closing Date with the same force and effect as if they had been made at the Closing, except for changes contemplated by this Agreement.

(b) All of the terms, covenants and conditions of this Agreement to be complied with and performed by Fluidigm at or prior to the Closing shall have been duly complied with and performed in all material respects.

11.3 Conditions to Obligations of Fluidigm. The obligations of Fluidigm to effect the transactions to be performed by it at the Closing are subject to the satisfaction at or prior to the Closing of the following additional conditions any of which may be waived in writing by Fluidigm:

(a) All of the representations and warranties of Oculus and UABRF set forth in Articles IV and VI hereof shall be true in all material respects on and as of the Closing Date with the same force and effect as if they had been made at the Closing, except for changes contemplated by this Agreement.

(b) All of the terms, covenants and conditions of this Agreement to be complied with and performed by Oculus and UABRF at or prior to the Closing shall have been duly complied with and performed in all material respects.

(c) All required consents from third parties required to allow the consummation of the sale of the Assigned Rights, the grant of rights under the New License

Agreement and the other transactions contemplated hereby shall have been obtained and delivered to Fluidigm.

(d) Fluidigm shall have received an opinion from the attorney(s) prosecuting the patent filings listed on Exhibit D, in form and substance reasonably acceptable to Fluidigm, as to the following matters: (i) assignments of the inventions covered by the patent filings to UABRF have been properly filed with the United States Patent and Trademark Office ("USPTO"), (ii) UABRF is named as the sole owner of the inventions covered by the patent filings listed on Exhibit D, (iii) a declaration of interference was timely requested with at least one of the pending U.S. patent applications listed on Exhibit D and U.S. Patent No. 6,296,673 with the USPTO in accordance with U.S.C. Section 135, (iv) none of the patents listed on Exhibit D have been held to be permanently revoked, unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and none of the patents listed on Exhibit D have been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, and (v) the patent applications listed on Exhibit D were filed in good faith and have not been abandoned or finally disallowed without the possibility of appeal or refiling of such application.

ARTICLE XII

POST-CLOSING MATTERS

12.1 Additional Payments by Fluidigm. In addition to the consideration delivered by Fluidigm at the Closing, Fluidigm will pay the following amounts to UABRF upon the achievement of the following milestones:

(a) Milestone 1. Milestone 1 shall be satisfied upon a declaration by the USPTO of an interference between a pending patent application in the Technology and U.S. Patent No. 6,296,673 (the "Interfering Patent). Within thirty (30) days after Fluidigm receives written notice of the USPTO declaration of interference, Fluidigm will issue shares of its stock having a value of $600,000 (based on the fair value of the stock at the time Milestone 1 is achieved), subject to compliance with applicable securities laws.

(b) Milestone 2. Milestone 2 shall be satisfied upon the achievement of freedom to operate (as specified below) with respect to relevant claims in the Interfering Patent for Fluidigm's Topaz3 crystallization microprocessor, as determined by Fluidigm in its sole discretion that either (i) a U.S. patent has issued from an application listed on Exhibit D or subsequent applications claiming priority thereto with claims that the USPTO has determined are entitled to priority in view of claims in the Interfering Patent and which claims cover the Topaz crystallization microprocessor, or (ii) a cross-license for the Technology has been signed by Fluidigm and a third party controlling the Interfering Patent and related applications such that the interference is terminated and Fluidigm has freedom to operate with respect to the Interfering Patent and related filings. Within thirty (30) days after such determination by Fluidigm, Fluidigm will issue shares of its stock having a value of $1,500,000 (based on the fair value at the time Milestone 2 is achieved), subject to compliance with applicable securities laws. In addition, (i) Fluidigm will enter into a non-transferable site license with Athersys, Inc.

("Athersys") under which Athersys will have the right to use the Technology for internal drug efforts, but not to provide service or equipment to third parties.

(c) Stock to be Issued. If Fluidigm is a private company at the time a milestone is achieved, upon achievement of a milestone Fluidigm will issue shares of the series of Fluidigm Preferred Stock that was issued in Fluidigm's most recent financing and the shares will be valued at the price at which the shares were sold in such financing. If Fluidigm is a public company at the time a milestone is achieved, upon achievement of a milestone Fluidigm will issue shares of Fluidigm Common Stock and the shares will be valued at the average closing price of Fluidigm's Common Stock over the five trading days preceding the achievement of the milestone.

12.2 Settlement of Lawsuit. If the Lawsuit has not been settled or dismissed as of the Closing Date:

(a) Oculus agrees that Fluidigm and its counsel and advisors shall have reasonable access during normal business hours to the final version of the settlement agreement between Oculus and Syrrx related to the Lawsuit, and drafts of such settlement agreement (to the extent permissible under applicable confidentiality terms), in the manner contemplated by Section 7.2 of this Agreement, until the Lawsuit is settled or dismissed.

(b) Oculus and UABRF agree that if a settlement agreement related to the Lawsuit is entered into after the Closing Date, the settlement will not involve the sale, transfer or assignment of the Technology or the Assigned Rights, or any rights in any of the foregoing, or result in the creation of any Encumbrance on the Technology, the Assigned Rights, or any rights in any of the foregoing.

ARTICLE XIII

TERMINATION OF AGREEMENT

13.1 Termination by Fluidigm. This Agreement may be terminated at any time before the Closing by action of the Board of Directors of Fluidigm upon written notice to Oculus and UABRF, specifying the basis for such termination, if (i) Oculus or UABRF shall have breached in any material respect any of their covenants or agreements contained in this Agreement, or (ii) any representation or warranty of Oculus or UABRF contained in this Agreement shall have been materially inaccurate.

13.2 Termination by UABRF. This Agreement may be terminated at any time before the Closing by action of the Board of Directors or other governing body of UABRF upon written notice to Fluidigm, specifying the basis for such termination, if (i) Fluidigm shall have breached in any material respect any of its covenants or agreements contained in this Agreement, or (ii) any representation or warranty of Fluidigm contained in this Agreement shall have been materially inaccurate.

13.3 Mutual Consent. This Agreement may be terminated at any time before the Closing, by the mutual written consent of Fluidigm, Oculus and UABRF.

13.4 Effect of Termination. Upon any termination of this Agreement, all parties hereto shall be relieved of all further obligations under this Agreement, except for the provisions of Section 2.5 regarding the assignment by Oculus to Fluidigm of Assigned Rights, together with all patent rights and all other intellectual property rights therein, Section 15.6 regarding the payment of certain expenses and Section 10.1 regarding the continuing obligations of the parties under the Confidential Disclosure Agreements.

ARTICLE XIV

SURVIVAL OF REPRESENTATIONS AND WARRANTIES

14.1 Survival of Representations and Warranties. The representations and warranties set forth in this Agreement shall survive the Closing for a period equal to the greater of 12 months after the Closing Date or the date on which both Milestones specified in Section 12.1 have been achieved. After the expiration of such period, such representations and warranties shall expire and be of no further force and effect.

ARTICLE XV

GENERAL

15.1 Governing Law. It is the intention of the parties hereto that the internal laws of the State of California (irrespective of its choice of law principles) shall govern the validity of this Agreement, the construction of its terms, and the interpretation and enforcement of the rights and duties of the parties hereto; provided, however, that any disputes involving UABRF shall be governed by the internal laws of the State of Alabama (irrespective of its choice of law principles and any disputes involving UABRF shall be resolved Birmingham, Alabama in accordance with the provisions of Section 15.11 and UABRF shall have the right to raise all of the defenses available to the University of Alabama at Birmingham.

15.2 Assignment; Binding upon Successors and Assigns. None of the parties hereto may assign any of its rights or obligations hereunder (whether by operation of law or otherwise) without the prior written consent of the other party; provided, however, that any party may assign its rights and obligations under covenants and agreements to be performed after the Closing in connection with the sale of all or substantially all of such party's business. This Agreement will be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and assigns.

15.3 Severability. If any provision of this Agreement, or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such provision to other persons or circumstances shall be interpreted so as best to reasonably effect the intent of the parties hereto. The parties further agree to replace such illegal, void or unenforceable provision of this Agreement with a valid and enforceable provision which will achieve, to the extent possible, the economic, business and other purposes of the illegal, void or unenforceable provision.

15.4 Entire Agreement. This Agreement (including the Exhibits and Schedules hereto) the Ancillary Agreements, the documents and instruments and other agreements among the parties hereto referenced herein and therein, and the exhibits thereto, constitute the entire understanding and agreement of the parties hereto with respect to the subject matter hereof and thereof and supersede all prior and contemporaneous agreements or understandings, inducements or conditions, express or implied, written or oral, between the parties with respect hereto and thereto including, without limitation, the Letter Agreement. To the extent that any provision of this Agreement conflicts with any provision of the New License Agreement or the Sponsored Research Agreement between Fluidigm and UABRF, the applicable provision of the New License Agreement or the Sponsored Research Agreement, as the case may be, shall control and supersede the applicable provision of this Agreement.

15.5 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall constitute an original and all of which together shall constitute one and the same instrument.

15.6 Expenses.

(a) The parties shall each pay their own legal, accounting and financial advisory fees and other out-of-pocket expenses incurred incident to the negotiation, preparation and carrying out of this Agreement and the transactions herein contemplated, whether or not the transactions contemplated hereby are consummated.

(b) Each party shall indemnify the other against, and agrees to hold the other harmless from, all liabilities and expenses (including reasonable attorneys' fees) in connection with any claim by any person for compensation as a broker, finder or in any similar capacity, by reason of services allegedly rendered to the indemnifying party in connection with the transactions contemplated hereby.

15.7 Other Remedies. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party shall be deemed cumulative with and not exclusive of any other remedy conferred hereby or by law on such party, and the exercise of any one remedy shall not preclude the exercise of any other.

15.8 Amendment. Any term or provision of this Agreement may be amended by a written instrument signed by Fluidigm, Oculus and UABRF; provided that any term or provision that pertains only to UABRF and Fluidigm may be amended by a written instrument signed by UABRF and Fluidigm.

15.9 Waiver. Any party hereto may, by written notice to the other party: (i) waive any of the conditions to its obligations hereunder or extend the time for the performance of any of the obligations or actions of another party; (ii) waive any inaccuracies in the representations of another party contained in this Agreement or in any documents delivered pursuant to this Agreement; (iii) waive compliance with any of the covenants of the other contained in this Agreement; or (iv) waive or modify performance of any of the obligations of another party. Except as specifically contemplated by this Agreement, no action taken pursuant to this Agreement, including without limitation any investigation by or on behalf of any party, shall be

deemed to constitute a waiver by the party taking such action of compliance with any representation, warranty, condition or agreement contained herein. Waiver of the breach of any one or more provisions of this Agreement shall not be deemed or construed to be a waiver of other breaches or subsequent breaches of the same provisions.

15.10 Informal Resolution. In the event of any controversy or claim arising under this Agreement, officers or comparable officials of UABRF, Oculus and Fluidigm shall promptly meet and attempt in good faith to reach a resolution of such controversy or claim.

15.11 Mediation. Any controversy or claim between any of the parties hereto arising out of or relating to this Agreement that is not resolved by the parties within thirty (30) days after delivery of notice of such controversy or claim, upon written notice of either Fluidigm, Oculus or UABRF, shall be submitted for resolution by mediation in accordance with commercial mediation guidelines. Any mediation proceeding shall be conducted in the County of Cook, City of Chicago, in the State of Illinois. The mediation shall be concluded within a ninety (90) day period after notice.

15.12 Notices. All notices and other communications hereunder will be in writing and will be deemed given (i) upon receipt if delivered personally (or if mailed by registered or certified mail), (ii) the next business day after dispatch if sent by overnight delivery service, (iii) upon dispatch if transmitted by facsimile (and confirmed by a copy delivered in accordance with clause (i) or (ii)), properly addressed to the parties at the following addresses:

Fluidigm:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, CA 94080 Attention: President Facsimile No.: (650) 871-7192
with a copy to:	Fluidigm Corporation 7100 Shoreline Court South San Francisco, CA 94080 Attention: General Counsel Facsimile No.: (650) 871-7195
Oculus:	Oculus Pharmaceuticals, Inc. 1601 12th Avenue South Birmingham, AL 35205 Attention: B.J. Lehman Facsimile No: (216) 361-9495 and Oculus Pharmaceuticals, Inc. 3201 Carnegie Avenue Cleveland, OH 44115 Attention: B.J. Lehman Facsimile No.: (216) 361-9495

UABRF: The UAB Research Foundation
1120G Administration Building
701 20th Street South
Birmingham, AL 35294-0111
Attention: Director
Facsimile No.: (205) 975-5560

Any party may change its address for such communications by giving notice thereof to the other party in conformity with this Section.

15.13 Construction and Interpretation of Agreement.

(a) This Agreement has been negotiated by the parties hereto and their respective attorneys, and the language hereof shall not be construed for or against any party.

(b) The titles and headings herein are for reference purposes only and shall not in any manner limit the construction of this Agreement, which shall be considered as a whole.

(c) Any reference to a "material adverse effect" with respect to any entity or group of entities means a material adverse effect on the business, assets (including intangible assets), financial condition, properties, liabilities, results of operations or prospects of such entity.

(d) Any reference to a party's "knowledge means such party's actual knowledge after reasonable inquiry of its directors, officers and other management level employees that have responsibility for the referenced matters.

(e) When reference is made to a Section or Article, such reference shall be to a Section or Article of the Agreement, unless otherwise indicated.

15.14 No Joint Venture. Nothing contained in this Agreement shall be deemed or construed as creating a joint venture or partnership between any of the parties hereto. No party is by virtue of this Agreement authorized as an agent, employee or legal representative of any other party. No party shall have the power to control the activities and operations of any other and their status is, and at all times, will continue to be, that of independent contractors with respect to each other. No party shall have any power or authority to bind or commit any other. No party shall hold itself out as having any authority or relationship in contravention of this Section.

15.15 Absence of Third Party Beneficiary Rights. No provisions of this Agreement are intended, nor shall be interpreted, to provide or create any third party beneficiary rights or any other rights of any kind in any client, customer, affiliate, shareholder, partner of any party hereto or any other person or entity unless specifically provided otherwise herein, and, except as so provided, all provisions hereof shall be personal solely between the parties to this Agreement.

15.16 Further Assurances. In connection with this Agreement and the transactions contemplated hereby, each party shall execute and deliver any additional documents and instruments and perform any additional acts that may be reasonably necessary or appropriate to effectuate and perform the provisions of this Agreement and such transactions and the intention of the parties.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

FLUIDIGM CORPORATION

By: /s/ Gajus Worthington

Title: President & CEO

OCULUS PHARMACEUTICALS, INC.

By: /s/ (ILLEGIBLE)

Title: President & CEO

THE UAB RESEARCH FOUNDATION

By: /s/ (ILLEGIBLE)

Title: Director

Acknowledged and agreed to
this March 7, 2003.

/s/ Dr. Larry DeLucas
Dr. Larry DeLucas

SCHEDULE 4.6

Lawsuit filed by Syrrx, Inc. against Oculus on April 30, 2002 in the United States District Court for the District of Delaware — Syrrx and Oculus may enter into a settlement agreement to settle the Lawsuit prior to the Closing under the Agreement; as part of the settlement a judgment or other order will be entered against Oculus by the court in which the Lawsuit was filed.

EXHIBIT A

Amended and Restated
Articles of Incorporation of Fluidigm

Superseded by Exhibit 3.1 filed with Registration Statement on April 14, 2008.

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

Gajus V. Worthington and William Smith certify that:

1. They are the President and Secretary, respectively, of Fluidigm Corporation, a California corporation (the "Corporation").

2. The Articles of Incorporation of the Corporation are amended and restated in full to read as set forth in EXHIBIT A attached hereto.

3. Said Amended and Restated Articles of Incorporation have been duly approved by the Corporation's Board of Directors.

4. Said Amended and Restated Articles of Incorporation have been duly approved by the required vote of shareholders in accordance with Sections 902 and 903 of the Corporations Code. The total number of outstanding shares of the corporation is 8,363,318 shares of Common Stock, 2,727,273 shares of Series A Preferred Stock, 6,460,675 shares of Series B Preferred Stock and 16,364,832 shares of Series C Preferred Stock. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding Common Stock, voting as a single class, more than 66 2/3% of the outstanding Series C Preferred Stock, voting as a single class, more than 66 2/3% of the outstanding Preferred Stock voting as a single class and more than 50% of the outstanding Common Stock and Preferred Stock, voting together as a single class.

I further declare under penalty of perjury that the matters set forth in the foregoing certificate are true and correct of my own knowledge.

Executed at Palo Alto, California, this 17th day of December, 2003.

/s/ Gajus V. Worthington
Gajus V. Worthington
President

/s/ William Smith
William Smith
Secretary

Exhibit A

AMENDED AND RESTATED

ARTICLES OF INCORPORATION OF

FLUIDIGM CORPORATION

ARTICLE I

The name of the corporation is Fluidigm Corporation.

ARTICLE II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated under the California Corporations Code.

ARTICLE III

The total number of shares of stock that the corporation shall have authority to issue is One Hundred Nine Million One Hundred Twenty-Six Thousand Eight Hundred Twenty-Seven (109,126,827), consisting of Sixty-Five Million Five Hundred Thousand (65,500,000) shares of Common Stock, $0.001 par value per share, and Forty-Three Million Six Hundred Twenty-Six Thousand Eight Hundred Twenty-Seven (43,626,827) shares of Preferred Stock, $0.001 par value per share. The first series of Preferred Stock shall be designated “Series A Preferred Stock” and shall consist of Two Million Seven Hundred Twenty–Seven Thousand Two Hundred Seventy–Three (2,727,273) shares. The second series of Preferred Stock shall be designated “Series B Preferred Stock” and shall consist of Six Million Four Hundred Sixty Thousand Six Hundred Seventy-Five (6,460,675) shares. The third series of Preferred Stock shall be designated “Series C Preferred Stock” and shall consist of Twenty Million Five Hundred Fifty-One Thousand One Hundred Sixty Three (20,551,163) shares. The fourth series of Preferred Stock shall be designated “Series D Preferred Stock” and shall consist of Thirteen Million Eight Hundred Eighty-Seven Thousand Seven Hundred Sixteen (13,887,716) shares.

ARTICLE IV

The terms and provisions of the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this Article IV, the following definitions shall apply:

(a) "Conversion Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock and $2.80 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(b) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities (other than shares of Common Stock) convertible into or exchangeable for Common Stock.

(c) "Corporation" shall mean Fluidigm Corporation.

(d) "Dividend Rate" shall mean an annual rate of $0.11 per share for the Series A Preferred Stock, an annual rate of $0.18 for the Series B Preferred Stock, an annual rate of $0.26 per share for the Series C Preferred Stock and an annual rate of $0.30 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(e) "Liquidation Preference" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 per share for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock and $2.80 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(f) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(g) "Original Issue Price" shall mean $1.10 per share for the Series A Preferred Stock, $1.78 for the Series B Preferred Stock, $2.58 per share for the Series C Preferred Stock and $2.80 per share for the Series D Preferred Stock (each subject to adjustment from time to time as set forth elsewhere herein).

(h) "Preferred Stock" shall mean the Series A Preferred Stock, Series B Preferred Stock, the Series C Preferred Stock and the Series D Preferred Stock.

2. Dividends.

(a) Series D Preferred Stock. The holders of outstanding shares of Series D Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or Common Stock (collectively, the "**Junior Stock**") of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Junior Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all declared dividends on the Series D Preferred Stock have been paid or set apart for payment to the holders of Series D Preferred Stock. The right to receive dividends on shares of Series D Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series D Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(b) Series C Preferred Stock. The holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Series A Preferred Stock, Series B Preferred Stock or Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Series A Preferred Stock, Series B Preferred Stock or Common Stock during any fiscal year of the Corporation, other than dividends on the Common Stock payable solely in Common Stock, until all declared dividends on the Series C Preferred Stock have been paid or set apart for payment to the holders of Series C Preferred Stock. The right to receive dividends on shares of Series C Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(c) Series A Preferred Stock and Series B Preferred Stock. The holders of outstanding shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive dividends, when and as declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any distribution on Common Stock of the Corporation other than a dividend payable solely in Common Stock. No distributions shall be made with respect to the Common Stock, other than dividends payable solely in Common Stock, until all declared dividends on the Preferred Stock have been paid or set apart for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Series A Preferred Stock and Series B Preferred Stock shall be on a pro-rata, pari passu basis in proportion to the Dividend Rates for the Series A Preferred Stock and Series B Preferred Stock, as applicable. The right to receive dividends on shares of Series A Preferred Stock and Series B Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any year.

(d) Distribution. For purposes of this Section 2, unless the context otherwise requires, a "**distribution**" shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, payable other than in Common Stock, or the purchase or redemption of shares of the Corporation other than (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors; and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors; and (iii) any other repurchase or redemption of capital stock of the corporation unanimously approved by the Board of Directors and approved by the holders of the majority of the Common Stock and the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock, voting as separate classes.

(e) Common Stock. Dividends may be paid on the Common Stock as and when declared by the Board of Directors, subject to the prior dividend rights of the Preferred Stock and Section 6 below.

(f) Non-Cash Distributions. Whenever a distribution provided for in this Section 2 shall be payable in property other than cash, the value of such distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

(g) Consent to Certain Repurchases. As authorized by Section 402.5(c) of the California Corporations Code, Sections 502 and 503 of the California Corporations Code shall not apply with respect to payments made by the Corporation in connection with (i) repurchase of shares of Common Stock issued to or held by employees, consultants, officers and directors of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase and at the original purchase price paid by such employees, consultants, officers and directors, and (ii) repurchase of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such rights, provided that such repurchase is unanimously approved by the Board of Directors, and (iii) any other repurchase or redemption of capital stock of the Corporation unanimously approved by the Board of Directors and approved by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

3. Liquidation Rights.

In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, distribution of the assets of the Corporation legally available for distribution to the Corporation's shareholders shall be made in the following manner:

(a) Series D Liquidation Preference. The holders of the Series D Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series D Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series D Preferred Stock. If the assets of the Corporation legally available for distribution to the holders of the Series D Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series D Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Series C Liquidation Preference. After payment to the holders of Series D Preferred Stock of the full amounts specified in Section 3(a) above, the holders of the Series C Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of the Common Stock, the Series A Preferred Stock and the Series B Preferred Stock by reason of their ownership of such stock, an amount per share for each

share of Series C Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series C Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series C Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series C Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(b).

(c) Series B Liquidation Preference. After the payment to the holders of Series D Preferred Stock and Series C Preferred Stock of the full amounts specified in Sections 3(a) and 3(b) above, the holders of the Series B Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock and the Series A Preferred Stock by reason of their ownership of such stock, an amount per share for each share of Series B Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series B Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series B Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(c), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series B Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(c).

(d) Series A Liquidation Preference. After the payment to the holders of Series D Preferred Stock, the holders of Series C Preferred Stock and the holders of Series B Preferred Stock of the full amounts specified in Sections 3(a), 3(b) and 3(c) above, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the remaining assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference for such shares and (ii) all declared and unpaid dividends on such share of Series A Preferred Stock. If the remaining assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(d), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(d).

(e) Remaining Assets. After the payment to the holders of Preferred Stock of the full amounts specified in Sections 3(a), 3(b), 3(c) and 3(d) above, the entire remaining assets of the Corporation legally available for distribution shall be distributed pro-rata to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(f) Shares Not Treated as Both Preferred Stock and Common Stock in Any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any distribution, or series of distributions, as shares of Common

Stock, without first foregoing participation in the distribution, or series of distributions, as shares of Preferred Stock.

(g) Reorganization. For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction or series of transactions continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, transfer, lease or other conveyance of all or substantially all of the assets of the Corporation.

(h) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to shareholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to shareholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or the Nasdaq Stock Market System (or a similar national quotation system), then the value of the securities shall be deemed to be to the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution; or

(iii) if there is no active public market for the securities, then the value of the securities shall be deemed to be the fair market value thereof as determined in good faith by the Board of Directors which determination shall include consideration of the illiquidity of the securities.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date shall be deemed to the date such transaction closes.

For the purposes of this Section 3(h), "**trading day**" shall mean any day on which the exchange or system on which the securities to be distributed are traded is open, and "closing prices" or "closing bid prices" shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or Nasdaq, the last reported trade price or sale price,

as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the "regular hours" trading period that is generally accepted as such for such exchange, market or system. If, after the date hereof, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

(a) Right to Convert. Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series. (The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is hereinafter referred to as the "**Conversion Rate**" for each such series.) Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 4, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering on Form S-1 (or successor form) filed under the Securities Act of 1933, as amended (the "**Securities Act**"), covering the offer and sale of the Corporation's Common Stock, provided that the offering price per share is not less than $5.69 (as adjusted for stock splits or stock dividends) and the aggregate gross proceeds to the Corporation are not less than $25,000,000, or (ii) upon the receipt by the Corporation of a written consent or request for such conversion from the holders of two-thirds of the shares of Preferred Stock then outstanding, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) being hereinafter referred to as an "**Automatic Conversion Event**").

(c) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, and shall give written notice to the Corporation at such office that he elects to convert the same; provided, however, that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; provided further, however, that the Corporation shall not be obligated to issue

certificates evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of the sale of such securities.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 4(d), "**Additional Shares of Common**" shall mean all shares of Common Stock issued (or, pursuant to Section 4(d)(iii), deemed to be issued) by the Corporation after the filing of these Articles of Incorporation, other than:

(1) shares of Common Stock issued or issuable upon conversion of shares of Preferred Stock;

(2) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants and other service providers to, the Corporation pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors or upon exercise of options or warrants granted to such parties pursuant to any such plan, program or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of these Articles of Incorporation;

(4) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Section 4(e), 4(f) or 4(g) hereof;

(5) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to an Automatic Conversion Event;

(6) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are unanimously approved by the Board of Directors;

(7) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board of Directors;

(8) shares of Common Stock issued or issuable in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements, or strategic partnerships or relationships, if the issuance is approved by the Board of Directors; and

(9) shares of Common Stock issued or issuable upon conversion of up to $5 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to Biomedical Sciences Investment Fund Pte Ltd. or its affiliates and upon conversion of up to $3 million in aggregate principal amount (plus interest) of convertible promissory notes originally issued or issuable to Invus, L.P. or its affiliates.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to Section 4(d)(vi)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for such series of Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the date of the filing of these Articles of Incorporation shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible

Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of the Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Corporation, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(3) no readjustment pursuant to clause (2) above shall have the effect of increasing the Conversion Price of the Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price of the Preferred Stock on the original adjustment date, or (ii) the Conversion Price of the Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

(4) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been

received by the Corporation (determined pursuant to Section 4(d)(v)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(5) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price of Series D Preferred Stock Upon Issuance of Additional Shares of Common.

(1) For so long as the Conversion Price of the Series D Preferred Stock is greater than $2.58 (as adjusted for subdivisions and combinations of the Common Stock and changes in the Common Stock as set forth in Sections 4(e) and 4(g)) (the "**Series D Ratchet Amount**"), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) for a consideration per share less than the applicable Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, but for a consideration per share equal to or greater than the Series D Ratchet Amount, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue to a price (calculated to the nearest cent) equal to the per share price of the Additional Shares of Common.

(2) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the Series D Ratchet Amount, then, the Conversion Price of the Series D Preferred Stock immediately prior to such issue shall be deemed to be equal to the Series D Ratchet Amount (the "**Adjusted Conversion Price**") and such Adjusted Conversion Price shall be further reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Adjusted Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Adjusted Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(iv)(2), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding. Section 4(d)(iv)(3) shall govern adjustments to the Conversion Price of the Series D Preferred Stock after the first adjustment to the Conversion Price of the Series D Preferred Stock pursuant to this Section 4(d)(iv)(2).

(3) After any adjustment to the Conversion Price of the Series D Preferred Stock pursuant to Section 4(d)(iv)(2), in the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to

Section 4(d)(iii)) without consideration or for a consideration per share less than Conversion Price of the Series D Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series D Preferred Stock shall be reduced concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(iv)(3), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

(v) Adjustment of Conversion Price of Series A, B and C Preferred Stock. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (if affected) shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. For the purposes of this Section 4(d)(v), all shares of Common Stock issuable upon exercise of outstanding Options or the conversion of outstanding Convertible Securities and shares of Preferred Stock, and all Additional Shares of Common deemed issued pursuant to Section 4(d)(iii) hereof, shall be deemed to be outstanding.

(vi) Determination of Consideration. For purposes of this Section 4(d), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation before deducting reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with such issue (or deemed issue);

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 4(d)(iii) shall be determined by dividing

(X) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(Y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(e) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above ("**Liquidation Rights**"), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(h) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 4(h) shall prohibit the Corporation from amending its Articles of Incorporation with the requisite consent of its shareholders and the board of directors.

(i) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a liquidation, dissolution or winding up of the corporation pursuant to Section 3(f);

then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 14 days' prior written notice of the date on which a record shall be taken for such dividend or distribution (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Each such written notice shall be given by first class mail, postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of this Corporation.

The right of the holders of the Preferred Stock to notice hereunder may be waived, either prospectively or retroactively and either generally or in a particular instance, by the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(l) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived, either prospectively or retroactively and either generally or in a particular instance, by the consent or vote of the holders of more than two-thirds (2/3) of the outstanding shares of such series. Any such waiver shall bind all future holders of shares of such series of Preferred Stock.

5. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any shareholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted

and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(e) Election of Directors. So long as at least 2,000,000 shares of Series D Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of the Series D Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. So long as at least 2,000,000 shares of Series C Preferred Stock (as adjusted for stock splits, subdivisions, combinations or stock dividends with respect to such shares) remain outstanding, the holders of Series C Preferred Stock, voting as a separate class, shall be entitled to elect three (3) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's shareholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock, Series A Preferred Stock and Series B Preferred Stock, voting together as a single class.

6. Amendments and Changes Requiring Approval of Preferred Stock. As long as any of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of more than two-thirds (2/3) of the outstanding shares of the Preferred Stock voting together as a single class:

(a) amend, alter or repeal any provision of the Articles of Incorporation or By-laws of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

(b) enter into any transaction or series of related transactions deemed to be a liquidation, dissolution or winding up of the Corporation pursuant to Section 3(f) above;

(c) voluntarily liquidate or dissolve;

(d) declare or pay any distribution (as defined in Section 2(d)) with respect to the Common Stock of the Corporation;

(e) permit any subsidiary of the Corporation to sell securities to a third party (other than directors' qualifying shares in the case of subsidiaries outside the United States);

(f) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock;

(g) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, liquidation, redemption, conversion or other rights senior to or on a parity with any series of Preferred Stock or with respect to voting senior to any series of Preferred Stock;

(h) increase or decrease the authorized number of directors of the Corporation; or

(i) amend this Section 6.

7. Amendments and Changes Requiring the Approval of the Series D Preferred Stock.

(a) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of 60% of the outstanding shares of the Series D Preferred Stock:

(i) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series D Preferred Stock in a manner different from any other series of Preferred Stock; or

(ii) amend this Section 7(a).

(b) As long as any of the Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of a majority of the outstanding shares of the Series D Preferred Stock:

(i) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series D Preferred Stock;

(ii) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series D Preferred Stock or with respect to voting senior to the Series D Preferred Stock;

(iii) declare or pay any distribution (as defined in Section 2(d)) with respect to the Common Stock or Preferred Stock of the Corporation;

(iv) increase the authorized number of directors of the Corporation above eleven (11); or

(v) amend this Section 7(b).

8. Amendments and Changes Requiring the Approval of the Series C Preferred Stock. As long as any of the Series C Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series C Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or

restrictions provided for the benefit of the Series C Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series C Preferred Stock;

(c) authorize or create (by reclassification or otherwise) any new class or series of capital stock having rights, preferences or privileges with respect to dividends, payments upon liquidation or other rights senior to or on a parity with the Series C Preferred Stock or with respect to voting senior to the Series C Preferred Stock;

(d) declare or pay any distribution (as defined in Section 2(c)) with respect to the Common Stock or Preferred Stock of the Corporation;

(e) increase the authorized number of directors of the Corporation above eleven (11); or

(f) amend this Section 8.

9. Amendments and Changes Requiring the Approval of the Series B Preferred Stock. As long as any of the Series B Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of two-thirds of the outstanding shares of the Series B Preferred Stock:

(a) amend, alter or repeal any provision of the Articles of Incorporation of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock in a manner different from any other series of Preferred Stock;

(b) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Series B Preferred Stock; or

(c) amend this Section 9.

10. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Article 4 hereof, then the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Articles of Incorporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

11. Notices. Any notice required by the provisions of this Article IV to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE V

1. Limitation of Directors' Liability. The liability of the directors of this Corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

2. Indemnification of Corporate Agents. This Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, votes of shareholders or disinterested directors or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to this Corporation and its shareholders.

3. Repeal or Modification. Any repeal or modification of the foregoing provisions of this Article V shall not adversely affect any right of indemnification or limitation of liability permitted under California law relating to acts or omissions occurring prior to such repeal or modification.

(THE GREAT SEAL OF THE STATE OF CALIFORNIA - OFFICE OF THE SECRETARY OF STATE)

EXHIBIT B

Form of New License Agreement

[***] Indicates text has been omitted from this Exhibit pursuant to a confidential treatment request and has been filed separately with the Securities and Exchange Commission.

8805. LICI.001
UAB Research Foundation

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (this "Agreement") dated as of March 7, 2003 (the "Effective Date"), is entered into between The UAB Research Foundation, an Alabama not for profit organization ("UABRF"), having a place of business at 1120G Administration Building, 704 20th Street, Birmingham, Alabama 35294, and Fluidigm Corporation, a California corporation ("Fluidigm"), having a place of business at 7100 Shoreline Court, South San Francisco, California 94080.

WHEREAS, UABRF owns or has rights in certain technology regarding nanovolume crystallization arrays.

WHEREAS, UABRF and Oculus Pharmaceuticals, Inc. ("Oculus") have entered into that certain License Agreement dated as of September 21, 2001 ("Oculus Agreement") pursuant to which UABRF has granted to Oculus an exclusive license to the Oculus Agreement Technology (as defined below), on the terms and conditions of the Oculus Agreement.

WHEREAS, UABRF and Oculus have terminated the Oculus Agreement effective as of January 30, 2003.

WHEREAS, UABRF has licensed to Diversified Scientific, Inc. ("DSI") rights in certain other technology, which certain technology is identified in the attached Exhibit A ("UABRF/DSI Technology").

WHEREAS, DSI is performing certain research pursuant to one or more grants, existing as of December 19, 2002, between UAB (as defined below) and DSI under Defense Small Business Innovation Research Program.

WHEREAS, Fluidigm desires to obtain an exclusive worldwide license under the Licensed IP Rights (as defined below), on the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, the parties agree as follows:

1. DEFINITIONS

1.1 "Affiliate" shall mean, with respect to any Person, any other Person which directly or indirectly controls, is controlled by, or is under common control with, such Person. A Person shall be regarded as in control of another Person if it owns, or directly or indirectly controls, at least forty percent (40%) of the voting stock or other ownership interest of the other Person, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other Person by any means whatsoever.

1.2 "Confidential Information" shall mean, with respect to a party, all information of any kind whatsoever, and all tangible and intangible embodiments thereof of any

kind whatsoever, which is disclosed by such party to the other party and is marked, identified as or otherwise acknowledged to be confidential at the time of disclosure to the other party. Notwithstanding the foregoing, Confidential Information of a party shall not include information which the other party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the disclosing party to the other party, (b) to have become publicly known, without fault on the part of the other party, subsequent to disclosure of such information by the disclosing party to the other party, (c) to have been received by the other party at any time from a source, other than the disclosing party, rightfully having possession of and the right to disclose such information, (d) to have been otherwise known by the other party prior to disclosure of such information by the disclosing party to the other party, or (e) to have been independently developed by employees or agents of the other party without access to or use of such information disclosed by the disclosing party to the other party.

1.3 "Fluidigm Series C Preferred Stock" shall have the meaning set forth in Section 1.9 of the Master Closing Agreement.

1.4 "Licensed IP Rights" shall mean, collectively, the Licensed Patent Rights and the Licensed Know-How Rights.

1.5 "Licensed Know-How Rights" shall mean all trade secret and other know-how rights in all information and data disclosed on or before the Effective Date that (i) is not generally known (including, but not limited to, information and data regarding formulae, procedures, protocols, techniques and results of experimentation and testing), (ii) is developed by Dr. Larry DeLucas in his capacity as a UAB faculty member or by UAB personnel under the scientific direction and scientific supervision of Dr. Larry DeLucas, and (iii) is necessary or useful for Fluidigm to research, develop, make, use, sell or seek regulatory approval to market a composition, or to practice any method or process, at any time (a) comprising the Oculus Agreement Technology or (b) claimed or covered by in any issued patent or pending patent application within the Licensed Patent Rights.

1.6 "Licensed Patent Rights" shall mean (a) those certain patent applications and patents listed on Exhibit B hereto; (b) all patent applications heretofore or hereafter filed or having legal force in any country which claim any Oculus Agreement Technology; (c) all patents that have issued or in the future issue from the patent applications described in clauses (a) and (b) of this Section 1.6, including utility, model and design patents and certificates of invention; and (d) all divisionals, continuations, continuations-in-part, reissues, renewals, extensions or additions to any such patent applications and patents.

1.7 "Master Closing Agreement" shall mean a Master Closing Agreement between Fluidigm, UABRF and Oculus of even date hereof.

1.8 "NanoScreen Patent Rights" shall mean (a) those certain patent applications and patents listed on Exhibit B hereto; (b) all patents that have issued or in the future issue from any such patent applications, including utility, model and design patents and certificates of invention; and (c) all divisionals, continuations, continuations-in-part, reissues, renewals, extensions or additions to any such patent applications and patents.

1.9 “Oculus Agreement Technology” shall mean collectively, the technology, processes, inventions, trade secrets, know-how and other proprietary property described in Exhibit C hereto.

1.10 “Person” shall mean an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, pool, syndicate, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

1.11 “Third Party” shall mean any Person other than UABRF, Fluidigm and their respective Affiliates.

1.12 “UAB” shall mean the University of Alabama at Birmingham.

1.13 “UABRF/DSI License Agreements” shall mean, collectively, [***].

1.14 “UAB Related Entities” shall mean and include UAB, UABRF, University Hospital, The University of Alabama Health Services Foundation (“UAHSF”), Southern Research Institute and all other entities within the UAB Medical Center, which are under the control of the Board of Trustees of The University of Alabama or are associated with said Board of Trustees through an affiliation agreement.

2. REPRESENTATIONS AND WARRANTIES

2.1 Mutual Representations and Warranties Each party hereby represents and warrants to the other party as follows:

2.1.1 Corporate Existence. Such party is a corporation duly organized, validly existing and in good standing under the laws of the state in which it is incorporated.

2.1.2 Authorization and Enforcement of Obligations. Such party (a) has the corporate power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder, and (b) has taken all necessary corporate action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms.

2.1.3 No Consents. All necessary consents, approvals and authorizations of all governmental authorities and other Persons required to be obtained by such party in connection with this Agreement have been obtained.

2.1.4 No Conflict. The execution and delivery of this Agreement and the performance of such party’s obligations hereunder (a) do not conflict with or violate any

requirement of applicable laws or regulations, and (b) do not conflict with, or constitute a default under, any contractual obligation of it.

2.2 UABRF Representations and Warranties. UABRF represents and warrants to Fluidigm as follows:

2.2.1 Ownership. UABRF is the sole owner of the Licensed IP Rights (other than those listed under Item No. 3 of Exhibit B), and as of the Effective Date has no knowledge of any Third Party having any license or other interest in such Licensed IP Rights. UABRF shall use its commercially reasonable efforts to provide Fluidigm with (a) evidence of UABRF's sole ownership of those Licensed IP Rights listed under Item No. 3 of Exhibit B, and (b) a letter from DSI to Fluidigm stating that DSI has no license or other interest in NanoScreen Patent Rights except to the extent necessary for DSI to perform its research obligations pursuant to the SBIR Grants (as defined below).

2.2.2 No Injunction. No action, suit or proceeding before any court or government body is instituted (or is pending) by any government authority or any other Person to restrain or prohibit this Agreement or the consummation of the transactions contemplated hereby. No preliminary or permanent injunction or other order issued by any federal or state court of competent jurisdiction preventing this Agreement or the consummation of the transactions contemplated hereby is in effect.

2.2.3 No Infringement. As of the Effective Date, UABRF and Dr. Larry DeLucas (a) are not aware of any Third Party patent, patent application or other intellectual property rights that would be infringed by practicing any process or method or by making, using or selling any composition which is claimed or disclosed in the Licensed Patent Rights or which constitutes Licensed Know-How Rights; (b) are not aware of any infringement or misappropriation by a Third Party of the Licensed IP Rights; and (c) are not aware of any license or other right granted to DSI or any other Third Party under the NanoScreen Patent Rights. Provided however, UABRF has disclosed to Fluidigm the potential infringement by DSI of the Licensed IP Rights to the extent necessary for DSI to perform its research obligations pursuant to one or more grants (the "SBIR Grants"), existing as of December 19, 2002, between UAB and DSI under the Defense Small Business Innovation Research (SBIR) Program, with the understanding that neither DSI nor any other third party would have the right to commercialize any results of such SBIR grants that would infringe the Licensed IP Rights without first obtaining a license from Fluidigm under the Licensed IP Rights. Not later than ten (10) days following the Effective Date, UABRF shall provide Fluidigm with copies of all documents and instruments relating to such SBIR Grants.

3. LICENSE GRANT

3.1 Licensed IP Rights. UABRF hereby grants to Fluidigm an exclusive, perpetual, irrevocable, royalty-free, worldwide license (including the right to grant sublicenses) under the Licensed IP Rights. The license grant under the Licensed IP Rights (other than the NanoScreen Patent Rights) is subject to the licenses previously and expressly granted by UABRF to DSI pursuant to the UABRF/DSI License Agreements regarding the UABRF/DSI Technology only to the extent necessary for DSI to exercise its license rights under the

UABRF/DSI Technology granted thereunder. The license grant under the NanoScreen Patent Rights is not subject to any previously granted licenses other than those certain rights which may have been granted to DSI to the extent necessary for DSI to perform its research obligations pursuant to the SBIR Grants. To the extent any of the rights, title and interest in and to the Licensed IP Rights can be neither assigned nor licensed by UABRF to Fluidigm without (a) the consent of, or (b) breach by UABRF of any agreement with, any Third Party, UABRF hereby irrevocably waives and agrees never to assert such non-assignable and non-licensable rights, title and interest against Fluidigm or any of Fluidigm's successors in interest to such non-assignable and non-licensable rights during the term of this Agreement.

3.2 Sublicenses. Fluidigm shall not sublicense the Licensed IP Rights prior to the first (1st) anniversary of the Effective Date except in connection with settlement of any action or claim relating to the technology that is the subject of the Licensed IP Rights. Fluidigm shall give UABRF prompt written notice of each sublicense under this Agreement. Each sublicense shall be subject to the terms and conditions of this Agreement.

3.3 Availability of the Licensed IP Rights. UABRF shall provide Fluidigm with all information available to UABRF regarding the Licensed IP Rights.

3.4 Reservation of Rights.

3.4.1 Research Use. UABRF hereby retains the right to, and this Agreement shall not limit UABRF's ability to, utilize the Licensed IP Rights for internal research, academic and educational purposes at UAB, UAB Related Entities and academic institution collaborators of UAB, for patient care at UAB and UAB Related Entities, and/or for the performance of services for for-profit or not-for-profit institutions.

3.4.2 Obligations to U.S. Government. UABRF agrees that during the term of this Agreement UABRF shall not use the Licensed IP Rights in any manner except for internal research, academic and educational purposes at UAB, UAB Related Entities and academic institution collaborators of UAB, for patient care at UAB and UAB Related Entities, and/or for the performance of services for for-profit or not-for-profit institutions as provided in Section 3.4.1 above and as may be necessary or appropriate to fulfill the obligations of UABRF or UAB under the National Institutes of Health ("NIH") grant used to fund the research resulting in the development of certain portion of the Licensed IP Rights. In determining the actions required under such grant, UABRF shall consult with Fluidigm and keep Fluidigm informed, but UABRF shall have the ultimate right to determine the necessary and appropriate actions relative thereto. UABRF's rights to the Licensed IP Rights for use in fulfilling UAB's obligations under the NIH grant shall only relate to those portions of the Licensed IP Rights funded by such NIH grant.

3.5 Non-Assertion Covenant. To the extent the research activities of DSI conducted in accordance with the SBIR Grants infringe the rights granted to Fluidigm under this Section 3, Fluidigm agrees not to assert such rights against DSI. Fluidigm agrees not to assert against DSI such rights only to the extent expressly stated herein. No license or other right by Fluidigm in favor of DSI shall be created hereunder by implication, estoppel or otherwise.

4. LICENSE ISSUE FEE

Within thirty (30) days after the Effective Date Fluidigm shall (a) pay UABRF the sum in cash of [***] and (b) issue to UABRF such number of Fluidigm Series C Preferred Stock as provided in Section 2.3 of the Master Closing Agreement.

5. RESEARCH AND DEVELOPMENT OBLIGATIONS

5.1 Research and Development Efforts. Fluidigm shall use commercially reasonable efforts to research, develop and commercialize the Licensed IP Rights as Fluidigm determines commercially feasible. Appendix 1 of the Sponsored Research Agreement sets forth the components of Fluidigm's Topaz System which Fluidigm plans to release commercially.

5.2 Records. Fluidigm shall maintain records, in sufficient detail and in good scientific manner, which shall reflect all work done and results achieved in the performance of its research and development regarding the Licensed IP Rights (including all data in the form required under all applicable laws and regulations).

5.3 Reports. Within ninety (90) days following the end of each calendar year during the term of this Agreement, Fluidigm shall prepare and deliver to UABRF a written summary report which shall describe the research and development of the Licensed IP Rights during such year.

6. CONFIDENTIALITY

6.1 Confidential Information. During the term of this Agreement, and for a period of five (5) years following the expiration or earlier termination hereof, each party shall maintain in confidence all Confidential Information disclosed by the other party, and shall not use, disclose or grant the use of the Confidential Information except on a need-to-know basis to those directors, officers, employees, consultants, clinical investigators, contractors, (sub)licensees, distributors or permitted assignees, to the extent such disclosure is reasonably necessary in connection with such party's activities as expressly authorized by this Agreement. To the extent that disclosure is authorized by this Agreement, prior to disclosure, each party hereto shall obtain agreement of any such person or entity to hold in confidence and not make use of the Confidential Information for any purpose other than those permitted by this Agreement. Each party shall notify the other promptly upon discovery of any unauthorized use or disclosure of the other party's Confidential Information.

6.2 Terms of this Agreement. Except as otherwise provided in Section 6.1 or 6.3, neither party shall disclose any terms or conditions of this Agreement to any third party without the prior consent of the other party. Notwithstanding the foregoing, prior to execution of this Agreement, the parties have agreed upon the substance of information that can be used to describe the terms of this transaction, and each party may disclose such information, as modified by mutual agreement from time to time, without the other party's consent.

6.3 Permitted Disclosures. The confidentiality obligations contained in this Section 6 shall not apply to the extent that the receiving party (the "Recipient") is required (a) to disclose information by law, order or regulation of a governmental agency or a court of

competent jurisdiction, or (b) to disclose information to any governmental agency for purposes of obtaining approval to test or market a product, provided in either case that the Recipient shall provide written notice thereof to the other party and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof.

7. PATENTS

7.1 Prosecution and Maintenance. Fluidigm shall be responsible for and shall control, at its sole cost, the preparation, filing, prosecution, defense (including without limitation prosecution, defense and settlement of any interference or opposition) and maintenance of the Licensed Patent Rights. Fluidigm shall give UABRF an opportunity to review and comment on the text of each patent application within the Licensed Patent Rights before filing, and shall provide UABRF with a copy of such patent application as filed, together with notice of its filing date and serial number. UABRF shall cooperate with Fluidigm, execute all lawful papers and instruments and make all rightful oaths and declarations as may be necessary in the preparation, prosecution and maintenance of the Licensed Patent Rights.

Enforcement.

7.2.1 Each party shall notify the other party of any infringement known to such party of any Licensed Patent Rights and shall provide the other party with the available evidence, if any, of such infringement.

7.2.2 Fluidigm, at its sole expense, shall have the right to determine the appropriate course of action to enforce the Licensed Patent Rights or otherwise abate the infringement thereof, to take (or refrain from taking) appropriate action to enforce the Licensed Patent Rights, to control any litigation or other enforcement action and to enter into, or permit, the settlement of any such litigation or other enforcement action with respect to the Licensed Patent Rights, and shall consider, in good faith, the interests of UABRF in so doing. UABRF shall cooperate with Fluidigm in the execution of any action to enforce the Licensed Patent Rights. Fluidigm shall retain all monies recovered upon the final judgment or settlement of any such suit to enforce the Licensed Patent Rights.

8. TERMINATION

8.1 Expiration. Subject to the provisions of Section 8.2 below, this Agreement shall expire on the expiration of the last to expire of the Licensed Patent Rights. Upon expiration of this Agreement under this Section 8.1, Fluidigm shall have a paid-up, exclusive, worldwide license under the Licensed Know-How Rights.

8.2 Termination by Fluidigm. Fluidigm may terminate this Agreement, in its sole discretion, upon thirty (30) days prior written notice to UABRF. Upon termination of this Agreement by Fluidigm under this Section 8.2, Fluidigm shall have a paid-up, non-exclusive, worldwide license under the Licensed Know-How Rights.

Effect of Expiration or Termination. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination, and the provisions of Sections 6, 7 and 9 shall survive the expiration or termination

of this Agreement. Except as the parties otherwise agree in writing, termination of this Agreement shall not affect the Master Closing Agreement.

9. INDEMNIFICATION

9.1 Indemnification. Fluidigm shall defend, indemnify and hold the UABRF harmless from all losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs) resulting from any claims, demands, actions and other proceedings by any Third Party to the extent resulting from Fluidigm's use of the Licensed IP Rights under this Agreement.

9.2 Procedure. UABRF promptly shall notify Fluidigm of any claim, demand, action or other proceeding for which UABRF intends to claim indemnification. Fluidigm shall have the right to participate in, and to the extent Fluidigm so desires jointly with any other indemnitor similarly noticed, to assume the defense thereof with counsel selected by Fluidigm; provided, however, that UABRF shall have the right to retain its own counsel, with the fees and expenses to be paid by UABRF, if representation of UABRF by the counsel retained by Fluidigm would be inappropriate due to actual or potential differing interests between UABRF and any other party represented by such counsel in such proceedings. The indemnity obligations under this Section 9 shall not apply to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the prior express written consent of Fluidigm, which consent shall not be unreasonably withheld or delayed. The failure to deliver notice to Fluidigm within a reasonable time after notice of any such claim or demand, or the commencement of any such action or other proceeding, if prejudicial to its ability to defend such claim, demand, action or other proceeding, shall relieve such Indemnitor of any liability to UABRF under this Section 9 with respect thereto, but the omission so to deliver notice to Fluidigm shall not relieve it of any liability that it may have to UABRF other than under this Section 9. Fluidigm may not settle or otherwise consent to an adverse judgment in any such claim, demand, action or other proceeding, that diminishes the rights or interests of UABRF without the prior express written consent of UABRF, which consent shall not be unreasonably withheld or delayed. UABRF, its employees and agents, shall reasonably cooperate with Fluidigm and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by this Section 9.

9.3 Insurance. Fluidigm shall maintain insurance with respect to the research, development and commercialization of products by Fluidigm pursuant to this Agreement in such amount as Fluidigm customarily maintains with respect to the research, development and commercialization of its similar products. Fluidigm shall maintain such insurance for so long as it continues to research, develop or commercialize any products pursuant to this Agreement, and thereafter for so long as Fluidigm customarily maintains insurance covering the research, development or commercialization of its similar products.

10. MISCELLANEOUS

10.1 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the parties to the other shall be in writing and addressed to such other party at its address indicated below, or to such other address as the addressee shall

have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to UABRF: UAB Research Foundation
1120G Administration Building
704 20th Street
Birmingham, Alabama 35294
Attention: Director

If to Fluidigm: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: President

with a copy to: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: General Counsel

10.2 Assignment. Except as otherwise expressly provided under this Agreement neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred (whether voluntarily, by operation of law or otherwise), without the prior express written consent of the other party; provided, however, that either party may, without such consent, assign this Agreement and its rights and obligations hereunder in connection with the transfer or sale of all or substantially all of its business, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment or transfer in violation of this Section 10.2 shall be void.

10.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Alabama, without regard to the conflicts of law principles thereof.

10.4 Entire Agreement. This Agreement and the Master Closing Agreement (together with the Ancillary Agreements, as defined in the Master Closing Agreement) contain the entire understanding of the parties with respect to the subject matter hereof. All express or implied representations, agreements and understandings, either oral or written, heretofore made are expressly superseded by this Agreement and the Master Closing Agreement. To the extent that any provision of this Agreement conflicts with any provision of the Sponsored Research Agreement between the parties of even date hereof ("Sponsored Research Agreement"), the applicable provision of this Agreement shall control and supersede the applicable provision of the Sponsored Research Agreement.

10.5 Independent Contractors. Each party hereby acknowledges that the parties shall be independent contractors and that the relationship between the parties shall not constitute a partnership, joint venture or agency. Neither party shall have the authority to make any

statements, representations or commitments of any kind, or to take any action, which shall be binding on the other party, without the prior consent of the other party to do so.

10.6 Waiver. The waiver by a party of any right hereunder, or of any failure to perform or breach by the other party hereunder, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other party hereunder whether of a similar nature or otherwise.

10.7 Force Majeure. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement to the extent, and for so long as, such failure or delay is caused by or results from causes beyond the reasonable control of the affected party including but not limited to fire, floods, embargoes, war, acts of war (whether war be declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party.

10.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

UAB RESEARCH FOUNDATION

By /s/ (ILLEGIBLE)

Title Director

FLUIDIGM CORPORATION

By /s/ Gajus Worthington

Title President & CEO

Acknowledged and agreed to
this March 7, 2003.

/s/ Dr. Larry DeLucas
Dr. Larry DeLucas

EXHIBIT A

UABRF/DSI TECHNOLOGY

[***]

EXHIBIT B

PATENT RIGHTS

1. [***]
2. [***]
3. [***]

4. [***]
5. [***]

EXHIBIT C

OCULUS AGREEMENT TECHNOLOGY

1. [***]
2. [***]
3. Copies of all documentation describing the foregoing, in particular, drawings, operations manuals.

EXHIBIT C

Form of Sponsored Research Agreement

FORM OF
SPONSORED RESEARCH AGREEMENT

THIS SPONSORED RESEARCH AGREEMENT (this "Agreement") dated as of March , 2003 (the "Effective Date"), is entered into between The UAB Research Foundation, an Alabama not for profit organization (the "UABRF"), having a place of business at 1120G Administration Building, 704 20th Street, Birmingham, Alabama 35294, and Fluidigm Corporation, a California corporation ("Fluidigm"), having a place of business at 7100 Shoreline Court, South San Francisco, California 94080. The parties agree as follows:

1. DEFINITIONS

1.1 "Confidential Information" shall mean, with respect to a party, all information of any kind whatsoever, and all tangible and intangible embodiments thereof of any kind whatsoever, which is disclosed by such party to the other party and is marked, identified as or otherwise acknowledged to be confidential at the time of disclosure to the other party. Notwithstanding the foregoing, Confidential Information of a party shall not include information which the other party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the disclosing party to the other party, (b) to have become publicly known, without fault on the part of the other party, subsequent to disclosure of such information by the disclosing party to the other party, (c) to have been received by the other party at any time from a source, other than the disclosing party, rightfully having possession of and the right to disclose such information, (d) to have been otherwise known by the other party prior to disclosure of such information by the disclosing party to the other party, or (e) to have been independently developed by employees or agents of the other party without access to or use of such information disclosed by the disclosing party to the other party (each, a "Confidentiality Exception").

1.2 "Derived" or "derived" shall mean obtained, developed, created, designed, derived or resulting from, based upon or otherwise generated (whether directly or indirectly, or in whole or in part).

1.3 "Master Closing Agreement" shall mean a Master Closing Agreement between Fluidigm, UABRF and Oculus Pharmaceuticals, Inc. of even date hereof.

1.4 "Materials" shall mean the proprietary materials provided by one party to the other under this Agreement, together with all derivatives and parts thereof.

1.5 "Principal Investigator" shall mean [***].

1.6 "Program" shall mean the research program described in Section 2.1.

1.7 "Program Period" shall mean the period commencing on the Effective Date, and continuing through the fifth (5th) anniversary of the Effective Date, unless terminated earlier as provided below.

1.8 "Program Technology" shall mean, collectively, all inventions, discoveries, data and information (whether patentable or not patentable) generated in connection with the Program, excluding the Materials. Unless subject to a Confidentiality Exception, all Program Technology shall be Confidential Information of UABRF.

1.9 "Research Plan" shall mean the annual written research workplan for the Program.

2. SPONSORED RESEARCH

2.1 Statement of Work. During the Program Period, UABRF shall conduct the Program in accordance with the Research Plan. The Research Plan for the first (1st) year of the Program is attached hereto as Exhibit A. No later than ninety (90) days prior to each anniversary of the Effective Date (other than the fifth (5th) anniversary thereof) during the term of this Agreement the parties shall mutually agree upon the Research Plan for the upcoming year of the Program and shall amend Exhibit A by attaching such mutually agreed upon Research Plan thereto. Except as provided in this Section 2.1 or except by the mutual written agreement of the parties, the Research Plan shall not be altered.

2.2 Principal Investigator. UABRF shall conduct the Program under the direction of the Principal Investigator. The Principal Investigator shall be responsible for the supervision and administration of the Program, including all budgeting and revisions to the budget in accordance with all applicable policies of UABRF. Fluidigm shall consider in good faith utilizing on mutually acceptable terms and conditions the engineering capability available at the Principal Investigator's laboratory for the continuing development of Fluidigm's Topaz microprocessor product line as reasonably required by, but at the sole discretion of, Fluidigm at additional compensation over and above the amounts set forth in Section 4.1 of this Agreement.

2.3 Records and Reports.

2.3.1 UABRF shall keep complete and accurate records of the work performed under this Agreement in accordance with established good laboratory practices and appropriate for patent purposes. Fluidigm shall have the right, upon reasonable notice and during reasonable business hours, to inspect and make copies of such accounts, notes, data and records.

2.3.2 Within [***] after the end of each calendar quarter during the Program Period, UABRF shall prepare and provide Fluidigm with quarterly written reports describing the work performed during such calendar quarter under this Agreement and all resulting Program Technology. Within [***] after the expiration or earlier termination of the Program Period, UABRF shall prepare and provide Fluidigm with a comprehensive written report describing all work performed under this Agreement and all resulting Program Technology. At Fluidigm's request, upon reasonable notice, UABRF also shall provide interim summary reports and copies of all data generated under this Agreement.

2.4 Informal Consultations. At reasonable times during the Program Period, Fluidigm's representatives may consult informally with the Principal Investigator regarding the Program personally, by telephone, email or other means of communication.

3. MATERIAL TRANSFER

3.1 Materials. Each party shall provide to the other party (the "Recipient") those Materials required to be provided under the Research Plan. The Recipient of any Materials hereby acknowledges that, as between the parties, the other party is the sole owner or licensee of such Materials.

3.2 Permitted Use. The Recipient shall use the Materials solely as permitted under the Research Plan and not for any other purpose. THE RECIPIENT UNDERSTANDS THAT THE MATERIALS ARE PROVIDED SOLELY FOR CERTAIN RESEARCH USE ONLY AND HAVE NOT BEEN APPROVED FOR HUMAN USE. THE RECIPIENT SHALL NOT ADMINISTER THE MATERIALS TO HUMANS IN ANY MANNER OR FORM. Provided however, upon the Fluidigm Materials becoming commercially available ("Commercial Fluidigm Materials"), the restrictions of this Section 3.2 shall terminate as to the Commercial Fluidigm Materials, and the UABRF /UAB shall have the right to use the Commercial Fluidigm Materials on the same terms and conditions as Fluidigm generally makes the Commercial Fluidigm Materials commercially available to third parties.

3.3 No Transfer. The Recipient shall not transfer the Materials to any third party without the prior express written consent of the other party. The Recipient shall limit transfer and disclosure of the Materials on a need to know basis, as reasonably necessary for the conduct of the Program, to its directors, officers and employees who are bound by written agreements with the Recipient to not use or transfer the Materials for any purpose other than those permitted by this Agreement. The Recipient shall notify the other party promptly upon discovery of any unauthorized use or transfer thereof.

3.4 Return of Materials. Upon expiration or termination of the Program Period, the Recipient shall promptly return or destroy (as requested by the other party) all remaining Materials to the other party.

3.5 No Warranty. THE RECIPIENT ACKNOWLEDGES THAT THE MATERIALS ARE EXPERIMENTAL IN NATURE AND ARE PROVIDED "AS IS." THE PARTY PROVIDING THE MATERIALS MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRES OR IMPLIED, WITH RESPECT TO THE MATERIALS OR THE USE THEREOF, AND DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT.

4. FUNDING

4.1 Budget and Payment. Subject to the terms and conditions of this Agreement, Fluidigm shall support the Program by an aggregate grant to UABRF of [***], payable in [***] equal quarterly installments of [***] on or before the thirtieth (30th) day of each calendar quarter after the Effective Date. Fluidigm shall have no obligation to provide funds to UABRF in excess of such amount. All payments by Fluidigm to UABRF under this Agreement shall be originated from a United States bank located in the United States and made by bank wire transfer

to the following account: Account Name: UAB Research Foundation; Bank Name: First Commercia1 Bank; ABA Number: [***], Account Number: [***].

4.2 Accounting. Upon request by Fluidigm, UABRF shall provide to Fluidigm a report of expenditures shown by major cost categories.

5. PROGRAM TECHNOLOGY

5.1 Ownership.

5.1.1 All right, title and interest in all Program Technology (a) made or conceived solely by employees or others acting on behalf of UABRF (the "UABRF Inventions") shall be owned solely by UABRF; (b) made or conceived solely by employees or others acting on behalf of Fluidigm (the "Fluidigm Inventions") shall be owned solely by Fluidigm; and (c) made or conceived jointly by employees or others acting on behalf of Fluidigm and by employees or others acting on behalf of UABRF (the "Joint Inventions") shall be owned jointly by Fluidigm and UABRF. Each party shall have the right, subject to the provisions of this Agreement, to freely exploit, transfer, license or encumber its rights in any Joint Inventions, and the patent rights and other intellectual property rights therein, without the consent of, or payment or accounting to, the other party.

5.1.2 The transfer of physical possession of any materials or technology owned by, and the physical possession and use of any materials or technology by, Fluidigm or UABRF, as the case may be, shall not be (nor construed as) a sale, lease, offer to sell or lease, or other transfer of title of such materials or technology to UABRF or Fluidigm, as the case may be.

5.2 Disclosure. UABRF promptly shall disclose to Fluidigm any Program Technology made or conceived by or on behalf of UABRF, and provide Fluidigm with copies of all information available to UABRF regarding such Program Technology.

5.3 Options and Licenses.

5.3.1 UABRF hereby grants to Fluidigm a nonexclusive, worldwide, royalty-free license (together with the right to grant sublicenses), under UABRF's rights in the Program Technology, to use all unpatented Program Technology for all purposes.

5.3.2 With respect to each discovery or invention comprising Program Technology, UABRF hereby grants to Fluidigm an exclusive option to obtain an exclusive, worldwide, royalty-bearing license (with the exclusive right to sublicense) under any issued patents relating to such discovery or invention for all purposes. The option with respect to each such discovery or invention shall be exercisable for the [***] following disclosure to Fluidigm of all information available to UABRF regarding such discovery or invention. The license shall be on mutually acceptable terms and conditions. Upon exercise by Fluidigm of the option with respect to each such discovery or invention, the parties shall negotiate in good faith, and shall use good faith efforts to execute a written agreement evidencing such license prior to the expiration of [***] days following the expiration of the one-year option term described above. The actual royalty rate shall be negotiated in good faith based on reasonable factors including without limitation [***]

[***]. Fluidigm shall have the right to control the filing, prosecution, maintenance and enforcement of all patent applications and patents that are so licensed to Fluidigm.

5.3.3 If Fluidigm fails to obtain a license under Section 5.3.2 with respect to any patent rights, during the [***] day negotiation period under Section 5.3.2 ("Option Negotiation Period"), UABRF for a [***] month period following the expiration of the Option Negotiation Period shall [***].

5.4 Patent Rights

5.4.1 UABRF shall control the preparation, filing, prosecution and maintenance of all patents and patent applications to the extent they claim UABRF Inventions or Joint Inventions. Fluidigm shall advise UABRF no later than ninety (90) days after disclosure by UABRF of a UABRF Invention or a Joint Invention whether it intends to reimburse UABRF for the reasonable out of pocket costs of preparing, filing and prosecuting patent applications covering such UABRF Invention or Joint Invention. If Fluidigm declines to reimburse UABRF for all reasonable costs of preparing, filing and prosecuting a patent application for a patentable UABRF Invention or Joint Invention in any jurisdiction, UABRF may do so at its sole cost, but such patent application and patent shall be excluded from Fluidigm's option to license under Section 5.3 above; provided, however, UABRF shall not file or prosecute a patent application when Fluidigm has demonstrated to UABRF that the filing or prosecution of such patent application would be prejudicial to the optimization of such UABRF Invention or Joint Invention. UABRF shall give Fluidigm an opportunity to review the text of, and shall reasonably consider Fluidigm's comments with respect to, each patent application for a UABRF Invention or a Joint Invention before filing, and shall supply Fluidigm with a copy of such application as filed, together with notice of its filing date and serial number. UABRF shall prepare, file and prosecute patent applications covering UABRF Inventions or Joint Inventions in all jurisdictions requested by Fluidigm, provided that Fluidigm has not declined to reimburse UABRF for all reasonable costs of preparing, filing and prosecuting such patent applications.

5.4.2 Fluidigm shall control, at its sole expense, the preparation, filing, prosecution and maintenance of all patents and patent applications to the extent they claim Fluidigm Inventions.

5.4.3 Each party shall cooperate with the other party, execute all lawful papers and instruments and make all rightful oaths and declarations as may be necessary in the preparation, filing, prosecution maintenance and enforcement of all patents and patent applications described in this Section 5.4.

6. CONFIDENTIALITY AND PUBLICATION

6.1 Confidential Information. During the term of this Agreement, and for a period of five (5) years following the expiration or earlier termination hereof, each party shall maintain in confidence all Confidential Information disclosed by the other party, and shall not use, disclose or grant the use of the Confidential Information except on a need-to-know basis to those directors, officers, employees, consultants, clinical investigators, contractors, (sub)licensees, distributors or permitted assignees, to the extent such disclosure is reasonably necessary in connection with such party's activities as expressly authorized by this Agreement. To the extent that disclosure is authorized by this Agreement, prior to disclosure, each party hereto shall obtain agreement of any such person or entity to hold in confidence and not make use of the Confidential Information for any purpose other than those permitted by this Agreement. Each party shall notify the other promptly upon discovery of any unauthorized use or disclosure of the other party's Confidential Information.

6.2 Terms of this Agreement. Except as otherwise provided in Section 6.1 or 6.3, neither party shall disclose any terms or conditions of this Agreement to any third party without the prior consent of the other party. Notwithstanding the foregoing, prior to execution of this Agreement, the parties shall agree upon the substance of information that can be used to describe the terms of this transaction, and each party may disclose such information, as modified by mutual agreement from time to time, without the other party's consent.

6.3 Permitted Disclosures. The confidentiality obligations contained in this Section 6 shall not apply to the extent that the receiving party is required (a) to disclose information by law, order or regulation of a governmental agency or a court of competent jurisdiction, or (b) to disclose information to any governmental agency for purposes of obtaining approval to test or market a Product, provided in either case that the receiving party shall provide written notice thereof to the other party and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof.

6.4 Publication. Fluidigm acknowledges UABRF's interest in publishing certain results of the Program to obtain recognition within the scientific community and to advance the state of scientific knowledge. Each party also recognized their mutual interest in obtaining valid patent protection and protecting business interests. Consequently, if UABRF desires to make a publication (including any oral disclosure made without obligation of confidentiality) of any results of the Program, UABRF shall provide Fluidigm with a copy of the proposed written publication at least [***] days prior to submission for publication, or an outline of such oral disclosure at least [***] days prior to presentation. Fluidigm shall have the right (a) to propose modifications to the publication for patent reasons, and (b) to request a reasonable delay in publication in order to protect patentable information. If Fluidigm requests such a delay, UABRF shall delay submission or presentation of the publication for a period of [***] days to enable patent applications to be prepared and filed. Upon the expiration of such [***] day period (in the case of proposed written disclosures) or [***] day period (in the case of proposed oral disclosures) from receipt by Fluidigm, UABRF shall be free to proceed with the written publication or the presentation, respectively, unless Fluidigm has requested the delay described above.

7. TERM

7.1 Expiration. Unless terminated earlier pursuant to Section 7.2, this Agreement shall expire on the expiration of the Program Period.

7.2 Termination for Cause. A party may terminate this Agreement upon or after a material breach of this Agreement by the other party, if the breaching party has not cured such breach within thirty (30) days after notice thereof from the other party.

7.3 Effect of Expiration and Termination. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. The provisions of Sections 5, 6 and 8 shall survive the expiration or termination of this Agreement. Except as the parties otherwise agree in writing, termination of this Agreement shall not affect the Master Closing Agreement.

7.4 Outstanding Commitments. Upon the giving of notice of termination by either party, UABRF shall use best efforts to limit or terminate any outstanding commitments in connection with the Program. Fluidigm shall reimburse UABRF for all direct costs incurred by it for all work performed through the effective termination date, and for all outstanding obligations which cannot be cancelled; provided, however, that Fluidigm's aggregate funding obligation under this Agreement shall not exceed the amount set forth in Section 4.1 above. Within thirty (30) days after the effective date of termination, UABRF shall furnish Fluidigm with a final statement for settlement of all costs to be reimbursed. This statement may include costs incurred before the notice of termination was given but which were not yet billed. If funds received by UABRF exceed expenses incurred, UABRF shall reimburse Fluidigm for any such excess funds at the time such final statement is furnished to Fluidigm.

8. INDEMNIFICATION

8.1 Indemnification.

8.1.1 Fluidigm shall defend, indemnify and hold UABRF harmless from all losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs) resulting from any claims, demands, actions and other proceedings by any unaffiliated third party to the extent resulting from Fluidigm's gross negligence or willful misconduct under this Agreement or use of the UABRF Materials or UABRF Confidential Information.

8.1.2 UABRF shall (to the fullest extent to which University of Alabama at Birmingham has the right under applicable law to do so) defend, indemnify and hold Fluidigm harmless from all losses, liabilities, damages and expenses (including reasonable attorneys, fees and costs) resulting from any claims, demands, actions and other proceedings by any unaffiliated third party to the extent resulting from UABRF's gross negligence or willful misconduct under the Agreement, or use of the Fluidigm Materials or Fluidigm Confidential Information.

8.1.3 A party (the "Indemnitee") that intends to claim indemnification under this Section 8.1 shall promptly notify the other party (the "Indemnitor") of any liability or action in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall have the right to participate in, and, to the extent the Indemnitor so desires,

jointly with any other indemnitor similarly noticed, to assume the defense thereof with counsel selected by the Indemnitor; provided, however, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitor, if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceedings. The indemnity agreement in this Section 8.1 shall not apply to amounts paid in settlement of any loss, claim, damage, liability or action if such settlement is effected without the consent of the Indemnitor, which consent shall not be unreasonably withheld or delayed. The failure to deliver notice to the Indemnitor within a reasonable time after the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve the Indemnitor of any liability to the Indemnitee under this Section 8.1, but the omission so to deliver notice to the Indemnitor will not relieve it of any liability that it may have to the Indemnitee otherwise than under this Section 8.1. The Indemnitor may not settle the action or otherwise consent to an adverse judgment in such action that diminishes the rights or interests of the Indemnitee without the express written consent of the Indemnitee. The Indemnitee, its employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigation and defense of any action, claim or liability covered by this indemnification.

8.2 Representation. UABRF hereby represents that to the knowledge of UABRF and the Principal Investigator the rights and obligations of UABRF under this Agreement do not conflict with rights and obligations provided under other agreements which it has with third parties, including the federal and local governments. During the Program Period (or while Fluidigm is providing any subsequent funding), neither UABRF nor the Principal Investigator shall enter into any other agreements which conflict with rights and obligations provided hereunder, including any rights and obligations which survive termination hereto. UABRF shall enter into written agreements with its employees. consultants and such others as is necessary to obtain ownership of inventions, discoveries and other useful research results, products and processes made by them pursuant to activity carried out in connection with the Program.

9. MISCELLANEOUS

9.1 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the parties to the other shall be in writing and addressed to such other party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to UABRF: UAB Research Foundation
1120G Administration Building
704 20th Street
Birmingham, Alabama 35294
Attention: Director

If to Fluidigm: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: President

with a copy to: Fluidigm Corporation
7100 Shoreline Court
South San Francisco, California 94080
Attention: General Counsel

9.2 Assignment. Except as otherwise expressly provided under this Agreement neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred (whether voluntarily, by operation of law or otherwise), without the prior express written consent of the other party; provided, however, that either party may, without such consent, assign this Agreement and its rights and obligations hereunder in connection with the transfer or sale of all or substantially all of its business, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment or transfer in violation of this Section 9.2 shall be void.

9.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Alabama, without regard to the conflicts of law principles thereof.

9.4 Entire Agreement. This Agreement and the Master Closing Agreement (together with the Ancillary Agreements, as defined in the Master Closing Agreement) contain the entire understanding of the parties with respect to the subject matter hereof. All express or implied representations, agreements and understandings, either oral or written, heretofore made are expressly superseded by this Agreement and the Master Closing Agreement.

9.5 Independent Contractors. Each party hereby acknowledges that the parties shall be independent contractors and that the relationship between the parties shall not constitute a partnership, joint venture or agency. Neither party shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other party, without the prior consent of the other party to do so.

9.6 Waiver. The waiver by a party of any right hereunder, or of any failure to perform or breach by the other party hereunder, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other party hereunder whether of a similar nature or otherwise.

9.7 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have duly executed and delivered this Agreement as of the date first written above.

UAB RESEARCH FOUNDATION

By: _____
Title: _____

FLUIDIGM CORPORATION

By: _____
Title: _____

Acknowledged and agreed to
this March , 2003.

_____
Dr. [***],
Principal Investigator

EXHIBIT A

RESEARCH PLAN

[***]

APPENDIX 1
(To Exhibit A ("Research Plan")

[***]

Part Number	Item	Quantity
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

Other Materials included: [***]

EXHIBIT D

PATENTS AND PATENT APPLICATIONS

[***]

SUBLEASE

This SUBLEASE is made as of March 25, 2004, by and between Genome Therapeutics Corporation, a Massachusetts corporation having a place of business at 100 Beaver Street, Waltham, Massachusetts 02453 ("Sublessor") and Fluidigm Corporation, a California corporation having an address at 7100 Shoreline Court, San Francisco, California 94080 ("Sublessee").

WITNESSETH:

WHEREAS, pursuant to that certain Agreement of Lease dated as of November 9, 1999, by and between Mountain Cove Tech Center, L.L.C., as "landlord", ("Master Lessor") and MJ Research Company, Inc., as "tenant", ("Prime Lessor") (the "Master Lease"), Master Lessor leases to Prime Lessor the land and building known as and numbered 7000 Shoreline Court, San Francisco, California (the "Building") (all as more particularly described in the Master Lease a true and complete copy of which is attached hereto as **Exhibit A-1**, the "Master Premises"); and

WHEREAS, pursuant to that certain Agreement of Lease dated as of October 6, 2000 by and between Prime Lessor, as "landlord" and Sublessor, as "tenant" (as successor in interest to Genesoft, Inc.), as amended by a First Amendment to Lease dated December 5, 2002 and a Second Amendment to Lease dated March 25, 2004 (such lease, as so amended, and all renewals, modifications and extensions thereof being hereinafter collectively referred to as the "Prime Lease"), a true and complete copy of which is attached hereto as **Exhibit A-2**, Prime Lessor leases to Sublessor approximately 68,460 rentable square feet of space located on the first, second and third floors of the Building (all as more particularly described in the Prime Lease, the "Premises"); and

WHEREAS, Sublessee subleases other space in the Building directly from Prime Lessor pursuant to that certain Sublease dated December 1, 2001 (as amended to date, the "MJ Research Sublease"); and

WHEREAS, Sublessee desires to sublease a portion of the Premises from Sublessor and Sublessor is willing to sublease the same, all on the terms and conditions hereinafter set forth;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties covenant and agree as follows:

1. Sublease of Subleased Premises. For the rent and upon the terms and conditions herein, Sublessor hereby subleases to Sublessee, and Sublessee hereby subleases from Sublessor approximately 14,503 rentable square feet of office and lab space located on the 1st floor of the Building as shown on **Exhibit B** attached hereto (the "Subleased Premises"). Sublessee acknowledges that any reference to the square

footage of the Subleased Premises is an approximation. Nevertheless, the parties agree that such approximation shall be final and binding for all purposes hereunder, and that no adjustment shall be made to the Rent if the actual square footage of the Subleased Premises differs from any reference to square footage contained herein. During the term hereof, Sublessee shall have access to the Subleased Premises and the parking lot(s) adjacent to the Building twenty-four (24) hours a day, 7 days a week, subject to the terms of the Prime Lease and this Sublease. Sublessor also grants Sublessee the right to use, without additional charge during the term of this Sublease, those items of personal property identified on **Exhibit C** attached hereto and made a part hereof (the "Furniture"), together with the existing network wiring/equipment (including handsets) and fixtures in the Subleased Premises as of the Commencement Date. Sublessee accepts possession of the Furniture and said network wiring/equipment and fixtures "as is, where is" and in their current condition, Sublessor having made no representation or warranty of any kind, express or implied (including, but not limited to, any warranty of fitness for any particular use or purpose) with respect to any of the same. Prior to the Commencement Date, Sublessee shall, upon prior notice to the Sublessor, have the right to enter the Subleased Premises for the purposes of inspecting the same, taking measurements, installing its furniture, fixtures and equipment, and preparing for the move into the Subleased Premises. Sublessor shall have the right to have a representative present any time such early entry right is exercised. If Sublessee enters the Subleased Premises prior to the Commencement Date, Sublessee shall be responsible for complying with all of the terms of this Sublease (other than the payment of Rent) and, to the extent incorporated herein by reference, the Prime Lease.

2. Term. The Term of this Sublease (the "Initial Term") shall commence on March 1, 2004 (the "Commencement Date"), and shall expire on December 31, 2007 (the "Expiration Date") or such earlier date upon which said Initial Term may expire, be canceled or be terminated pursuant to any of the terms or provisions of the Prime Lease, this Sublease or applicable law. Sublessee shall have one option to extend the term of this Sublease from January 1, 2008 until December 31, 2010 (the "Extension Term") following the Initial Term on the same terms and conditions as herein specified (other than the payment of Rent), which option shall be exercisable upon Sublessee's providing Sublessor with written notice no later than six (6) months prior to the Expiration Date, time being of the essence. Failure on the part of Sublessee to give timely such notice exercising the extension option for the Extension Term shall render said extension option void and of no further force or effect.

On the conditions (any one or more of which conditions Sublessor may waive, at its election, by written notice to Sublessee at any time) that at the time of option exercise Sublessee is not in default of its covenants and obligations under this Sublease beyond all applicable cure periods, Sublessee may elect to exercise its right to the Extension Term.

The Rent for the Extension Term shall be 95% of the then current fair market rental value ("FMRV") for comparable space in South San Francisco, California under a three (3) year sublease, taking into account all relevant factors.

The FMRV shall be proposed by Sublessor within thirty (30) days of the receipt of Sublessee's notice that it intends to extend the term of the Sublease (the "Sublessor's Proposed Market Rent"). The Sublessor's Proposed Market Rent shall be deemed to be the FMRV unless Sublessee notifies Sublessor, within thirty (30) days of Sublessee's receipt of the Sublessor's Proposed Market Rent notice, that the Sublessor's Proposed Market Rent is not satisfactory to Sublessee (the "Sublessee's Rejection Notice").

If the FMRV is not otherwise agreed upon by Sublessor and Sublessee within fifteen (15) days after Sublessor's receipt of the Sublessee's Rejection Notice, then:

(1) If the MJ Research Sublease has been extended for a period coterminous with the Extension Term hereunder and the "fair market rent" for such extension has been determined in good faith under and pursuant to the process set forth in Section 4 of the MJ Research Sublease, the FMRV shall be determined by multiplying such fair market rent per rentable square foot by the rentable square footage of the Subleased Premises. However, if for any reason such fair market rent has not been so determined as of the commencement of the Extension Term hereof, the FMRV shall be determined as set forth in subparagraphs (2) through (8) below.

(2) Sublessor and Sublessee shall notify one another within ten (10) days after the commencement of the Extension Term of the name and address of the appraiser designated by each. Such two (2) appraisers shall, within twenty (20) days after the designation of the second appraiser, make their determination of the FMRV in writing and give notice thereof to each other and to Sublessor and Sublessee. Such two (2) appraisers shall have twenty (20) days after the receipt of notice of each other's determinations to confer with each other and to attempt to reach agreement as to the determination of the FMRV. If such appraisers shall concur in such determination within said twenty (20) day period, then they shall give notice thereof to Sublessor and Sublessee and such concurrence shall be final and binding upon Sublessor and Sublessee. If such appraisers shall fail to concur as to such determination within said twenty (20) day period, then they shall give notice thereof to Sublessor and Sublessee and shall immediately designate a third appraiser. If the two (2) appraisers shall fail to agree upon the designation of such third appraiser within five (5) days after said twenty (20) day period, then they or either of them shall give notice of such failure to agree to Sublessor and Sublessee and, if Sublessor and Sublessee fail to agree upon the selection of such third appraiser within five (5) days after the appraiser(s) appointed by the parties give notice as aforesaid, then either party on behalf of both may apply to the American Arbitration Association or any successor thereof to designate a third appraiser, or on such association's failure, refusal or inability to act, to a court of competent jurisdiction, for the designation of such third appraiser.

(3) All appraisers shall be commercial real estate brokers who shall have had at least five (5) years' continuous experience as a commercial real estate broker, including some experience leasing biotech space, in the South San Francisco, California area.

(4) The third appraiser shall conduct such investigations as he or she may deem appropriate and shall, within ten (10) days after the date of his or her designation, make an independent determination of the FMRV.

(5) If none of the determinations of the appraisers varies from the mean of the determinations of the other appraisers by more than ten percent (10%), the mean of the determinations of the three (3) appraisers shall be the FMRV for the Subleased Premises. If, on the other hand, the determination of any single appraiser varies from the mean of the determinations of the other two (2) appraisers by more than ten percent (10%), the mean of the determination of the two (2) appraisers whose determinations are closest shall be the FMRV.

(6) The determination of the appraisers, as provided above, shall be conclusive upon the parties and shall have the same force and effect as a judgment made in a court of competent jurisdiction.

(7) Each party shall pay fees, costs and expenses of the appraiser selected by it and its own counsel fees and one-half (1/2) of all other expenses and fees of the third appraiser.

(8) Should the arbitration process extend beyond the Initial Term the monthly Rent will increase by 3.5% of the then monthly Rent until the new monthly Rent is established by the appraisers as provided herein and any Rent paid by Sublessee during such period shall be adjusted accordingly based on the outcome of the arbitration process.

References herein to the "Term" of this Sublease shall be deemed to mean and include the Initial Term and the Extension Term (and the Expiration Date shall be deemed extended accordingly) if and when Sublessee has given timely such notice exercising the same.

3. Appurtenant Rights. Sublessee shall have, as appurtenant to the Subleased Premises, rights to use in common with Sublessor and others entitled thereto Sublessor's rights in driveways, walkways, hallways, stairways and passenger elevators convenient for access to the Subleased Premises and the lavatories nearest thereto. In addition, Sublessor grants Sublessee the right to use not less than 44 parking spaces in the lot(s) adjacent to the Building on a non-exclusive basis. Sublessor shall not oversubscribe its parking rights under the Prime Lease.

4. Rent. Sublessee shall pay to Sublessor the following amounts as rent (the "Rent") during the Initial Term, which is intended to be full service gross rent, during the term of this Sublease:

Lease Period	Annual Rent	Monthly Rent	P.R.S.F.
3/1/04 - 9/30/04	N/A	$69,904.46	$57.84
10/01/04-12/31/04	N/A	$43,509.00	$36.00
1/1/05 -12/31/05	$522,108.00	$43,509.00	$36.00
1/1/06 -12/31/06	$540,381.78	$45,031.82	$37.26
1/1/07-12/31/07	$559,235.68	$46,602.97	$38.56

Rent includes the following: (i) all utility charges (including electricity consumed by Sublessee in the Subleased Premises); (ii) janitorial and all cleaning charges Monday through Friday (except federal holidays); (iii) non-hazardous waste disposal; (iv) RO/DI water; (v) vacuum/compressed air; (vi) emergency/back-up generator power, which generator shall provide at least the same amount of power that is currently available to Sublessee; (vii) use of common shipping/receiving area; (viii) waste water PH neutralization system; (ix) common on-site fitness room, lunch room and adjacent patio; (x) access cards; (xi) Taxes and property insurance; (xii) use of existing telephone and data wiring infrastructure; (xiii) common loading dock area; and (xiv) all maintenance and repair of the Subleased Premises excluding, subject to paragraph 7 of this Sublease, damage caused by the negligence or willful misconduct of Sublessee its employees, agents, contractors and invitees. Sublessor shall promptly and diligently perform the services required of it as set forth above. Rent does not include any Sublessee-specific operational items, including, but not limited to: (a) telecom/high speed data service through local service providers; (b) liquid nitrogen or any other specialty gas provisions; (c) hazardous waste disposal; and (d) any Sublessee-specific operating license(s) requirement(s). Environmental, health and safety and other consulting services are available through Sublessor at additional cost on a per case or as needed basis. Sublessee shall begin paying Rent to Sublessor on the Commencement Date. In addition to Rent, Sublessee shall also pay to Sublessor the sum of $35,000.00 per month as tenant improvement recovery, up to a total payment of (including the payment owing as of March 1, 2004 and all payments owing through the final scheduled $35,000.00 payment in December 1, 2004) $350,000.00. All monthly payments of Rent are due and payable in advance on the first day of each calendar month, without demand, deduction, counterclaim or setoff. Rent for any partial month shall be prorated and paid on the first of such month. Sublessee shall pay as additional rent ("Additional Rent") all sums of money or other charges required to be paid by Sublessee under this Sublease whether or not such sums and other charges are specifically designated as "Additional Rent." Sublessor shall have the same remedies for a default in the payment of Additional Rent as for a default in the payment of Rent.

5. Permitted Uses. Sublessee shall use the Subleased Premises for research and development, light manufacturing and general office uses and uses accessory thereto to the extent permitted by applicable law and under the Prime Lease, including without limitation, Article 5 of the Prime Lease as and to the extent hereinafter incorporated by reference and for no other purpose or purposes.

6. Condition of Subleased Premises. On the Commencement Date, the Subleased Premises shall be delivered to Sublessee in the condition existing on the date hereof, with all electrical, plumbing, gas, safety, security, sewer, fire suppression, restrooms, and water systems in good operating condition. Sublessee acknowledges that it has had an opportunity thoroughly to inspect the condition of the Subleased Premises, and Sublessee agrees that, subject only to the foregoing, Sublessee is leasing the Subleased Premises on an "AS IS" basis, with all defects, without any representation or warranty by Sublessor or its agents as to the condition of the Subleased Premises or their fitness for Sublessee's use, and subject to all applicable zoning, municipal, county and state laws, ordinances and regulations governing and regulating the use of the Subleased Premises, and any easements, covenants or restrictions of record. Sublessee acknowledges that Sublessor and its agents have not made any representations or warranties that the Subleased Premises or the Building comply with legal requirements, including, but not limited to, the ADA, Title 24, any Transportation Management Plans, or any laws relating to hazardous substances or materials, and as a material inducement to Sublessor, Sublessee assumes responsibility for causing the Subleased Premises to comply with all legal requirements throughout the Term to the extent and only to the extent the same become applicable as a result of the introduction of hazardous substances to the Subleased Premises by Sublessee or any of its agents, contractors or employees, special circumstances of Sublessee's employees (and not generally applicable to the Building under the ADA), Sublessee's particular use of (or change of use from that currently obtaining in) the Subleased Premises, or Sublessee's construction of alterations in the Subleased Premises. Sublessee acknowledges that it has satisfied itself that the Subleased Premises are suitable for its intended use. Sublessor shall have no obligation to do any work in and to the Subleased Premises in order to prepare the Subleased Premises for occupancy or use by Sublessee.

Sublessee shall make no alterations, installations, removals, additions or improvements in or to the Subleased Premises or any other portion of the Building except with the consent of (a) Sublessor, which shall not be unreasonably withheld or delayed, (b) Prime Lessor in accordance with and to the extent required by Article 10 of the Prime Lease and (c) Master Lessor in accordance with and to the extent required by Article 10 of the Master Lease; provided, however, that, subject to the last sentence of this paragraph, Sublessor shall be entitled to condition its consent upon Sublessee's removal of the proposed alterations upon the expiration or earlier termination of this Sublease. Any alterations, installations, removals, additions or improvements consented to by Sublessor, Prime Lessor and Master Lessor shall be performed at Sublessee's sole cost. At the time Sublessee submits plans to Sublessor for Sublessor's approval, Sublessor shall, upon request of Sublessee, inform Sublessee whether it will require any alteration or improvement to be removed from the Subleased Premises upon the expiration of the Sublease term, provided, however, that Sublessor shall not unreasonably require that any alteration or improvement be so removed.

All trade fixtures and personal property, including furniture, furnishings, and audio visual or other similar technical or specialty installations, installed in the Subleased Premises at Sublessee's expense ("Tenant's Property") shall at all times remain Sublessee's property and Sublessee shall be entitled to all depreciation,

amortization and other tax benefits with respect thereto. Except for Tenant's Property, which cannot be removed without material injury to the Subleased Premises, at any time Sublessee may remove Tenant's Property from the Subleased Premises, provided Sublessee repairs all damage caused by such removal and restores the Subleased Premises to a condition consistent with the then condition of the balance of the Subleased Premises. Upon request, Sublessor shall execute a lien waiver in reasonable form acknowledging its lack of any interest or title in Tenant's Property.

Sublessee shall not misuse the Furniture, fixtures and equipment (other than Tenant's Property) and shall keep the same in clean condition, reasonable wear and tear and damage by fire or other casualty, Master Lessor, Prime Lessor, Sublessor or their respective agents, employees and contractors, and hazardous substances not introduced to the Subleased Premises by Sublessee or its agents, employees or contractors excepted.

Notwithstanding anything to the contrary in this Sublease, Sublessee shall have no obligation to perform, construct, repair, maintain, make or reimburse Sublessor for any improvement, (i) necessitated by the acts or negligence of Sublessor, Master Lessor, Prime Lessor, any other occupant of the building or the project, or their respective agents, employees, invitees or contractors, (ii) occasioned by the exercise of the power of eminent domain or any peril that would be covered by the customary form of so-called "special form, extended coverage" casualty insurance, (iii) to the structure or common areas of the building or the project or the heating, ventilating, air conditioning, electrical, water, sewer, and plumbing systems serving the Subleased Premises, the building, or the project, unless caused by the acts or negligence of Sublessee or its agents, employees or contractors, (iv) to any portion of the building or the project outside of the demising walls of the Subleased Premises, unless caused by the acts or negligence of Sublessee or its agents, employees or contractors, (v) occasioned by the presence of any hazardous substance on or about the Subleased Premises, other than hazardous substances introduced into the Subleased Premises by Sublessee or its agents, employees or contractors, or persons under its control, (vi) which is expressly the obligation of the Prime Lessor under the Prime Lease or the Master Lessor under the Master Lease, (vii) except to the extent Sublessee's obligation under the first paragraph of this Section 6, required as a consequence of any law, rule, regulation, ordinance, covenant, condition or restriction or occasioned by any construction defect or legal violation of the Subleased Premises, the building or the project, (viii) which would customarily be reimbursable under any "special form, extended coverage" casualty insurance policy, or (ix) except to the extent Sublessee's obligation under the first paragraph of this Section 6, which could be treated as a "capital expenditure" under generally accepted accounting principles.

7. Insurance. Sublessee shall maintain throughout the term of this Sublease such insurance in respect of the Subleased Premises and the conduct and operation of business therein, with Sublessor, Prime Lessor and Master Lessor (and Master Lessor's members, property managers and other parties in interest as Master Lessor may from time to time reasonably designate to Sublessee in writing), listed as additional insureds on the liability coverage component thereof, as is required of "Tenant"

pursuant to the terms of the Prime Lease (including, without limitation, Article 13 as and to the extent hereinafter incorporated by reference) and the terms of the Master Lease with no penalty to Sublessor, Prime Lessor or Master Lessor resulting from deductibles or self-insured retentions effected in Sublessee's insurance coverage, and with such other endorsements and provisions as Prime Lessor or Master Lessor may reasonably request under and pursuant to the Prime Lease and Master Lease, respectively. If Sublessee fails to procure or maintain such insurance and to pay all premiums and charges therefor within five (5) days after notice from Sublessor, Sublessor may (but shall not be obligated to) do so, whereupon Sublessee shall reimburse Sublessor upon demand. All such insurance policies shall, to the extent obtainable, contain endorsements providing that (i) such policies may not be canceled except upon thirty (30) days' prior notice to Sublessor, and if they are required hereunder to be named as additional insureds thereunder, Prime Lessor and Master Lessor, (ii) no act or omission of Sublessee shall affect or limit the obligations of the insurer with respect to any other named or additional insured and (iii) Sublessee shall be solely responsible for the payment of all premiums under such policies and Sublessor, notwithstanding that it is or may be a named insured, shall have no obligation for the payment thereof. Such insurance shall otherwise be in both form and substance as is customarily carried by landlords of comparable buildings in the South San Francisco, California area. On or before the Commencement Date, Sublessee shall deliver to Sublessor, Prime Lessor and Master Lessor either a fully paid-for policy or certificate, at Sublessee's option, evidencing the foregoing coverages. Any endorsements to such policies or certificates shall also be delivered to Sublessor, and if they are required hereunder to be named as additional insureds thereunder, Prime Lessor and Master Lessor upon issuance thereof. Sublessee shall procure and pay for renewals of such insurance from time to time before the expiration thereof, and Sublessee shall deliver to Sublessor, Prime Lessor and Master Lessor such renewal policies or certificates at least thirty (30) days before the expiration of any existing policy. In the event Sublessee fails so to deliver any such renewal policy or certificate at least thirty (30) days before the expiration of any existing policy, Sublessor shall have the right, but not the obligation, to obtain the same where upon Sublessee shall reimburse Sublessor upon demand.

Sublessee shall include in all such insurance policies any clauses or endorsements in favor of Prime Lessor and Master Lessor including, but not limited to, waivers of rights of subrogation, which Sublessor is currently required to provide pursuant to the provisions of the Prime Lease. Notwithstanding anything to the contrary in this Sublease, Sublessee and Sublessor, for themselves and their agents, employees, and contractors hereby waive any and all damages, losses, liabilities, costs, and expenses, (i) to the extent the same would be covered by the standard form in California of so-called full replacement cost, "special form" extended coverage casualty insurance and (ii) to the extent the same are actually covered by insurance carried by said party.

Sublessor shall maintain the insurance required of it under Section 13.1(b) of the Prime Lease.

8. Indemnification. Except to the extent arising out of the negligence, willful misconduct or violation of law by Sublessor, Master Lessor, Prime Lessor or

their respective agents, employees or contractors, or the breach of this Sublease, the Prime Lease or the Master Lease by Sublessor, Master Lessor, or Prime Lessor, Sublessee agrees to protect, defend (with counsel reasonably approved by Sublessor), indemnify and hold Sublessor, Prime Lessor and Master Lessor and their respective officers, agents and employees harmless from and against any and all claims, costs, expenses, losses and liabilities to the extent arising: (i) from the conduct or management of or from any work or thing whatsoever done in the Subleased Premises during the term hereof; (ii) from any condition arising, and any injury to or death of persons, damage to property or other event occurring or resulting from an occurrence in the Subleased Premises during the Term hereof; and (iii) from any breach or default on the part of Sublessee in the performance of any covenant or agreement on the part of Sublessee to be performed pursuant to the terms of this Sublease or from any willful misconduct or negligence on the part of Sublessee or any of its agents, employees, licensees, invitees or assignees or any person claiming through or under Sublessee. Sublessee further agrees to indemnify Sublessor, Prime Lessor and Master Lessor and their respective officers, agents and employees from and against any and all damages, liabilities, costs and expenses, including reasonable attorneys' fees, incurred in connection with any such indemnified claim or any action or proceeding brought in connection therewith. Except to the extent arising out of the negligence, willful misconduct or violation of law by Sublessee, Master Lessor, Prime Lessor or their respective agents, employees or contractors, or the breach of this Sublease, the Prime Lease or the Master Lease by Sublessee, Master Lessor, or Prime Lessor, Sublessor agrees to protect, defend (with counsel reasonably approved by Sublessee), indemnify and hold Sublessee and its respective officers, agents and employees harmless from and against any and all claims, costs, expenses, losses and liabilities to the extent arising from any willful misconduct or negligence on the part of Sublessor or any of its agents, employees or contractors. Sublessor further agrees to indemnify Sublessee and its officers, agents and employees from and against any and all damages, liabilities, costs and expenses, including reasonable attorneys' fees, incurred in connection with any such indemnified claim or any action or proceeding brought in connection therewith. The provisions of this Paragraph are intended to supplement any other indemnification provisions contained in this Sublease and in the Prime Lease to the extent incorporated by reference herein.

9. No Assignment or Subletting. Sublessee shall not assign, sell, mortgage, pledge or in any manner transfer this Sublease or any interest herein, or the term or estate granted hereby or the rentals hereunder, or sublet the Subleased Premises or any part thereof, or grant any concession or license or otherwise permit occupancy of all or any part of the Subleased Premises by any person, entity or any Competitor (as defined in Section 14.2 of the Prime Lease) of Prime Lessor, without the prior written consent of Sublessor, which shall not be unreasonably withheld or delayed and, if and to the extent required under the terms of the Master Lease or the Prime Lease, the consent of Prime Lessor and Master Lessor. Notwithstanding anything to the contrary in this Sublease, the consent of Sublessor shall not be required for any sublease of the Subleased Premises or any assignment of this Sublease to any entity controlled by, under common control with, or which controls Sublessee for so long as such entity is controlled by, under common control with, or controls Sublessee, or in connection with any merger of

Sublessee with any other entity (provided the surviving entity has at least the net worth of Sublessee immediately prior to the merger) or the sale of substantially all of the assets of Sublessee located in the Subleased Premise. Neither the consent of Sublessor, Prime Lessor or Master Lessor to an assignment, subletting, concession, or license, nor the references in this Sublease to assignees, subtenants, concessionaires or licensees, shall in any way be construed to relieve Sublessee of the requirement of obtaining the consent of Sublessor, Prime Lessor and Master Lessor to any further assignment or subletting or to the making of any assignment, subletting, concession or license for all or any part of the Subleased Premises. Notwithstanding any assignment or subletting, including, without limitation, any assignment or subletting permitted or consented to, the original Sublessee named herein and any other person(s) who at any time was or were Sublessee shall remain fully liable under this Sublease. If this Sublease is assigned, or if the Subleased Premises or any part thereof is underlet or occupied by any person or entity other than Sublessee, Sublessor may, after default by Sublessee following the lapse of any cure period, collect rent from the assignee, undertenant or occupant, and apply the net amount collected to the rents payable by Sublessee hereunder, but no assignment, underletting, occupancy or collection shall be deemed a waiver of the provisions hereof, the acceptance of the assignee, undertenant or occupant as tenant, or a release of Sublessee from the further performance by Sublessee of the covenants hereunder to be performed on the part of Sublessee (except to the extent such amounts are so applied). Any attempted assignment or subletting without the prior written consent of Sublessor, Prime Lessor and Master Lessor, to the extent required, shall be void.

10. Primacy and Incorporation of Prime Lease.

(a) This Sublease is and shall be subject and subordinate to the Prime Lease and to all matters to which the Prime Lease is or shall be subject and subordinate, and to all amendments, modifications, renewals, extensions and replacements of or to the Prime Lease that do not adversely affect Sublessee, this Sublease or the rights of Sublessee, under this Sublease in the Subleased Premises or the use thereof by Sublessee, and Sublessor purports hereby to convey, and Sublessee takes hereby, no greater rights then those accorded to or taken by Sublessor as “Tenant” under the terms of the Prime Lease. To the extent expressly incorporated herein below, Sublessee covenants and agrees that it will perform and observe all of the provisions contained in the Prime Lease to be performed and observed by “Tenant” thereunder as applicable to the Subleased Premises, except that “Rent” shall be defined for purposes of this Sublease as set forth in Paragraph 4 hereof. Notwithstanding the foregoing, Sublessee shall have no obligation to (i) cure any default of Sublessor under the Prime Lease, (ii) perform any obligation of Sublessor under the Prime Lease which arose prior to the Commencement Date and Sublessor failed to perform, (iii) repair any damage to the Subleased Premises caused by Sublessor, (iv) remove any alterations or additions installed within the Subleased Premises by Sublessor, (v) indemnify Sublessor or Prime Lessor with respect to any negligence or willful misconduct of Sublessor, its agents employees or contractors, or (vi) discharge any liens on the Subleased Premises or the Building which arise out of any work performed, or claimed to be performed, by or at the direction of Sublessor. Except to the extent inconsistent with the context hereof,

capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Prime Lease. Further, except as set forth below, the terms, covenants and conditions of the following specified provisions of the Prime Lease are incorporated herein by reference as if such terms, covenants and conditions were stated herein to be the terms, covenants and conditions of this Sublease, so that except to the extent that they are inconsistent with or modified by the provisions of this Sublease, for the purpose of incorporation by reference each and every referenced term, covenant and condition of the Prime Lease binding upon or inuring to the benefit of the "Landlord" thereunder shall, in respect of this Sublease and the Subleased Premises, be binding upon or inure to the benefit of Sublessor, and each and every referenced term, covenant and condition of the Prime Lease binding upon or inuring to the benefit of the "Tenant" thereunder shall, in respect of this Sublease, be binding upon or inure to the benefit of Sublessee, with the same force and effect as if such terms, covenants and conditions were completely set forth in this Sublease: Articles/Sections: 2.3, 5.2, 5.3(a), 5.3(b), 5.3(c) (excluding the fourth, fifth, sixth and seventh sentences), 5.3(d), 5.3(e), 5.3(f), 5.3(g), 5.3(h) through the word "contractors," 5.4, 6.5, 6.6, the last two sentences of 7.8, 8, the fourth sentence of 10, 11, 12, 13.1 (excluding 13.1(b) and, subject to the additional qualification that Sublessor shall exercise its rights thereunder only as and to the extent Prime Lessor exercises the same against Sublessor, 13.1(g), 13.2, 13.3, 13.4, 15 (excluding 15.5 and 15.6), 16 (as amended), 17, 19, 20, 22, 23.3, the first paragraph of 24, 27.1, 27.2, 27.3, 27.4, 27.12 and 27.13, and Exhibits B, C and D. Notwithstanding the foregoing, for purposes of this Sublease, as to such incorporated terms, covenants and conditions:

(i) references in the Prime Lease to the "Demised Premises" shall be deemed to refer to the "Subleased Premises" hereunder;

(ii) references in the Prime Lease to "Landlord" and to "Tenant" shall be deemed to refer to "Sublessor" and "Sublessee" hereunder, respectively, except that where the term "Landlord" is used in the context of ownership or management of the entire Building, such term shall be deemed to mean "Prime Lessor";

(iii) references in the Prime Lease to "this Lease" shall be deemed to refer to "this Sublease" (except when such reference in the Prime Lease is, by its terms (unless modified by this Sublease), a reference to any other section of the Prime Lease, in which event such reference shall be deemed to refer to the particular section of the Prime Lease);

(iv) references in the Prime Lease to the "Term Commencement Date" shall be deemed to refer to the "Commencement Date" hereunder;

(v) references in the Prime Lease to the "Yearly Fixed Rent", "Fixed Rent", "Additional Rent" and "rent" shall be deemed to refer to the "Rent" as defined hereunder;

(vi) Sublessee shall not be required to name Sublessor, Prime Lessor, Master Lessor or any other party as an additional insured on its worker's compensation, business interruption or personal property insurance; and

(vii) reference to "Article 14" in Section 19.1 shall mean Paragraph 9 of this Sublease.

Notwithstanding the foregoing, the following provisions of the Prime Lease, Exhibits and Schedules annexed thereto are not incorporated herein by reference and shall not, except as to definitions set forth therein, have any applicability to this Sublease: Articles/Sections 1, 2.1, 2.2, 2.4, 3, 4, 5.1, the fourth, fifth, sixth and seventh sentences of 5.3(c), everything after the word "contractors" in 5.3(h), 6 (excluding 6.5 and 6.6), 7 (except the last two sentences of 7.8), 9, 10 (except the fourth sentence), 13.1(b), 13.5, 14, 15.5, 15.6, 18, 21, 23.1, 23.2, the second paragraph of 24, 25, 26, 27.5, 27.6, 27.7, 27.8, 27.9, 27.10, 27.11, 27.14, 28 and 29 and Exhibits A, A-l, A-2, E, F, G and H.

Where reference is made in the following Sections to "Landlord", the same shall be deemed to refer to "Master Lessor" and "Prime Lessor": Sections 7 (other than the last sentence of 7.8) 8, 13.5, 15.1 and 16.

Where reference is made in the following Section to "Landlord", the same shall be deemed to refer to "Prime Lessor": the fourth sentence of Section 15.6.

Where reference is made in the following Sections to "Landlord", the same shall be deemed to refer to "Master Lessor", "Prime Lessor" and "Sublessor": Sections 5.3(b), 5.3(d), 5.3(f), 5.3(g), 5.4, the last two sentences of 7.8, 10, 11,13.1, 13.2, 13.3, 13.4, 15.2, 15.3, 15.6 (excluding the fourth sentence), 15.7 and 17.

Where reference is made in the following Sections to "Landlord", the same shall be deemed to refer to "Prime Lessor" and "Sublessor": Sections 5.3(c) and 5.3(e).

(b) (Intentionally omitted)

(c) Notwithstanding anything to the contrary contained in the Prime Lease, the time limits (the "Notice Periods") contained in the Prime Lease for the giving of notices, making of demands or performing of any act, condition or covenant on the part of the "Tenant", thereunder, or for the exercise by the "Tenant", thereunder of any right, remedy or option, are changed for the purposes of incorporation herein by reference by shortening the same in each instance by five (5) days, so that in each instance Sublessee shall have five (5) fewer days to observe or perform hereunder than Sublessor has as the "Tenant" under the Prime Lease; provided, however, that if the Prime Lease allows a Notice Period of six (6) days or less, then Sublessee shall nevertheless be allowed the number of days equal to one-half of the number of days in each Notice Period to give any such notices, make any such demands, perform any such acts, conditions or covenants or exercise any such rights, remedies or options; provided, further, that if one-half of the number of days in the Notice Period is not a whole number, Sublessee shall

be allowed the number of days equal to one-half of the number of days in the Notice Period rounded up to the next whole number.

(d) Notwithstanding anything to the contrary contained in this Sublease (including, without limitation, the provisions of the Prime Lease incorporated herein by reference), Sublessor makes no representations or warranties whatsoever with respect to the Subleased Premises, this Sublease, Prime Lease or any other matter, either express or implied, except as set forth in this Sublease, and except that Sublessor represents and warrants (i) that it is the sole holder of the interest of the "Tenant" under the Prime Lease, (ii) that the Prime Lease is in full force and effect and that there are no modifications of the Prime Lease which will affect Sublessee's rights or obligations hereunder, (iii) that no notices of default have been served on Sublessor under the Prime Lease which have not been cured and to the best of Sublessor's knowledge Sublessor is not otherwise in default of its obligations under the Master Lease, and (iv) to the best of Sublessor's knowledge, Prime Lessor is not in default under the Prime Lease or the Master Lease and Master Lessor is not in default under the Master Lease.

11. Certain Services and Rights. Except as otherwise expressly set forth herein, the only services or rights to which the Sublessee is entitled hereunder, are those expressly set forth herein and those services and rights to which Sublessor is entitled under the Prime Lease, including without limitation those set forth in Sections 7.3, 7.4, 7.6 and 7.7(a) of the Prime Lease. Notwithstanding anything to the contrary contained herein, in no event shall Sublessor be deemed to be in default under this Sublease or liable to Sublessee for any failure of the Prime Lessor to perform its obligations under the Prime Lease. With respect to all work, services, utilities, repairs, restoration, maintenance, compliance with law, insurance, indemnification or other obligations or services to be performed or provided by Prime Lessor under the Prime Lease, Sublessor's sole obligation shall be, without expense to itself, to exercise commercially reasonable efforts to require Prime Lessor to comply with the obligations of Prime Lessor under the Prime Lease, provided that in no event shall Sublessor be required to file suit against Prime Lessor.

12. Compliance with Prime Lease. Sublessee shall neither do nor permit its agents, employees or contractors to do anything which violates the Prime Lease and which would cause the Prime Lease to be terminated or forfeited by reason of any right of termination or forfeiture reserved or vested in Prime Lessor under the Prime Lease, and Sublessee shall defend, indemnify and hold Sublessor harmless from and against any and all claims, liabilities, losses, damages and expenses (including reasonable attorneys' fees) of any kind whatsoever if the Prime Lease is terminated or forfeited in whole or in part as a result of a breach or default on the part of Sublessee. Sublessee covenants and agrees that Sublessee will not do anything which would constitute a default under the provisions of the Prime Lease or omit to do anything which Sublessee is obligated to do under the terms of this Sublease, which would constitute a default under the Prime Lease. Except if the same results in whole or in part from a breach on the part of Sublessee or any of its agents, employees or contractors of the obligations of Sublessee hereunder, Sublessor shall not cause or permit the Prime Lease to be terminated or forfeited by reason of any default on the part of Sublessor thereunder and

Sublessor shall indemnify, defend and hold harmless Sublessee from any such termination or forfeiture.

13. Default. In the event that Sublessee shall default in any of its obligations hereunder beyond applicable cure periods, including any default of the nature described in the herein incorporated provisions of the Prime Lease beyond applicable cure periods as modified by Paragraph 10(c) hereof, Sublessor shall have available to it all of the rights and remedies available to Prime Lessor under the Prime Lease, including without limitation Article 19 thereof as incorporated herein by reference, as though Sublessor were the "Landlord" thereunder and Sublessee the "Tenant" thereunder. Sublessee further agrees to reimburse Sublessor for all costs and expenses incurred by Sublessor in asserting its rights hereunder against Sublessee or any other party. The non-prevailing party shall also pay the attorneys' fees and costs incurred by the prevailing party in any post-judgment proceedings to collect and enforce the judgment. The covenant in the preceding sentence is separate and several and shall survive the merger of this provision into any judgment on this Sublease.

14. Brokerage. Sublessee and Sublessor represent that they have not dealt with any broker in connection with this Sublease other than CRESA Partners (the "Broker"). Each party agrees to indemnify and hold harmless the other from and against any and all liabilities, claims, suits, demands, judgments, costs, interests and expenses (including, without being limited to, reasonable attorneys' fees and expenses) which the indemnified party may be subject to or suffer by reason of any claim made by any person, firm or corporation other than the Broker for any commission, expense or other compensation as a result of the execution and delivery of this Sublease, which is based on alleged conversations or negotiations by said person, firm or corporation with the indemnifying party. Sublessee shall pay the Broker the brokerage fees/commissions due under a separate agreement between and among Sublessee and Broker. Each party shall indemnify and hold the other harmless from and against any and all liabilities, claims, suits, demands, judgments, costs, interest and expenses (including, without being limited, reasonable attorneys' fees and expenses) which said other party may be subject to or suffer by reason of any claim made by any other Broker for any brokerage fees/commissions, expense of other compensation as a result of the execution and delivery of this Sublease in breach of the indemnified parties representation.

15. Security Deposit. On January 1, 2005, the cash security deposit then currently held by Sublessor for the Subleased Premises shall be released to Sublessee and exchanged for a letter of credit in accordance with the following: Sublessee at its sole cost and expense shall deliver to Sublessor, in a form and from a financial institution acceptable to Sublessor, an irrevocable, unconditional standby letter of credit in the amount of $130,527.00 (the "Letter of Credit"), as security for the full and faithful performance and observance by Sublessee of Sublessee's covenants and obligations under this Sublease (the "Security Deposit"). Sublessee shall be solely responsible for all costs and expenses of obtaining, amending, renewing or replacing such Letter of Credit. The Letter of Credit shall have an expiration date not earlier than thirty (30) days following the expiration of the Term of this Sublease. If Sublessee defaults in the full and prompt payment and performance of any of Sublessee's covenants and

obligations under this Sublease, including, but not limited to, the payment of Rent specified in Paragraph 4 hereof, Sublessor may, after the giving of any required notices and the lapse of any cure period, but without giving any other notice to Sublessee, draw upon the Letter of Credit to the extent required for the payment of any Rent or any other sums as to which Sublessee is in default or for any sum which Sublessor may expend or may be required to expend by reason of Sublessee's default in respect of any of the terms, covenants and conditions of this Sublease, including, but not limited to, any damages or deficiency in the reletting of all or any portion of the Subleased Premises, whether such damages or deficiency accrue before or after summary proceedings or other re-entry by Sublessor. If Sublessor draws upon the Letter of Credit to cure any default, Sublessee shall cause the Letter of Credit to be restored to its original amount (or shall make a cash security deposit with Sublessor in said amount) within fifteen (15) days of such drawing and failure to do so shall be deemed a default hereunder. Sublessee understands that its potential liability under this Sublease is not limited to the amount of the Security Deposit. Use of said Security Deposit by Sublessor shall not constitute a waiver, but is in addition to other remedies to Sublessor under this Sublease and under law (except to the extent of the amount so applied). In the event of any sale of Sublessor's interest in the Premises, Sublessor shall either return the Security Deposit to Sublessee or assign its interest in the Security Deposit to the transferee or assignee and Sublessor shall thereupon be released by Sublessee from all liability for the return or payment thereof; and Sublessee shall look solely to the new sublessor for the return or payment of the same delivered to the new sublessor; and the provisions hereof shall apply to every transfer or assignment made of the same to a new sublessor. Sublessee shall not assign or encumber or attempt to assign of encumber the Security Deposit and neither Sublessor nor its successors or assigns shall be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. Sublessee waives the provisions of California Civil Code Section 1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Sublease that provide that Sublessor may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Sublessee, or to clean the Subleased Premises.

16. Notices. All notices, consents, approvals, demands, bills, statements and requests which are required or desired to be given by either party to the other hereunder shall be in writing and shall be governed by Article 25 of the Prime Lease as incorporated herein by reference, except that the mailing addresses for Sublessor and Sublessee shall initially be those first set forth above, except that after the Commencement Date the address for Sublessee shall be the Subleased Premises or such other address as Sublessee shall designate by written notice to Sublessor. Communications and payments to the Prime Lessor shall be given in accordance with, and subject to, Article 25 of the Prime Lease. Communications to the Master Lessor shall be given in accordance with, and subject to, Article 25 of the Master Lease.

17. Interpretation. This Sublease shall be construed without regard to any presumption or other rule requiring construction against the party causing this Sublease to be drafted. Each covenant, agreement, obligation or other provision of this Sublease shall be deemed and construed as a separate and independent covenant of the party

bound by, undertaking or making the same, which covenant, agreement, obligation or other provision shall be construed and interpreted in the context of the Sublease as a whole. All terms and words used in this Sublease, regardless of the number or gender in which they are used, shall be deemed to include any other number and any other gender as the context may require. The word "person" as used in this Sublease shall mean a natural person or persons, a partnership, a corporation or any other form of business or legal association or entity. Terms used herein and not defined shall have the meaning set forth in the Prime Lease.

18. Fire or Casualty; Eminent Domain. In addition to the provisions of Article 16 of the Prime Lease as and to the extent incorporated herein by reference, Sublessor also agrees if the MJ Research Sublease is terminated by Prime Lessor, Master Lessor or Sublessee because of a fire or other casualty, then Sublessee may terminate this Sublease. Sublessee may exercise the termination right described in the previous sentence by giving written notice to Sublessor within thirty (30) days of Sublessee's receipt or giving of the termination notice under the MJ Research Sublease and the effective date of the termination of this Sublease will be the same date as the termination date of the MJ Research Sublease. Upon execution of this Sublease by Sublessee and Sublessor and the delivery of the Consent described in Paragraph 28 hereof, Sublessor shall deliver to Sublessee in electronic format and hard copy the plans in Sublessor's possession as of the date hereof for the tenant improvements and will assign any rights Sublessor has in such plans for purposes of using such plans to rebuild any tenant improvements existing in the Subleased Premises as of the date hereof. In the event of a fire or casualty to the Subleased Premises where Prime Lessor has decided to restore the Building including the Subleased Premises, Sublessor shall turn over to Prime Lessor the proceeds of insurance required to be carried by Sublessor under Section 13.1(b) of the Prime Lease for the rebuilding of the tenant improvements by Prime Lessor, unless this Master Lessor terminates the Master Lease, Prime Lessor terminates the Prime Lease, or Sublessor or Sublessee terminates this Sublease.

19. Right to Cure Sublessee's Defaults. If Sublessee shall at any time fail to make any payment or perform any other obligation of Sublessee hereunder within fifteen (15) days (except in the case of an emergency) of receiving Sublessor's notice of such failure to make payment or to perform, then Sublessor shall have the right, but not the obligation, after notice to Sublessee in accordance with Paragraph 16 of this Sublease, or without notice to Sublessee in the case of any emergency, and without waiving or releasing Sublessee from any obligations of Sublessee hereunder, to make such payment or perform such other obligation of Sublessee in such manner and to such extent as Sublessor shall deem necessary, and in exercising any such right, to pay any incidental costs and expenses, employ attorneys, and incur and pay reasonable attorneys' fees. Sublessee shall pay to Sublessor upon demand all sums so paid by Sublessor and all incidental costs and expenses of Sublessor in connection therewith, together with interest thereon at an annual rate equal to the rate four percent (4%) above the base rate or prime rate then announced as such by Citibank, N.A. or its successor, or the maximum rate permitted by law. Such interest shall be payable with respect to the period commencing on the date such expenditures are made by Sublessor and ending on the date such amounts are repaid by Sublessee. If Sublessor shall at any time fail to

perform any obligations on its part to be performed under Paragraph 4 of this Sublease which interfere (or are reasonably likely to imminently interfere with the use of the Subleased Premises by Sublessee) and Sublessor shall fail to commence to cure such default within fifteen (15) days (or such longer period of time as is reasonably necessary in the exercise of reasonable diligence to cure such failure to perform) following written demand for such performance by Sublessee and thereafter to diligently complete such cure, then, in addition to its other rights and remedies, Sublessee shall have the right, but not the obligation, without waiving or releasing Sublessor from any obligations of Sublessor hereunder, to perform such obligation of Sublessor. Notwithstanding anything to the contrary in this Sublease, the cost reasonably incurred by Sublessee in completing such cure shall be paid by Sublessor to Sublessee within five (5) days of receiving Sublessee's bill for the same. The foregoing, however, shall not apply to any of the services to be provided by Prime Lessor directly to Sublessor as set forth in Paragraph 11 and, in such case, the obligations of Sublessor subject to this Section shall be limited to the obligations of Sublessor under Paragraph 11. The provisions of this Paragraph shall survive the Expiration Date or the sooner termination of this Sublease.

20. Termination of Prime Lease. Subject to the rights, if any, of Sublessee to recognition of Sublessee's rights hereunder by Master Lessor or Prime Lessor, if for any reason the term of the Prime Lease shall terminate prior to the Expiration Date, this Sublease shall thereupon automatically terminate as to the premises demised under the Prime Lease and Sublessor shall not be liable to Sublessee by reason thereof except in the event of a breach by Sublessor of its obligations under Paragraph 12 hereof; provided, however, that Sublessor agrees that so long as Sublessee is not in default hereunder beyond any applicable cure periods, Sublessor shall not voluntarily surrender the Prime Lease except in accordance with the Prime Lease in the event of a taking or casualty. Notwithstanding the foregoing, if the Prime Lease gives Sublessor any right to terminate the Prime Lease in the event of the partial or total damage, destruction, or condemnation of the Subleased Premises or the Building, the exercise of such right by Sublessor shall not constitute a default or breach hereunder.

Upon the expiration or termination of this Sublease, whether by forfeiture, lapse of time or otherwise, or upon the termination of Sublessee's right of possession, Sublessee shall at once surrender and deliver the Subleased Premises and the Furniture in the condition and repair required by, and in accordance with the provisions of, this Sublease and the Prime Lease, including without limitation Article 20 of the Prime Lease as incorporated herein by reference, including the Furniture, which shall be in the same condition as at the date possession of the Subleased Premises was delivered to Sublessee, reasonable wear and tear, alterations made by Sublessee in compliance herewith that Sublessee is permitted to surrender, acts of God, casualties, condemnations, hazardous materials not introduced to the Premises by Sublessee, its agents, employees or invitees and the acts of Sublessor, Prime Lessor, Master Lessor or other occupants if the building (other than Sublessee, its agents, employees or invitees) and their respective agents, employees and contractors excepted.

21. Consents and Approvals. All references in this Sublease to the consent or approval of Prime Lessor, Master Lessor and/or Sublessor shall be deemed to mean

the written consent or approval of Prime Lessor, Master Lessor and/or Sublessor, as the case may be, and no consent or approval of Prime Lessor, Master Lessor and/or Sublessor, as the case may be, shall be effective for any purpose unless such consent or approval is set forth in a written instrument executed by Prime Lessor, Master Lessor and/or Sublessor, as the case may be. In all provisions requiring the approval or consent of Sublessor (whether pursuant to the express terms of this Sublease or the terms of the Prime Lease incorporated herein), Sublessee shall be required to obtain the approval or consent of Sublessor and then to obtain like approval or consent of Prime Lessor to the extent Prime Lessor's consent is required under the Prime Lease and Master Lessor to the extent Master Lessor's consent is required under the Master Lease. Sublessor agrees its consent shall not be unreasonably withheld or delayed, except as otherwise provided herein. If Sublessor is required or has determined to give its consent or approval to a matter as to which consent or approval has been requested by Sublessee, Sublessor shall cooperate reasonably with Sublessee in endeavoring to obtain any required Prime Lessor's or Master Lessor's consent or approval upon and subject to the following terms and conditions: (i) Sublessee shall reimburse Sublessor for any reasonable out-of-pocket costs incurred by Sublessor in connection with seeking such consent or approval, (ii) Sublessor shall not be required to make any payments to Prime Lessor or Master Lessor or to enter into any agreements or to modify the Prime Lease, or this Sublease in any manner which will prejudice Sublessor in order to obtain any such consent or approval, (iii) if Sublessee agrees or is otherwise obligated to make any payments to Sublessor, Master Lessor or Prime Lessor in connection with such request for such consent or approval, Sublessee shall have made arrangements satisfactory to Sublessor for such payments and (iv) Sublessee shall indemnify and hold Sublessor harmless from and against all liabilities, losses, damages or expenses, including, without being limited to, reasonable attorneys' fees and expenses Sublessor shall suffer or incur in connection with seeking such consent or approval. Nothing contained in this Article shall be " deemed to require Sublessor to give any consent or approval merely because Prime Lessor or Master Lessor has given such consent or approval. Sublessor shall promptly forward to Prime Lessor and Master Lessor, as the case may be, such requests as Sublessee may submit for approval or consent from Prime Lessor and Master Lessor.

22. No Privity of Estate. Nothing contained in this Sublease shall be construed to create privity of estate or of contract between Sublessee and Prime Lessor and Master Lessor, and Prime Lessor and Master Lessor are not obligated to recognize or to provide for the non-disturbance of the rights of Sublessee hereunder except as expressly set forth in separate agreements, if any, between said party or parties and Sublessee.

23. No Waiver. The failure of Sublessor or Sublessee to insist in any one or more cases upon the strict performance or observance of any obligation of the other hereunder or to exercise any right or option contained herein shall not be construed as a waiver or relinquishment for the future of any such obligation, right or option. Sublessor's receipt and acceptance of Rent or Sublessor's or Sublessee's acceptance of performance of any other obligation by the other party, with knowledge of a breach of any provision of this Sublease, shall not be deemed a waiver of such breach. No waiver by Sublessor or Sublessee of any term, covenant or condition of this Sublease shall be

deemed to have been made unless expressed in writing and signed by the party to be charged. .

24. Complete Agreement. This Sublease constitutes the entire agreement between the parties and there are no representations, agreements, arrangements or understandings, oral or written, between the parties relating to the subject matter of this Sublease which are not fully expressed in this Sublease. This Sublease cannot be changed or terminated orally or in any manner other than by a written agreement executed by both parties. This Sublease shall not be binding upon either party unless and until it is signed and delivered by and to both parties.

25. Successors and Assigns. The provisions of this Sublease, except as herein otherwise specifically provided, shall extend to bind and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and permitted assigns.

26. Waiver of Jury Trial and Right to Counterclaim. To the extent permitted by law, the parties hereto hereby waive any rights which they may have to trial by jury in any summary action or other action, proceeding or counterclaim arising out of or in any way connected with this Sublease, the relationship of Sublessor and Sublessee, the Subleased Premises and the use and occupancy thereof, and any claim for injury or damages. Sublessee also hereby waives all right to assert or interpose a counterclaim (other than mandatory counterclaims) in any summary proceeding or other action or proceeding to recover or obtain possession of the Subleased Premises.

27. Estoppel Certificates. Sublessee and Sublessor shall each, within fifteen (15) days after each and every request by the other party, execute, acknowledge and deliver to the other party or any party reasonably designated by the other party, without cost or expense to the other party, a statement in writing (a) certifying that this Sublease is unmodified and, to its knowledge, is in full force and effect (or if there have been modifications, that the same is in full force and effect as modified, and stating such modifications); (b) specifying the dates to which Rent has been paid; (c) stating whether or not, to its knowledge, the other party is in default in the performance or observance of such other party's obligations under this Sublease and, if so, specifying each such default; (d) stating whether or not, to its knowledge, any event has occurred which, with the giving of notice or passage of time, or both, would constitute a default by the other party under this Sublease, and, if so, specifying each such default; (e) stating whether or not, to its knowledge, any event has occurred which, with the giving of notice or passage of time, or both, would constitute a default by the other party under this Sublease, and, if so, specifying each such event; (f) stating whether or not, to its knowledge, any event has occurred which, with the giving of notice or passage of time, or both, would constitute a default by Prime Lessor under the Prime Lease with respect to the Subleased Premises, and, if so, specifying such event; (g) describing all notices of default submitted by it to the other party and Prime Lessor with respect to this Sublease, or the Prime Lease from and after the date hereof; and (h) containing such other information with respect to the Subleased Premises or this Sublease as the other party shall reasonably request. Each party hereby acknowledges and agrees that any such statement delivered pursuant to this Paragraph may be relied upon by any prospective

assignee, transferee or mortgagee of the leasehold or subleasehold estate of the other party or any prospective lender or investor to the requesting party.

28. Consent of Prime Lessor. This Sublease is subject to the concurrent approval and consent of Prime Lessor, which Sublessor agrees to use all reasonable efforts to obtain. This Sublease shall not become effective unless and until a written approval and consent (the "Consent") is executed and delivered by the Prime Lessor, which Consent shall consent to this Sublease. After the Sublessor receives the Consent from the Prime Lessor, Sublessor agrees to promptly deliver a fully-executed original of the Consent to Sublessee. The effect and commencement of this Sublease is subject to and conditional upon the receipt by Sublessor and Sublessee of the Consent. To the extent that Sublessor has not already done so, upon execution of this Sublease by Sublessee, Sublessor will promptly apply to the Prime Lessor for the Consent and Sublessor will promptly inform Sublessee as to receipt of the Consent (if and when it is received) and deliver to Sublessee a copy of the same. If the Consent is not received by May 1, 2004 (the "Sunset Date"), then from the Sunset Date this Sublease will cease to have any further effect and the parties hereto will have no further obligations to each other with respect to this Sublease and any funds paid hereunder by Sublessee shall be promptly refunded by Sublessor.

29. Holding Over. If Sublessee shall fail to surrender and deliver the Subleased Premises as and when required hereunder, the Sublessee shall become a tenant at sufferance only, subject to all of the terms, covenants and conditions herein specified. Sublessee agrees to protect, defend (with counsel reasonably approved by Sublessor), indemnify and hold Sublessor and its officers, agents and employees harmless from and against any and all claims, costs, losses, damages, liabilities and expenses (including, without being limited to, reasonable attorneys' fees) that Sublessor may suffer by reason of any holdover by Sublessee hereunder.

30. Limitation of Liability. No director, officer, shareholder, employee, adviser or agent of Sublessor shall be personally liable in any manner for the obligations of the Sublessor under this Sublease. Except as set forth in Paragraph 29 hereof, in no event shall Sublessor or Sublessee or any of their directors, officers, shareholders, employees, advisers or agents be responsible for any indirect, special or consequential damages or interruption or loss of business, income or profits, nor shall Sublessor be liable for loss of or damage to artwork, securities or other property not in the nature of ordinary fixtures, furnishings and equipment used in general administrative and executive office activities. No director, officer, shareholder, employee, adviser or agent of Sublessee shall be personally liable in any manner for the obligations of the Sublessee under this Sublease.

31. Conflict. In the event of any conflict between the obligations of Sublessee set forth in this Sublease and the obligations of Sublessee under the Prime Lease as and to the extent incorporated herein by reference, the more restrictive provision shall control.

32. Security. Sublessee expressly assumes all responsibility for security, in the Subleased Premises, and, except to the extent arising out of the negligence, willful

misconduct, violation or law or breach of this Sublease or the Master Lease or Prime Lease by Sublessor or its agents, employees or contractors, Sublessor shall not be liable for any damage to goods, wares, merchandise or other property located in the Subleased Premises, or injury or death to Sublessee's employees, invitees, customers or any other person in or about the Subleased Premises. The foregoing waiver includes criminal acts of third parties.

33. Recording. Sublessor and Sublessee agree that neither party may record this Sublease.

34. Attorney's Fees. If either Sublessor or Sublessee shall bring any action or legal proceeding for an alleged breach of any provision of this Sublease, to recover rent, to terminate this Sublease or otherwise to enforce, protect or establish any term or covenant of this Sublease, the prevailing party shall be entitled to recover as a part of such action or proceeding, or in a separate action brought for that purpose, reasonable attorneys' fees, court costs, and expert fees as may be fixed by the court. "Prevailing party" as used in this Paragraph includes a party who dismisses an action for recovery hereunder in exchange for sums allegedly due, performance of covenants allegedly breached or considerations substantially equal to the relief sought in the action.

35. Existing Sublease. The existing Sub-Sublease Agreement dated as of May 31, 2001 by and between Sublessor and Sublessee (the "Existing Sub-Sublease Agreement") is hereby terminated. Sublessee agrees to deliver to Sublessor on or before the Commencement Date, the second and third floor space that was the subject of said Existing Sub-Sublease Agreement (i) in broom clean condition, (ii) with all of Sublessee's machinery, furniture, fixtures, and equipment, and hazardous materials removed from such space, and (iii) such space cleaned by Pass Janitorial Service. When so surrendered, the surrender obligations of Sublessee for such space as set forth in the existing sublease shall be deemed to have been performed in all required respects.

IN WITNESS WHEREOF, Sublessor and Sublessee have executed this Sublease as a sealed instrument as of the date first written above.

Genome Therapeutics Corporation

By: /s/ Stephen Rauscher
Name: Stephen Rauscher
Title: Sr VP+CEO

Fluidigm Corporation

By: /s/ Gajus Worthington
Name: Gajus Worthington
Title: CEO

EXHIBIT A-1

[See below for Agreement of Lease dated as of November 9, 1999, by and between Mountain Cove Tech Center, L.L.C. and Fluidigm Corporation]

EXHIBIT A-2

[See below for Agreement of Lease dated as of October 6, 2000 by and between Prime Lessor, as "landlord" and Sublessor, as "tenant" as amended by a First Amendment to Lease dated December 5, 2002 and a Second Amendment to Lease dated March 25, 2004]

EXHIBIT B

[Diagram depicting 14,503 rentable square feet of office and lab space located on the first floor of the Building]

EXHIBIT C

None.

FIRST AMENDMENT TO SUBLEASE

This First Amendment to Sublease is made as of the December 7, 2007 by and between Oscient Pharmaceuticals Corporation (formerly known as Genome Therapeutics Corporation), a Massachusetts corporation with a place of business at 1000 Winter Street, Suite 2200, Waltham, Massachusetts 02451 ("Sublessor"), and Fluidigm Corporation, a Delaware corporation, with a place of business at 7000 Shoreline Court, South San Francisco, California 94080 ("Sublessee").

WITNESSETH THAT:

WHEREAS, pursuant to that certain Agreement of Lease dated as of October 6, 2000 by and between ARE-San Francisco No. 17, LLC ("Prime Lessor") (as successor in interest to Mountain Cove Tech Center, L.L.C. by acquisition of the fee interest in the property, and MJ Research Company, Inc., by an Assignment and assumption of Subleases dated as of October 6, 2000 to Mountain Cove Tech Center, L.L.C.), as "landlord" and Sublessor, as "tenant" (as successor in interest to Genesoft, Inc.), as amended by a First Amendment to Lease dated December 5, 2002 and a Second Amendment to Lease dated March 25, 2004 (such lease, as so amended, and all renewals, modifications and extensions thereof being hereinafter collectively referred to as the "Prime Lease"), a true and complete copy of which is attached hereto as **Exhibit A,** Prime Lessor leases to Sublessor approximately 68,460 rentable square feet of space located on the first, second and third floors of the Building (all as more particularly described in the Prime Lease, the "Premises"); and

WHEREAS, pursuant to that certain Sublease Agreement dated as of March 25, 2004, by and between Sublessor, as "sublessor" and Sublessee, as "sublessee" (the "Sublease"), a true and complete copy of which is attached hereto as **Exhibit B,** Sublessor subleases to Sublessee approximately 14,503 rentable square feet of office and lab space located on the first floor of the Building (all as more particularly described in the Sublease, the "Subleased Premises"); and

WHEREAS, the term of the Sublease ends on December 31, 2007; and

WHEREAS, Sublessor and Sublessee desire to amend the Sublease to, among other things, extend said term all subject to the provisions hereof;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties covenant and agree as follows:

1. Term. Notwithstanding anything to the contrary in the Sublease, the term of the Sublease is hereby extended for a period commencing on January 1, 2008 (the "Extension Effective Date") and expiring on February 28, 2011 (the "Expiration Date") or such earlier date upon which said term may expire, be cancelled or be terminated pursuant to any of the terms of provisions of the Prime Lease, the Sublease, this First Amendment to Sublease or applicable law (the "Additional Term"). Said extension shall be subject to all terms, covenants and conditions contained in the Sublease except as otherwise set forth herein. References herein and in the

Sublease to the Term shall be deemed to mean and include the Initial Term and Additional Term (and the Expiration Date shall be deemed extended accordingly). Sublessee acknowledges and agrees that it has no further right to extend the term of the Sublease and that any such right set forth in Section 2 of the Sublease is null and void.

2. Termination For Convenience. Sublessee is granted a one-time right to terminate ("Termination Right") the Sublease on July 1, 2009, Sublessee shall provide Sublessor written notification of its intent to terminate no later than October 1, 2008. If Sublessee exercises this Termination Right, Sublessee shall pay Sublessor an amount equal to $332,500.00 on or before July 1, 2009.

3. Rent. Notwithstanding anything to the contrary contained in Section 4 of the Sublease, commencing on January 1, 2008, the Rent due under the Sublease shall be equal to the following amounts during the periods set forth below:

Term Period	Monthly Rent	P.R.S.F. Per Year
1/1/08 — 12/31/08	$57,172.24	$47.305
1/1/09 — 12/31/09	$58,477.51	$48.385
1/1/10 — 12/31/10	$59,637.75	$49.345
1/1/11 — 2/28/11	$60,943.02	$50.425

The Rent specified above is inclusive of all services previously provided by Sublessor pursuant to Section 4 of the Sublease as well as all other provisions contained in Sections 4 and 11 of the Sublease. Section 4 (ii) is hereby deleted. The parties agree that the Sublessee shall be responsible for the janitorial and cleaning services. The fifth sentence from the bottom of Section 4 is hereby deleted.

4. Assignment and Subletting. The references in the first two sentences of Section 9 of the Sublease to "Competitors" and to net worth shall be deleted.

5. Financial Statements. Section 27.13 of the Prime Lease, as incorporated into the Sublease, shall be revised such that (a) Section 27.13 shall not apply if Sublessee is a publicly traded company, (b) if Sublessee is not a publicly traded company, Sublessee shall only be required to provide Sublessor with audited financial statements once they have been completed, provided Sublessee uses commercially reasonable efforts to complete such statements with a reasonable time frame and (c) Sublessor shall hold all of Sublessee's financial statements confidential.

6. Proper Authority. Each party represents to the other that (i) it has not assigned, encumbered or hypothecated any of its right, title or interest in the Sublease or any portion thereof or interest therein, (ii) it is duly authorized to enter into and perform its obligations under

this First Amendment to Sublease and to modify its rights under the Sublease as set forth in this First Amendment to Sublease, and (iii) the parties executing this First Amendment to Sublease on behalf of each party are duly authorized to bind the party they purport to represent.

7. Brokerage. Sublessee and Sublessor represent that they have not dealt with any broker in connection with this First Amendment to Sublease other than CRESA Partners on behalf of Sublessee. The Sublessor shall not be responsible for a commission or other fee, if any, is due to CRESA Partners. Each party agrees to indemnify and hold harmless the other from and against any and all liability, claims, suits, demands, judgments, costs, interest and expense (including, without being limited to, reasonable attorneys' fees and expenses) which the indemnified party may be subject to or suffer by reason of any claim made by any person, firm or corporation for any commission, expense or other compensation as a result of the execution and delivery of this First Amendment to Sublease, which is based on alleged conversations or negotiations by said person, firm or corporation with the indemnifying party.

8. Condition. This First Amendment to Sublease is subject to (a) approval and consent of Prime Lessor in accordance with this Section 6 and (b) the full execution of the Third Amendment to Lease currently being negotiated between Sublessee and Prime Lessor to extend the term of the MJ Research Sublease (the "MJ Research Amendment"). This First Amendment to Sublease shall not become effective unless and until a written approval and consent to this First Amendment to Sublease is executed and delivered by Prime Lessor to Sublessor and the MJ Research Amendment is fully executed. If the above conditions are not satisfied within ten (10) business days of Sublessee's execution of this First Amendment to Sublease, either party may terminate this First Amendment to Sublease by delivering written notice to the other.

9. Security Deposit. Sublessee shall maintain in effect throughout the Additional Term a Letter of Credit as required under Section 15 of the Sublease. Within ten (10) days of the Extension Effective Date, Sublessee at its sole cost and expense shall deliver to Sublessor, an extension of the existing Letter of Credit or a replacement of the existing Letter of Credit in a form and from a financial institution reasonably acceptable to Sublessor. Sublessee may at any time substitute a cash security deposit for the Letter of Credit, and upon such substitution, Sublessor shall return the Letter of Credit to Sublessee.

10. Miscellaneous. Unless the context requires otherwise, the terms used herein shall be construed in conformity with the definitions set forth in the Sublease. References in the Sublease to the MJ Research Sublease shall mean the MJ Research Sublease as amended, including by the MJ Research Amendment. As hereby modified, the Sublease is ratified and confirmed and remains in full force and effect.

IN WITNESS WHEREOF, Sublessor and Sublessee have caused this instrument to be executed under seal as of the day and year first above written.

OSCIENT PHARMACEUTICALS CORPORATION
a Massachusetts corporation

By /s/ Ph. M. MAITRE
Name: Ph. M. MAITRE
Title: SVP & CFO.

FLUIDIGM CORPORATION,
a Delaware corporation

By _____
Name:
Title:

IN WITNESS WHEREOF, Sublessor and Sublessee have caused this instrument to be executed under seal as of the day and year first above written.

OSCIENT PHARMACEUTICALS CORPORATION
a Massachusetts corporation

By _____
Name:
Title:

FLUIDIGM CORPORATION,
a Delaware corporation

By /s/ Gajus Worthington
Name: Gajus Worthington
Title: CEO

EXHIBIT A

[See below for Agreement of Lease dated as of October 6, 2000 by and between Prime Lessor, as "landlord" and Sublessor, as "tenant" as amended by a First Amendment to Lease dated December 5, 2002 and a Second Amendment to Lease dated March 25, 2004]

EXHIBIT B

[See above for Sublease Agreement dated as of March 25, 2004.]

AGREEMENT OF LEASE

AGREEMENT OF LEASE made as of the 1st day of December, 2001, by and between MJ Research Company, Inc. (hereinafter referred to as “Landlord”) and Fluidigm Corporation (hereinafter referred to as “Tenant”).

WITNESSETH:

Landlord hereby leases to Tenant and Tenant hereby hires from Landlord a portion of the building (the “Building”) in South San Francisco, as described in Section 1.1(4) below and shown on the plan attached hereto as Exhibit A and made a part hereof (hereinafter referred to as the “Premises” or the “Demised Premises”).

1. REFERENCE DATA

1.1 Definitions. Each reference in this Lease to any of the terms and titles contained in this Article shall be deemed and construed to incorporate the data stated following that term or title in this Article.

1)	Additional Rent:	Sums or other charges payable by Tenant to Landlord under this Lease, other than Monthly Fixed Rent, all of which shall be payable as additional rent under this Lease.
2)	Broker:	None.
3)	Business Day:	All days except Saturdays, Sundays, days defined as “legal holidays” for the entire state under the laws of the State of California, and such other days as Tenant presently or in the future recognizes as holidays for Tenant’s general staff.
4)	Demised Premises:	Space on the first floor of the Building at 7000 Shoreline Court, South San Francisco, California 94080 (the “Building”), which space is shown on the plans attached as Exhibit A.
5)	Environmental Laws:	As defined in Section 5.3 (a) (1).
6)	Event of Default:	The occurrence of an event listed in Section 19.1.
7)	Hazardous Materials:	As defined in Section 5.3 (a) (2).

8)	Interest Rate:	18% per annum, or the maximum interest rate Landlord is permitted to charge Tenant under applicable law, whichever is less.
9)	Land:	The parcel of land on which the Building is situated.
10)	Landlord's Address:	7000 Shoreline Court, So. San Francisco, CA 94080, Attn: Edward Breakell
11)	Landlord's Architect:	Any licensed architect from time to time designated by Landlord.
12)	Lease Year:	A twelve (12) month period beginning on the Term Commencement Date and each succeeding twelve (12) month period during the Term of this Lease, except that if the Term Commencement Date shall be other than the first day of a calendar month, the first Lease Year shall include the partial calendar month in which the Term Commencement Date occurs as well as the succeeding twelve (12) full calendar months.
13)	Mortgage:	A mortgage, deed of trust, trust indenture, or other security instrument of record creating an interest in or affecting title to the Land or Building or any part thereof, and any and all renewals, modifications, consolidations or extensions of any such instrument.
14)	Mortgagee:	The holder of any Mortgage.
15)	Permitted Use:	Office and light engineering, subject to the provisions contained herein involving the use of hazardous materials.
16)	Prime Landlord:	Mountain Cove Tech Center LLC, a California limited liability company.
17)	Prime Lease:	The lease dated November 9, 1999 between Prime Landlord and Landlord.
18)	Property:	The Land and Building.

19)	Rent:	Monthly Fixed Rent and Additional Rent.
20)	Rentable Area of the Demised Premises:	Agreed to be 12,501 rentable square feet plus the loading space shown on Exhibit A.
21)	Security Deposit:	$90,000.00
22)	Tenant's Address:	7100 Shoreline Court, South San Francisco, California 94080
23)	Term Commencement Date:	December 8, 2001
24)	Term of this Lease:	Approximately 37 months
25)	Termination Date:	January *7*, 2005
26)	Monthly Fixed Rent:	$48,700.00 per month ($584,400.00 per year) for the first lease year, which amount shall be increased annually by four (4.0%) compounded annually.

1.2 Exhibits. The following exhibits are attached hereto and made a part hereof:

A — Plan of Demised Premises
B — Cleaning Specifications
C — Rules and Regulations
D — List of Environmental Reports Given to Tenant
E — Form of Prime Landlord Consent

2. DESCRIPTION OF DEMISED PREMISES

2.1 Demised Premises. The Demised Premises are that portion of the Building as described above (as the same may from time to time be constituted after changes therein, additions thereto and eliminations therefrom pursuant to rights of Landlord hereinafter reserved).

2.2 Appurtenant Rights. Tenant shall have, as appurtenant to the Demised Premises, rights to use in common, subject to reasonable rules from time to time made by Landlord of which Tenant is given notice, those common roadways, walkways, elevators, hallways and stairways necessary for access to that portion of the Building occupied by the Demised Premises. There is also appurtenant to the Demised Premises at no additional charge the nonexclusive use, in common with Landlord and other entitled thereto, of the parking lot appurtenant to the Building, which lot is designed to have three (3) parking spaces per 1,000 rentable-square feet

in the Building. Landlord agrees that such parking lot shall be on a non-exclusive basis for Tenant and others' entitled thereto. Tenant may not store cars in the parking lot, i.e., leave cars parked for more than seven (7) days.

2.3 Reservations. All the perimeter walls of the Demised Premises except the inner surfaces thereof, any balconies, terraces or roofs adjacent to the Demised Premises, and any space in or adjacent to the Demised Premises used for serving other portions of the Building exclusively or in common with the Demised Premises, including without limitation (where applicable) shafts, stacks, pipes, conduits, wires and appurtenant fixtures, fan rooms, ducts, electric or other utilities, sinks or other Building facilities, and the use thereof, as well as the right of access through the Demised Premises for the purpose of operation, maintenance, decoration and repair, are expressly reserved to Landlord.

2.4 Certain Amenities. The named Tenant, Fludigm Corporation shall have access to on a nonexclusive basis, the following facilities:

(a) The exercise room. Landlord may charge a reasonable fee for towel service (if provided) and janitorial service.

(b) The lunchroom and adjacent patio.

In the event the named Tenant Fluidigm Corporation occupies less than all of the Premises, Landlord may eliminate said amenities or assign them exclusively to Landlord or other occupants of the Building. Such amenities shall not be available to assignees or subtenants of Tenant unless permitted in writing by Landlord.

2.5 Conference Room. Tenant may have the use of the executive conference room for up to an additional four (4) days per month at the rate of $700.00 for a full day or $400.00 for a half day. Use of the executive conference room must be booked through the Landlord.

3. TERM OF LEASE

3.1 Term. The Term of this Lease is approximately 37 months and (or until such Term shall sooner cease or expire) commencing on the Term Commencement Date and ending on January 7, 2005 (the "Termination Date").

4. PREPARATION OF PREMISES; TENANTS ACCESS

"As Is." The Premises are leased "as is."

5. USE OF PREMISES

5.1 Permitted Use. Tenant shall occupy and use the Demised Premises for the Permitted Use set forth in Article 1 and for no other purpose. Service and utility areas (whether or not a part of the Demised Premises) shall be used only for the particular purpose for which they are designated. Tenant shall have access to the Demised Premises 24 hours per day, 7 days per week.

5.2 Prohibited Uses. Tenant shall not use, or suffer or permit the use of, or suffer or permit anything to be done in or anything to be brought into or kept in, the Demised Premises or any part thereof (i) which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease, (ii) for any unlawful purposes or in any unlawful manner, or (iii) which, in the reasonable judgment of Landlord shall in any way (a) impair or tend to impair the appearance or reputation of the Building, (b) impair or interfere with or tend to impair or interfere with any of the Building services or the proper and economic heating, cleaning, air conditioning or other servicing of the Building or with the use of any of the other areas of the Building, or (c) occasion discomfort, inconvenience or annoyance to any of the other tenants, or occupants of the Building, whether through the transmission of noise or odors or vibrations or dust or otherwise. Without limiting the generality of the foregoing, no food shall be prepared or served for consumption by the general public on or about the Demised Premises; no intoxicating liquors or alcoholic beverages shall be sold or otherwise served for consumption by the general public on or about the Demised Premises; no lottery tickets (even where the sale of such tickets is not illegal) shall be sold and no gambling, betting or wagering shall otherwise be permitted on or about the Demised Premises; no loitering shall be permitted on or about the Demised Premises; and no loading or unloading of supplies or other material to or from the Demised Premises shall be permitted on the Land except at times (excluding Business Days from 7:00 to 9:30 a.m. and from 4:00 to 6:00 p.m.) and in locations to be reasonably designated by Landlord, except for the freight elevator described in Section 7.4, which Tenant may use at any time. The Demised Premises shall be maintained in a sanitary condition. Tenant shall suitably store all trash and rubbish in the Demised Premises or other locations designated by Landlord from time to time. All Hazardous Materials must be disposed of in compliance with Section 5.3. Tenant specifically agrees that its indemnification obligations pursuant to Section 13.2 shall extend to any claim arising from the consumption of intoxicating liquors or alcoholic beverages on or about the Demised Premises.

5.3 Hazardous Materials,

(a) Definitions.

(1) Environmental Law means any governmental statute, code ordinance, regulation, rule or order and any amendment thereto governing or regulating materials that are toxic, explosive, corrosive, flammable, radioactive, carcinogenic, dangerous or otherwise hazardous. Environmental Laws include, without limitation, the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. §9601 *et seq.*, the Resource Conservation and Recovery Act, 42 U.S.C. §6901 *et seq.*, the California Hazardous Substances Act at California Health and Safety Code Section 108100 *et seq.*, the provisions regarding hazardous waste control at California Health and Safety Code Sections 25100 through 25250.25 and the California Medical Waste Management Act at California Health and Safety Code §117600 *et seq*.

(2) Hazardous Materials shall mean any substance: (A) that now or in the future is regulated or governed by, requires investigation or remediation under, or is defined as a hazardous waste, medical waste, hazardous substance, pollutant or contaminant under any Environmental Law or (B) that is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, dangerous or otherwise hazardous, including gasoline, diesel fuel, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), asbestos, radon and urea formaldehyde foam insulation.

(b) Tenant's Covenants. No Hazardous Materials shall be stored, placed, handled, used or released by Tenant or its employees, contractors, sublessees, guests or visitors at or about the Demised Premises or Property without Landlord's prior written consent. Notwithstanding the foregoing, storage and use of routine office and janitorial supplies in usual and customary quantities and the Permitted Materials as defined in subsection (c) below are permitted without Landlord's prior written consent, provided that Tenant's activities at or about the Demised Premises and Property shall comply at all times with all Environmental Laws. Tenant shall keep Landlord fully and promptly informed of all storage, placement, handling, use or release by Tenant or its employees, contractors , sublessees, guests or visitors of all Hazardous Materials. At the expiration or termination of the Lease, Tenant shall remove from the Demised Premises all Hazardous Materials brought or released in or on the Building as a result of the activities of Tenant or its employees, agents, servants, invitees, visitors, customers, contractors, sublessees, and those other persons for whom Tenant is legally responsible (collectively "Tenant Parties"). Landlord shall have the right to perform an environmental assessment of the Demised Premises after such removal, which assessment shall be conducted at Landlord's expense, unless it reveals that Tenant has not complied with the requirements set

forth in this Section 5.3, in which case Tenant shall reimburse Landlord for the reasonable cost thereof within ten days after Landlord's request therefor. Nothing in this Section 5.3 shall require Tenant to indemnify Landlord for any matters arising out of or caused by the actions or omissions of Landlord, its employees, agents, contractors, licensees, or invitees.. Tenant shall be responsible and liable for the compliance with all of the provisions of this Section by all of Tenant Parties and all of Tenant's obligations under this Section (including its indemnification obligations under subsection (e) below) shall survive the expiration or termination of this Lease.

(c) Tenant may request permission to use the loading dock to accept deliveries of Hazardous Materials for use in Tenant's subleased space in the Building. Landlord shall grant such permission in its sole and absolute discretion. Tenant will operate under all applicable Federal, State and Local laws governing the use, storage and management of hazardous materials for building Occupancy Groups A3, B and H Divisions 2, 3 and 7, as allowable, including Title 22 of the CFR as defined under the Uniform Building Code and Uniform Fire Code developed by the International Fire Code Institute (the "Allowable Class Facilities").

(d) Compliance. Tenant shall at Tenant's expense promptly take all actions required by any governmental agency or entity in connection with or as a result of the storage, placement, handling, use or release by Tenant Parties of Hazardous Materials at or about the Demised Premises or Property, including inspection and testing, performing all cleanup, removal and remediation work required with respect to those Hazardous Materials, complying with all closure Laws and postclosure monitoring, and filing all required reports or plans. Tenant shall never use any of the Landlord's trash receptacles for disposing of any hazardous waste. All of the foregoing work shall be performed in a good, safe and workmanlike manner by consultants qualified and licensed to undertake such work and in a manner that will not interfere with any other tenant's quiet enjoyment of the Property or Landlord's use, operation, leasing and sale of the Property. Tenant shall deliver to Landlord prior to delivery to any governmental agency, or promptly after receipt from any such agency, copies of all permits, manifests, closure or remedial action plans, notices, and all other documents relating to the storage, placement, handling, use or release by Tenant Parties of Hazardous Materials at or about the Demised Premises or Property. Upon prior written notice from Landlord, Tenant shall make available to Landlord for Landlord's inspection and copying all of Tenant's documents, materials, data, inventories and other documentation (including, without limitation, Material Safety Data Sheets relating to Hazardous Materials as may be present or suspected to be present in, on or about the Demised Premises. If any lien attaches to the Demised Premises or the Property in connection with or as a

result of the storage, placement, handling, use or release by Tenant Parties of Hazardous Materials, and Tenant does not cause the same to be released, by payment, bonding or otherwise, within ten (10) days after the attachment thereof, Landlord shall have the right but not the obligation to cause the same to be released and any sums expended by Landlord in connection therewith shall be payable by Tenant on demand. Notwithstanding anything in the foregoing to the contrary, Tenant shall not be responsible for Hazardous Materials not introduced to the Premises, the Building or the Land by Tenant Parties.

(e) Tenant shall give Landlord immediate telephone notice and prompt written notice (which means as soon as practicable and, in no event, more than one (1) day following Tenant's knowledge of the applicable event) of any (i) spill, discharge, dumping, or other release of any Hazardous Materials (including, without limitation, the Permitted Materials) on, in, under or from the Demised Premises, the Building, or any portion of the Project, or the groundwater thereof, (ii) any oral or written notice from any governmental agency received by Tenant of any such spill, discharge, dumping, or other release of any Hazardous Materials, and (iii) any oral or written notice of any violation, warning, deficiency, non-compliance, or other alleged or actual failure by Tenant to comply strictly with any Environmental Law and/or any requirement, provision, or stipulation of any governmental permit, license, registrations, or approval.

(f) Landlord's Eights .Subject to the provisions of Section 15.2, Landlord shall have the right, but not the obligation, to enter the Demised Premises at any reasonable time upon 24 hours notice except in case of emergency (i) to confirm Tenant's compliance with the provisions of this Section, and (ii) to perform Tenant's obligations under this Section if Tenant has failed to do so after reasonable notice to Tenant. Landlord shall also have the right to engage qualified Hazardous Materials consultants to inspect the Demised Premises and review the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials, including review of all permits, reports, plans, and other documents regarding same. Tenant shall pay to Landlord on demand the reasonable costs of Landlord's consultant's fees if Tenant is found to have violated the terms of this Section 5.3 any and all reasonable costs incurred by Landlord in performing Tenant's obligations under this section. Landlord shall use reasonable efforts to minimize any interference with Tenant's business caused by Landlord's entry into the Demised Premises, but Landlord shall not be responsible for any interference caused thereby, unless such interference arises out of or is caused by the gross negligence or willful misconduct of Landlord, its employees, agents, contractors, licensees, or invitees.

(g) Tenant's Indemnification. Tenant agrees to indemnify, defend and hold harmless Landlord and its members, managers, directors, officers, agents and employees and their partners, members, managers, directors, officers, shareholders, employees and agents from all shall mean all costs and expenses of any kind, damages, including foreseeable and unforeseeable consequential damages, fines and penalties incurred in connection with any violation of and compliance with the Environmental Laws by Tenant Parties and all losses of any kind attributable to the diminution of value, loss of use or adverse effects on marketability or use of any portion of the Demised Premises or Property by Tenant Parties and all other claims, actions, losses, damages, liabilities, costs and expenses of every kind, including reasonable attorneys', experts' and consultants' fees and costs, incurred at any time and arising from or connection with the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials at or about the Property or Tenant's failure to comply in full with all Environmental Laws with respect to the Demised Premises and the Property.

5.4 Licenses and Permits. If any governmental license or permit shall be required for the property and lawful conduct of Tenant's business, and if the failure to secure such license or permit would in any way affect Landlord, Tenant, at Tenant's expense, shall duly procure and thereafter maintain such license or permit and submit the same to inspection by Landlord. Tenant, at Tenant's expense, shall at all times comply with the terms and conditions of each such license or permit.

6. RENT

6.1 Monthly Fixed Rent. Tenant shall pay to Landlord, without any set-off or deduction, at Landlord's office, or to such other person or at such other place as Landlord may designate by notice to Tenant, the Monthly Fixed Rent set forth in Article 1, subject to annual adjustment as set forth in said Article 1. The Monthly Fixed Rent shall be paid in equal monthly installments in advance on or before the first Business Day of each calendar month during the Term of this Lease and shall be apportioned for any fraction of a month in which the Term Commencement Date or the last day of the Term of this Lease may fall.

6.2 Taxes. Tenant shall timely file business property statements with respect to Tenant's personal property and trade fixtures and pay when due all taxes imposed on such personal property and trade fixtures. Tenant shall also pay all real estate taxes attributable to Alterations made by Tenant to the Demised Premises.

6.3 Obligations Survive Termination. All obligations and liabilities of Tenant relating to any period prior to the termination of the Term of this Lease,

including without limitation the obligation to pay any Additional Rent due pursuant to the provisions of this Article, shall survive such termination.

6.4 Payment to Mortgagee. Landlord reserves the right to provide in any Mortgage given by it or by Prime Landlord of the Property that some or all rents, issues, and profits and all other amounts of every kind payable to the Landlord under this Lease shall be paid directly to the Mortgagee for Landlord's account and Tenant covenants and agrees that it will, after receipt by it of notice from Landlord or Mortgagee designating such Mortgagee to whom payments are to be made by Tenant, pay such amounts thereafter becoming due directly to such Mortgagee until excused therefrom by notice from such Mortgagee.

6.5 Additional Rent. Tenant shall also pay as additional rent without notice, except as required under this Lease, and without any abatement, deduction or setoff except as provided herein, all sums, impositions, costs, expenses and other payments which Tenant in any of the provisions of this Lease assumes or agrees to pay, and, in case of any nonpayment thereof, Landlord shall have in addition to any other rights and remedies, all of the rights and remedies provided by law or"

provided for in the Lease for the nonpayment of Monthly Fixed Rent.

6.6 Place of Payment of Rent. All payments of Rent shall be made by Tenant to Landlord without notice or demand at such place as Landlord may from time to time designate in writing. The initial place for payment of rent shall be 7000 Shoreline Court, So. San Francisco, CA 94080. Any extension of time for the payment of any installment of rent, or the acceptance of rent after the time at which it is due and payable shall not be a waiver of the rights of Landlord to insist on having all other payments made in the manner and at the times herein specified.

6.7 Cleaning. Tenant shall arrange for cleaning of the Tenant space in accordance with the cleaning schedule attached hereto as Exhibit B with a cleaning contractor subject to Landlord's approval, which approval shall not be unreasonably withheld. Tenant shall pay all such costs of cleaning. In addition, Landlord may provide such cleaning services to the Premises at a cost plus a ten percent (10%) administrative fee.

7. UTILITIES AND LANDLORD'S SERVICES

7.1 Electricity. Landlord shall furnish, at Landlord's cost, all electrical energy that Tenant requires for operation of the lighting fixtures, appliances and equipment servicing the Demised Premises. Landlord shall not be liable in any way to Tenant for any failure or defect in the supply or character of electrical energy furnished to the Demised Premises by reason of any requirement, act or omission of the public utility serving the Building. Tenant's use of electrical energy in the Demised Premises shall not at any time exceed the capacity of any of the electrical

conductors and equipment in or otherwise serving the Demised Premises. In order to insure that such capacity is not exceeded and to avert possible adverse effect upon the Building electrical services Tenant shall give notice to Landlord and obtain Landlord's prior written consent whenever Tenant shall connect to the Building electrical distribution system any fixtures, appliances or equipment other than lamps, typewriters, personal computers and similar small machines. Landlord shall install and replace all light fixtures, bulbs, tubes, lamps, lenses, globes, ballasts and switches used in the Demised Premises.

7.2 Water. Landlord shall furnish cold water for ordinary cleaning, toilet and drinking purposes and hot and cold water for lavatory purposes.

7.3 Heat and Air Conditioning. Landlord shall furnish to and distribute in the Premises and common areas of the Building heat and air conditioning as normal seasonal changes may require on Business Days from 8:00 a.m. to 6:00 p.m. and on Saturdays from 9:00 a.m. to 1:00 p.m., provided Landlord may run common area HVAC on an economy mode on Saturdays. Without limiting the generality of the foregoing, all windows in the Demised Premises must remain closed at all times notwithstanding the fact that such windows may be operable. The air conditioning system servicing the Building is designed to provide cooling based upon an occupancy of not more than one person per one hundred (100) square feet of floor area, and upon a combined lighting and standard electrical load not to exceed 3.0 watts per square foot. In the event Tenant exceeds such condition or introduces into the Demised Premises equipment which overloads such system, or in any other way causes such system not to adequately perform its proper functions, supplementary systems may at Landlord's option be provided by Landlord at Tenant's, expense.

7.4 Elevator Service. Landlord shall provide non exclusive passenger elevator service consisting of two (2) elevators to the Demised Premises on Business Days from 8:00 a.m. to 6.00 p.m. and on a reduced basis at all other times.

7.5 Cleaning. Landlord shall furnish cleaning services to the common areas of the Building substantially in accordance with the specifications attached hereto as Exhibit B and made a part hereof.

7.6 Repairs and Other Services. Except as otherwise provided in Articles 8 and 16, and subject to Tenant's obligations in Article 12 and elsewhere in this Lease, Landlord shall at Landlord's expense (a) keep and maintain the roof, exterior walls, structural floor slabs and columns of the Building in as good condition and repair as they are in on the Term Commencement Date, reasonable use and wear excepted, (b) keep and maintain in workable condition the Building's sanitary, electrical, heating, air conditioning and other systems, (c) keep all walkways on the Property clean and remove all snow and ice therefrom, (d) provide grounds

maintenance to all landscaped areas and (e) keep and maintain the parking lot adjacent to the Building in good condition and repair.

7.7 Landlord's Further Responsibilities.

(a) Landlord shall allow Tenant to have full access to and use of the largest conference room on the third floor of the Building up to two (2) times per month, as reasonably agreed to in advance by Landlord and Tenant.

(b) Landlord shall be responsible at its sole cost and expense for the removal of all trash and garbage (excluding Hazardous Materials, laboratory, biological and animal waste) from the designated containers outside of the Building. Landlord will control the keys to the dumpster locks.

(c) Landlord shall comply with all obligations imposed on it in the CCR's (defined in Section 27.10) and shall pay its share of any future costs of providing BART shuttle service.

7.8 Interruption or Curtailment of Services. Landlord reserves the right to interrupt, curtail, stop or suspend the furnishing of services and the operation of any Building system, when necessary by reason of accident or emergency, or of repairs, alterations, replacements or improvements in the reasonable judgment of Landlord desirable or necessary to be made, or of difficulty or inability in securing supplies or labor, or of strikes, or of any other cause beyond the reasonable control of Landlord, whether such other cause be similar or dissimilar to those hereinabove specifically mentioned, until said cause has been removed. Landlord shall use reasonable efforts to minimize interruption to Tenant by any such interruption or curtailment of services. Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems, except that Landlord shall exercise reasonable diligence to eliminate the cause of same. Notwithstanding the foregoing, if utilities or Building services are interrupted due to the fault of Landlord (Tenant acknowledging that Landlord shall have no responsibility for failure of municipal or public utility suppliers to supply utilities to the Building), and such disruption continues for more than fifteen (15) days, rent shall abate if the Demised Premises are unusable and Tenant in fact vacates the Demised Premises.

8. CHANGES OR ALTERATIONS BY LANDLORD

Landlord reserves the right, exercisable by itself or its nominee, including without limitation Prime Landlord, at any time and from time to time without the same constituting an actual or constructive eviction and without incurring any liability to Tenant therefor or otherwise affecting Tenant's obligations under this Lease, to make such changes, alterations, additions, improvements, repairs or

replacements in or to the Building and the fixtures and equipment thereof, as well as in or to the street entrances, halls, passages, elevators, and stairways thereof, as it may deem necessary or desirable, and to change the arrangement and/or location of entrances or passageways, doors and doorways, and corridors, elevators, stairs, toilets, or other public parts of the Building, provided, however, that there be no unreasonable obstruction of the right of access to, or unreasonable interference with the use and enjoyment of, the Demised Premises by Tenant, except that Landlord shall not be obligated to employ labor at so-called "over-time" or other premium pay rates. Nothing contained in this Article shall be deemed to relieve Tenant of any duty, obligation or liability of Tenant with respect to making or causing to be made any repair, replacement or improvement or complying with any law, order or requirement of any governmental or other authority. Neither this Lease nor any use by Tenant shall give Tenant any right or easement or the use of any door or any passage or any concourse connecting with any other building or to any public convenience, and the use of such doors, passages and concourses and of such conveniences may be regulated or discontinued at any time and from time to time by Landlord without notice to Tenant and without affecting the obligations of Tenant hereunder or incurring any liability to Tenant therefor.

9. FIXTURES, EQUIPMENT AND IMPROVEMENTS — REMOVAL BY TENANT

All fixtures, equipment, leasehold improvements and appurtenances attached to or built into the Demised Premises prior to or during the Term, whether by Landlord at its expense or at the expense of Tenant (either or both) or by Tenant, except for personal property, equipment or trade fixtures paid for by Tenant regardless of whether or not they are affixed to the Premises, shall be and remain part of the Demised Premises and shall not be removed by Tenant at the end of the Term unless otherwise expressly provided by notice from Landlord to Tenant. Upon the request of Landlord, Tenant will remove such fixtures, equipment, leasehold improvements and appurtenances added by Tenant after the Term Commencement Date as are directed by Landlord and shall restore any damage caused by such removal.

10. ALTERATIONS AND IMPROVEMENTS BY TENANT

Tenant shall make no alterations, decorations, installations, removals, additions or improvements in or to the Demised Premises without Landlord's prior written consent and then only by contractors or mechanics approved by Landlord. No such installations or other work shall be undertaken or begun by Tenant until Landlord has approved written plans and specifications therefor; and no amendments or additions to such plans and specifications shall be made without prior written consent of Landlord. Any such approved alterations, decorations, installations, removals, additions and improvements shall be done at the sole

expense of Tenant and at such times and in such manner as Landlord may from time to time reasonably designate. Subject to the terms of Section 9 herein, if Tenant shall make any alterations, decorations, installations, removals, additions or improvements, then Landlord may elect to require Tenant at the expiration of this Lease to restore the Demised Premises to substantially the same condition as existed at the Term Commencement Date, such election to be made and advised to Tenant at the same time as Landlord grants consent to the making of such Alterations.

11. TENANTS CONTRACTORS - MECHANICS' - AND OTHER LIENS - STANDARD OF TENANT'S PERFORMANCE - COMPLIANCE WITH LAWS

Whenever Tenant shall make any alterations, decorations, installations, removals, additions or improvements or do any other work in or to the Demised Premises, Tenant will strictly observe the following covenants and agreements:

(a) In no event shall any material or equipment be incorporated in or added to the Demised Premises in connection with any such alteration, decoration, installation, addition or improvement which is subject to any lien, charge, mortgage or other encumbrance of any kind whatsoever or is subject to any security interest or any form of title retention agreement. Any mechanic's lien filed against the Demised Premises or the Building for work claimed to have been done for, or materials claimed to have been furnished to Tenant shall be discharged by Tenant within twenty (20) days thereafter, at the expense of Tenant, by filing the bond required by law or otherwise. If Tenant fails so to discharge any lien, Landlord may do so at Tenant's expense and Tenant shall reimburse Landlord for any expense or cost incurred by Landlord in so doing within fifteen (15) days after rendition of a bill therefor.

(b) All installations or work done by Tenant under this or any other Article of this Lease shall be at its own expense (unless expressly otherwise provided) and shall at all times comply with (i) laws, rules, orders and regulations of governmental authorities having jurisdiction thereof and (ii) plans and specifications prepared by and at the expense of Tenant theretofore submitted to Landlord for its prior written approval.

(c) Tenant shall procure all necessary permits before undertaking any work in the Demised Premises; do all such work in a good and workmanlike manner, employing materials of good quality and complying with all governmental requirements, and defend, save harmless, exonerate and indemnify Landlord from all injury, loss or damage to any person or property occasioned by or growing out of such work.

(d) Tenant shall notify Landlord no later than ten (10) days prior to starting work on any alterations so that Landlord shall have the opportunity to post a "Notice of nonresponsibility" at the Demised Premises and record said notice in the county in which the Property is located pursuant to California Civil Code Section 3094.

(e) all contractors and subcontractors shall be approved by Landlord, which approval shall not be unreasonably withheld, and all work by Tenant shall be performed by such contractors and subcontractors and in such manner as to maintain harmonious labor relations.

12. REPAIRS BY TENANT

Tenant, at its expense, shall keep or cause to be kept, all and singular, the Demised Premises in good repair, order and condition, reasonable use and wear thereof and damage by fire or by unavoidable casualty excepted. Without limiting the generality of the foregoing, Tenant shall keep all interior windows and other glass whole, and shall replace the same whenever broken with glass of the same quality and shall repair or replace all exterior windows if damaged by neglect or wrongdoing of Tenant. Tenant hereby waives the benefits of California Civil Code Section 1932(1). Notwithstanding any contrary implication, Tenant shall have no obligation to make any repairs, replacements or improvements of a capital nature (as determined pursuant to generally accepted accounting practices) to the Premises unless required as a result of tenant's or its agent's negligence or willful misconduct.

13. INSURANCE, INDEMNIFICATION, EXONERATION AND EXCULPATION

13.1 Tenant's Insurance

(a) Liability Insurance. Tenant shall maintain in full force throughout the Term commercial general liability and property damage insurance providing coverage on an occurrence form basis with limits of not less than Five Million Dollars ($5,000,000.00) each occurrence for bodily injury and property damage combined, Five Million Dollars ($5,000,000.00) annual general aggregate, and Five Million Dollars ($5,000,000.00) products and completed operations (if applicable) annual aggregate. Tenant's liability insurance policy or policies shall: (i) include premises and operations liability coverage, automobile, products and completed operations liability coverage (if applicable), broad form property damage coverage including completed operations (if applicable), blanket contractual liability coverage with, to the maximum extent possible, coverage for the indemnification obligations of Tenant under this Lease, and personal and advertising injury coverage; (ii) provide that the insurance company has the duty to defend all insureds

under the policy; (iii) provide that defense costs are paid in addition to and do not deplete any of the policy limits; (iv) cover liabilities arising out of or incurred in connection with Tenant's use or occupancy of the Premises or the Property; and (v) extend coverage to cover liability for the actions of Tenant's employees, contractors, sublessees, guests and visitors. Tenant's required insurance may be maintained by a combination of underlying and "umbrella" coverage.

(b) Personal Property Insurance. Tenant shall at all times maintain in effect with respect to Tenant's fixtures, equipment and personal property located at or within the Demised Premises, commercial property insurance providing coverage, at a minimum, for "broad form" perils, to the extent of 100% of the full replacement cost of covered property. Tenant may carry such insurance under a blanket policy, provided that such policy provides equivalent coverage to a separate policy. During the Term, the proceeds from any such policies of insurance shall be used for the repair or replacement of such fixtures, equipment and personal property so insured. Landlord shall be provided coverage under such insurance to the extent of its insurable interest and, if requested by Landlord, both Landlord and Tenant shall sign all documents reasonably necessary or proper in connection with the settlement of any claim or loss under such insurance. Landlord shall have no obligation to carry insurance on any such Tenant's leasehold improvements or on Tenant's fixtures, equipment or personal property.

(c) Workmen's Compensation Insurance. Tenant shall maintain worker's compensation insurance as required by law and employer's liability insurance in an amount not less than Five Hundred Thousand Dollars ($500,000).

(d) Business Interruption/Extra Expense Insurance. Tenant shall maintain loss of income, business interruption and extra expense insurance in such amounts as will reimburse Tenant for direct or indirect loss of earnings and incurred costs attributable to the perils commonly covered by Tenant's property insurance described above but in no event less than Five Hundred Thousand Dollars ($500,000.00). Such insurance shall be carried with the same insurer that issues the insurance for the personal property.

(e) Other Coverage. Tenant, at its cost, shall maintain such other insurance as Landlord may reasonably require from time to time, but in no event may Landlord require any other insurance which is (i) not then being required of comparable tenants leasing comparable amounts of space in comparable buildings in the vicinity of the Building or (ii) not then available at commercially reasonable rates.

(f) Insurance Criteria. Each policy of insurance required under this Section shall: (i) be in a form, and written by an insurer, reasonably acceptable to Landlord, (ii) be maintained at Tenant's sole cost and expense, and (iii) require at least thirty (30) days' written notice (or twenty (20) days in case of nonpayment of premium) to Landlord prior to any cancellation, nonrenewal or modification of insurance coverage. Insurance companies issuing such policies shall have rating classifications of "A" or better and financial size category ratings of "XIII" or better according to the latest edition of the A.M. Best Key Rating Guide. All insurance companies issuing such policies shall be licensed to do business in the State of California. Any deductible amount under such insurance shall not exceed maximum deductible amounts currently required under similar leases for buildings in the vicinity of the Building, with Tenant having the burden of proof. Tenant shall provide to Landlord, upon request, evidence that the insurance required to be carried by Tenant pursuant to this Section, including any endorsement affecting the additional insured status, is in full force and effect and that premiums therefore have been paid.

(g) Increase in Amount of Insurance. Tenant shall increase the amounts of insurance as required by any Mortgagee, and, not more frequently than once every three (3) years, as recommended by Landlord's insurance broker, if, in the reasonable opinion of either of them, the amount of insurance then required under this Lease is not adequate. Any limits set forth in this Lease on the amount or type of coverage required by Tenant's insurance shall not limit the liability of Tenant under this Lease.

(h) Insurance Provisions. Each policy of liability insurance required by this Section shall: (i) contain a cross liability endorsement or separation of insureds clause; (ii) provide that it is primary to and not contributing with, any policy of insurance carried by Landlord or Prime Landlord covering the same loss; (iii) provide that any failure to comply with the reporting provisions shall not affect coverage provided to Landlord, Prime Landlord, their officers, directors, shareholders, members, property managers and mortgagees; and (iv) name Prime Landlord, Mortgagees, Landlord, their officers, directors, employees, shareholders, members, property managers and such other parties in interest as Landlord may from time to time reasonably designate to Tenant in writing, as additional insureds. Such additional insureds shall be provided the same extent of coverage as provided to Tenant under such policies. All endorsements affecting such additional insured status shall be acceptable to Landlord and shall be at least as broad as additional insured endorsement form number CG 20 11 11 85 promulgated by the Insurance Services Office.

(i) Evidence of Coverage. Prior to occupancy of the Premises by Tenant, and not less than thirty (30) days prior to the expiration of any policy thereafter, Tenant shall furnish to Landlord a certificate of insurance reflecting that the insurance required by this Section is in force accompanied by an endorsement showing the required additional insureds satisfactory to Landlord in substance and form. Notwithstanding the requirements of this paragraph, Tenant shall, at Landlord's request, provide to Landlord within a commercially reasonable time a certified copy of each insurance policy required to be in force at any time pursuant to the requirements of this Lease or its Exhibits. Tenant's failure to furnish Landlord with such certificates of insurance within a reasonable time (not to exceed ten (10) days) after Landlord's request shall be deemed a material default under this Lease.

13.2 General. Tenant will save Landlord harmless, and will exonerate and indemnify Landlord and Prime Landlord, from and against any and all claims, liabilities, penalties, damages or expenses (including without limitation reasonable attorneys' fees) asserted against or incurred by Landlord or Prime Landlord:

(a) on account of or based upon any injury to person, or loss of or damage to property sustained or occurring on the Demised Premises on account of or based upon the act, omission, fault, negligence or misconduct of any person whomsoever (other than Landlord, Prime Landlord or their agents, contractors or employees);

(b) on account of or based upon any injury to person or loss of or damage to property, sustained or occurring elsewhere (other than on the Demised Premises) in or about the Building (and, in particular, without limiting the generality of the foregoing on or about the elevators, stairways, public corridors, sidewalks, roof, or other appurtenances and facilities used in connection with the Building or Demised Premises) arising out of the use or occupancy of the Building or Demised Premises by Tenant, or any person claiming by, through or under Tenant (other than those caused by or attributable to the negligence or willful misconduct of Landlord, Prime Landlord or their agents, contractors or employees);

(c) on account of or based upon (including moneys due on account of) any work or thing whatsoever done (other than by Landlord, Prime Landlord or their contractors, or agents or employees of any such party) in the Demised Premises during the Term of this Lease and during the period of time, if any, prior to the Term Commencement Date that Tenant may have been given access to the Demised Premises; and

(d) on account of or resulting from the failure of Tenant to perform and discharge any of its covenants and obligations under this Lease;

and, in case any action or proceeding be brought against Landlord or Prime Landlord by reason of any of the foregoing, Tenant upon notice from Landlord shall at Tenant's expense resist or defend such action or proceeding and employ counsel therefor reasonably satisfactory to Landlord, it being agreed that such counsel as may act for insurance underwriters of Tenant engaged in such defense shall be deemed satisfactory.

13.3 Property of Tenant. In addition to and not in limitation of the foregoing, and subject only to provisions of applicable law, Tenant covenants and agrees that all merchandise, furniture, fixtures and property of every kind, nature and description which may be in or upon the Demised Premises or elsewhere on the Property during the Term of this Lease, shall be at the sole risk and hazard of Tenant, and that if the whole or any part thereof shall be damaged, destroyed, stolen or removed from any cause or reason whatsoever other than the negligence or misconduct of Landlord or Prime Landlord or their contractors, or agents or employees of any such party, no part of said damage or loss shall be charged to, or borne by Landlord or Prime Landlord.

13.4 Bursting of Pipes, etc. Landlord shall not be liable for any injury or damage to persons or property resulting from fire, explosion, seismic events, earthquakes, falling plaster or tiles, steam, gas, electricity, electrical disturbance, water, rain or snow or leaks from any part of the Building or from the pipes, appliances or plumbing works or from the roof, street or sub-surface or from any other place or caused by any other cause of whatever nature, unless caused by or due to the negligence of Landlord, its agents, servants or employees; nor shall Landlord or its agents be liable for any such damage caused by other tenants or persons in the Building or caused by operations in construction of any private, public or quasi-public work; nor shall Landlord be liable for any latent defect in the Demised Premises or elsewhere in the Building.

13.5 Landlord's Insurance. Landlord shall, at its sole expense, carry so-called "all risk" full replacement cost casualty insurance on the Building (exclusive of Tenant's leasehold improvements, fixtures and equipment).

14. ASSIGNMENT, MORTGAGING, SUBLETTING, ETC.

14.1 Generally. Tenant shall not voluntarily, involuntarily or by operation of law assign, transfer, mortgage or otherwise encumber this Lease or any interest of Tenant therein, in the whole or in part of the Premises or permit the Premises or any part thereof to be used or occupied by others, without the prior written consent of Landlord and Landlord's mortgagee. Except in connection with a public stock offering, a transfer of any of Tenant's stock or a transfer or change of control of Tenant (if Tenant is a corporation), or a change in the composition of persons or entities owning any interest in Tenant (if Tenant is not a corporation), or any

transfer of Tenant's interest in the Lease by operation of law or by merger or consolidation of Tenant with or into any other entity, firm or corporation, shall be deemed an assignment for purposes of this Article 14. Notwithstanding anything to the contrary in this Lease, except with respect to Corporate Transfers (hereinafter defined) to a Competitor (as defined in Section 14.2), Tenant shall not be required to obtain Landlord's consent, and the terms of Sections 14.2 and 14.3 of this Lease shall not apply, to any transfer of Tenant's stock or a transfer or change of control of Tenant or other transfer to an entity which controls, is controlled by or is under common control with Tenant or any successor to Tenant or which succeeds to substantially all of Tenant's assets and business by merger, consolidation, reorganization or purchase or in connection with an initial public offering (collectively referred to as "Corporate Transfers"). Tenant shall give Landlord written notice at least thirty (30) days prior to the effective date of such Corporate Transfer. As used herein, the terms "controlled" or "controls" or "control" shall mean ownership of at least fifty-one percent (51%) of voting control of the relevant entity.

14.2 Landlord's Options. In connection with any request by Tenant for Landlord's consent to assignment or subletting, Tenant shall submit to Landlord in writing ("Tenant's Sublease Notice") (i) the name of the proposed assignee or subtenant, (ii) such information as to its financial responsibility and standing as Landlord may reasonably require, and (iii) all of the terms and provisions upon which the proposed assignment or subletting is to be made. Within ten (10) business days after receipt from Tenant of Tenant's Sublease Notice and receipt of the information required hereunder, Landlord shall have the following options: (a) reasonably withholding its consent; (b) withholding consent in its absolute discretion if the proposed assignee or sublessee is a "Competitor" (as that term is hereinafter defined); (c) if the request is to sublet a portion of the Premises, to take back such portion of the Premises for the proposed term of such sublease and to abate the Monthly Fixed Rent and Additional Rent accordingly; or (d) if the request is to assign this Lease or sublet all of the Premises, to take back the Premises for the proposed term of such assignment or sublease and to abate the Monthly Fixed Rent and Additional Rent accordingly; in each case under clauses (c) and (d) above, effective as of the date set forth in Tenant's Sublease Notice for commencement of the sublease term or for the assignment. The term "Competitor," as used herein shall mean any person or entity engaged in the manufacture or sale of instruments for DNA sequencing or amplification, including, without limitation, the following businesses and any affiliates, subsidiaries, parents or successors thereto: PE Corp., Applera Corporation, PE Biosystems, Inc., Applied Biosystems, Inc., Celera Genomics, Inc., Celera Genomics Group, F. Hoffmann-LaRoche Ltd., Hoffmann-LaRoche, Inc., Roche Diagnostics Corporation, Roche Molecular Systems, Inc., Amersham Pharmacia Biotech, Ltd., Molecular Dynamics, Inc., Perkin Elmer Corporation, Strategene, Hybade Ltd., Ericomp, Techne Corporation, MWG Biotech

AG, Whatman Biometra, Labreco, Inc., Bio-Rad Laboratories, Inc., and Cepheid. In the event Landlord shall exercise either option (c) or (d) above, Tenant shall sublease the Demised Premises, or relevant portion thereof or assign this Lease to Tenant upon the terms and conditions set forth in said Tenant's Sublease Notice. In the event Landlord shall exercise such option under clauses (c) and (d), Tenant shall surrender possession of the entire Premises, or the portion which is the subject of the option, as the case may be, on the date set forth in such notice in accordance with the provisions of this Lease relating to surrender of the Premises at the expiration of the Term. If the foregoing abatement of Monthly Fixed Rent relates only to a portion of the Premises or to a portion of the Term, the abatement shall relate to the particular space and period of time in question taking into account the rent paid per square foot for such space.

14.3 Conditions. Any subletting or assignment pursuant to this Article shall be subject to and conditioned upon the following:

(a) at the time of any proposed subletting or assignment, Tenant shall not be in default under any of the terms, covenants, or conditions of this Lease beyond applicable grace periods;

(b) the sublessee or assignee shall conduct its business in accordance with the Permitted Use;

(c) prior to occupancy, Tenant and its assignee or sublessee shall execute, acknowledge and deliver to Landlord a fully executed counterpart of a written assignment of lease or a written sublease, as the case may be, by the terms of which:

(1) in case of an assignment of this Lease in its entirety, Tenant shall assign to such assignee Tenant's entire interest in this Lease, together with all prepaid rents hereunder, and the assignee shall accept said assignment and assume and agree to perform directly for the benefit of Landlord, all of the terms, covenants and conditions of this Lease on Tenant's part to be performed; or

(2) in case of a subletting, the sublessee thereunder shall agree to be bound by and to perform all of the terms, covenants and conditions of this Lease on the Tenant's part to be performed during the term of the sublease to the extent of the premises sublet, except the payments of rents, charges and other sums reserved hereunder, which Tenant shall continue to be obligated to pay and shall pay to Landlord;

(d) Tenant shall pay to Landlord monthly fifty percent (50%) of the excess of the rents and other charges received by Tenant pursuant to the

assignment or sublease over the rents and other charges reserved to Landlord under this Lease attributable to the space assigned or sublet, less the reasonable costs and expenses of subleasing and less the unamortized cost of Tenant's leasehold improvements (but not trade fixtures or equipment) paid for by Tenant, which cost shall be amortized over a ten year basis commencing on the Term Commencement Date;

(e) Tenant and any guarantor of Tenant's obligations hereunder (hereinafter "Guarantor") shall acknowledge that, notwithstanding such assignment or sublease and consent of Landlord thereto, Tenant and Guarantor shall not be released or discharged from any liability whatsoever under this Lease and will continue to be liable with the same force and effect as though no assignment or sublease had been made; and

(f) Tenant shall pay Landlord's reasonable costs including but not limited to attorney's fees and Landlord's administrative and overhead costs, incurred in connection with each such assignment or subletting.

14.4 No Waiver. The consent by Landlord to an assignment or subletting shall not in any way be construed to relieve Tenant from obtaining the express consent of Landlord to any further assignment or subletting for the use of all or any part of the Premises, nor shall the collection of rent by Landlord from any assignee, sublessee or other occupant after default by Tenant be deemed a waiver of this covenant or the acceptance of such assignee, sublessee or occupant as tenant or a release of Tenant from the further performance by Tenant of the obligations in this Lease on Tenant's part to be performed.

15. MISCELLANEOUS COVENANTS

15.1 Rules and Regulations. Tenant and Tenant's servants, employees, agents, visitors and licensees will faithfully observe such Rules and Regulations as are attached hereto as Exhibit C and made a part hereof or as Landlord hereafter at any time or from time to time may make and may communicate in writing to Tenant and which in the reasonable judgment of Landlord shall be necessary for the reputation, safety, care or appearance of the Property, or the preservation of good order therein, or the operation or maintenance of the Property, or the equipment thereof, or the comfort of tenants or others in the Building, provided, however, that in the case of any conflict between the provisions of this Lease and any such Rules and Regulations, the provisions of this Lease shall control, and provided further that nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce such Rules and Regulations or the terms, covenants or conditions in any other lease as against any other tenant and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its servants, employees, agents, visitors, invitees or licensees.

15.2 Access to Premises. Tenant shall: (i) permit Landlord to erect, use and maintain pipes, ducts and conduits in and through the Demised Premises, provided the same do not materially reduce the floor area or materially adversely affect the use or appearance thereof; (ii) permit the Landlord and any Mortgagee to have free and unrestricted access to and to enter upon the Demised Premises at all reasonable hours (upon 24 hours prior notice except in case of emergency) for the purposes of inspection or of making repairs, replacements or improvements in or to the Demised Premises or the Building or equipment (including, without limitation, sanitary, electrical, heating, air conditioning or other systems) or of complying with all laws, orders and requirements of governmental or other authority or of exercising any right reserved to Landlord by this Lease (including the right during the progress of any such repairs, replacements or improvements or while performing work and furnishing materials in connection with compliance with any such laws, orders or requirements to take upon or through, or to keep and store within, the Demised Premises all necessary materials, tools and equipment); and (iii) permit Landlord, at reasonable times and upon 24 hours prior notice, to show the Demised Premises during ordinary business hours to any Mortgagee, prospective purchaser of any interest of Landlord in the Property, prospective Mortgagee, or prospective assignee of any Mortgage, and during the period of twelve months next preceding the Termination Date to any person contemplating the leasing of the Demised Premises or any part thereof. If Tenant shall not be personally present to open and permit any entry into the Demised Premises at any time when for any reason an entry therein shall be necessary or permissible pursuant to the terms of this Lease or by law, Landlord or Landlord's agents must nevertheless be able to gain such entry by contacting a responsible representative of Tenant, whose name, address and telephone number shall be furnished by Tenant. Provided that Landlord shall not be obligated to employ labor at so-called "over-time" or other premium pay rates, Landlord shall exercise its rights of access to the Demised Premises permitted under any of the terms and provisions of this Lease in such manner as to minimize to the extent practicable interference with Tenant's use and occupation of the Demised Premises. Notwithstanding the foregoing, any entry (other than in case of emergency) by Landlord, any Mortgagee or any of their agents or representatives shall be subject to Tenant's reasonable health, safety and security requirements, including but not limited to the requirement that a representative of Tenant accompany such parties when in certain parts of the Demised Premises.

15.3 Accidents to Sanitary and other Systems. Tenant shall give to Landlord prompt notice of any fire or accident in the Demised Premises or in the Building and of any damage to, or defective condition in, any part or appurtenance of the Building's sanitary, electrical, heating and air conditioning or other systems located in, or passing through, the Demised Premises.

15.4 Signs, Blinds and Drapes. Tenant shall not place any signs on the exterior of the Building or on or in any window, public corridor or door visible from the exterior of the Demised Premises. No drapes or blinds may be put on or in any exterior window.

15.5 Estoppel Certificate. Tenant shall at any time and from time to time upon not less than ten business (10) days' prior notice by Landlord, Prime Landlord or by a Mortgagee to Tenant, execute, acknowledge and deliver to the party making such request a statement in writing certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), and the dates to which Rent has been paid in advance, if any, and stating whether or not to the actual knowledge and belief of the signer of such certificate Landlord is in default in performance of any covenant, agreement, term, provisions or condition contained in this Lease and, if so, specifying each such default of which the signer may have knowledge, it being intended that any such statement delivered pursuant hereto may be relied upon by any prospective purchaser of any interest in the Property, any Mortgagee or prospective Mortgagee, any lessee or prospective lessee thereof, any prospective assignee of any Mortgage, or any other party designated by Landlord. The form of any such estoppel certificate requested by a Mortgagee shall be reasonably satisfactory to such Mortgagee.

15.6 Requirements of Law — Fines and Penalties. Tenant at its sole expense shall comply with all laws, rules, orders and regulations of Federal, State, County and Municipal Authorities and with any direction of any public officer or officers, pursuant to law, which shall impose any duty upon Landlord or Tenant with respect to and arising out of Tenant's use or occupancy of the Demised Premises. If Tenant receives notice of any violation of law, ordinance, order or regulation applicable to the Demised Premises, it shall give prompt notice thereof to Landlord. Without limiting the generality of the foregoing, Tenant shall be responsible for compliance with requirements imposed by the Americans with Disabilities Act relative to the Demised Premises, including without limitation all such requirements applicable to removing barriers, furnishing auxiliary aids and ensuring that, whenever alterations are made, the affected portions of the Demised Premises are readily accessible to and usable by individuals with disabilities. Notwithstanding anything in the foregoing to the contrary, if the requirement of additional work in the Demised Premises is caused by governmental action solely as result of work being done by Landlord in parts of the Building other than the Demised Premises or as a result of the general use or occupancy of the building itself, then Landlord shall be responsible for the cost of such ADA work. Conversely, if additional ADA work in the Building is caused by governmental action solely as a result of work in the Demised Premises by Tenant or as a result of Tenant's particular use of the Premises, then Tenant shall be responsible for the cost of such ADA work.

15.7 Tenant's Acts — Effect on Insurance. Tenant shall not do or permit to be done any act or thing upon the Demised Premises or elsewhere in the Building which will invalidate or be in conflict with any insurance policies covering the Building and the fixtures and property therein and shall not do, or permit to be done, any act or thing upon the Demised Premises which shall subject Landlord to any liability or responsibility for injury to any person or persons or to property by reason of any business or operation being conducted on the Demised Premises or for any other reason. Subject to the terms of this Lease and except as otherwise specifically set forth to the contrary herein, Tenant at its own expense shall comply with all applicable provisions of the California Health and Safety Code and all regulations promulgated thereunder and with all rules, orders, regulations or requirements of the underwriter(s) of the fire and other hazard insurance for the Property and the Demised Premises and shall not do, or permit anything to be done, in or upon the Demised Premises, or bring or keep anything therein, that is not permitted by the City of South San Francisco Fire Department, or other authority having jurisdiction, and then only in such quantity and manner of storage as will not increase the rate for any insurance applicable to the Building. If by reason of failure of Tenant to comply with the provisions hereof the insurance rate applicable to any policy of insurance shall at any time thereafter be higher than it otherwise would be, then Tenant shall reimburse Landlord for that part of any insurance premiums thereafter paid by Landlord, which shall have been charged because of such failure by Tenant.

15.8 Miscellaneous. Tenant shall not suffer or permit the Demised Premises or any fixtures, equipment or utilities therein or serving the same, to be overloaded, damaged or defaced.

16. DAMAGE BY FIRE, ETC.

In the event of loss of, or damage to, the Demised Premises or the Building by fire or other casualty, the rights and obligations of the parties hereto shall be as follows:

(a) If the Demised Premises, or any part thereof, shall be damaged by fire or other casualty, Tenant shall give prompt notice thereof to Landlord, and Landlord, upon receiving such notice and the insurance proceeds for such casualty, shall proceed in a commercially reasonable manner, subject to unavoidable delays, to repair, or cause to be repaired, such damage to the extent hereinafter provided. If the Demised Premises or any part thereof shall be rendered untenantable by reason of such damage, whether to the Demised Premises or to the Building, Yearly Fixed Rent shall proportionately abate for the period from the date of such damage to the date when such damage shall have been repaired by Landlord.

(b) If, as a result of fire or other casualty, the whole or a substantial portion of the Building is rendered untenantable and the nature and extent of the damage is such that in Landlord's opinion, taking into account a reasonable time for adjusting loss and obtaining plans and permits for restoration, the Demised Premises cannot be made tenantable within 180 days after such event, Landlord, within ninety (90) days from the date of such fire or casualty, may terminate this Lease by notice to Tenant, specifying a date not less than thirty (30) nor more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. If Landlord does not so elect to terminate this Lease, then Landlord shall (to the extent that proceeds of insurance required to be carried by Landlord, net of any portion thereof retained by a Mortgagee, are made available for such purpose) proceed with diligence to repair the damage to the Demised Premises and all facilities serving the same, if any, which shall have occurred, and the Yearly Fixed Rent shall meanwhile proportionately abate, all as provided in Paragraph (a) of this Section. However, if such damage is not repaired and the Demised Premises restored to substantially the same condition as they were prior to such damage within one (1) year from the date of such damage, Tenant within thirty (30) days from the expiration of such one (1) year period or from the expiration of any extension thereof by reason of unavoidable delays as hereinafter provided, may terminate this Lease by notice to Landlord, specifying a date not more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. The period within which the required repairs may be accomplished shall be extended by the number of days, lost as a result of unavoidable delays, which term shall be defined to include all delays referred to in Article 24.

(c) If the Demised Premises shall be rendered untenantable by fire or other casualty during the last year of the Term of this Lease, Landlord may terminate this Lease effective as of the date of such fire or other casualty upon notice to Tenant given within ninety (90) days after such fire or other casualty. Notwithstanding the foregoing to the contrary, in the event Landlord exercises the foregoing termination right, if Tenant has available to it the option to extend and validly exercises said option, Tenant may defeat said termination notice by the valid exercise of said option term so as to add an additional five years on to the Term of this Lease.

(d) Landlord shall not be required to repair or replace any of Tenant's leasehold improvements, fixtures, business machinery, equipment, cabinet work, furniture, personal property or other installations (all of which shall, however, be restored by Tenant within a reasonable time after Landlord shall have completed any repair or restoration required under the terms of this Article), and no damages, compensation or claim shall be payable by Landlord for inconvenience, loss of business or annoyance arising

from any repair or restoration of any portion of the Demised Premises or of the Building.

(e) The provisions of this Article shall be considered an express agreement governing any instance of damage or destruction of the Building or the Demised Premises by fire or other casualty, and any law now or hereafter in force providing for such a contingency in the absence of express agreement shall have no application.

(f) In the event of any termination of this Lease pursuant to this Article, the Term of this Lease shall expire as of the effective termination date as fully and completely as if such date were the date originally fixed herein for the end of the Term of this Lease. Tenant shall have access to the Demised Premises for a period of fifteen (15) days after the date of termination in order to remove Tenant's personal property.

(g) Landlord's Architect's certificate, given in good faith, shall be deemed conclusive of the statements therein contained and binding upon Tenant with respect to the performance and completion of any repair or restoration work undertaken by Landlord pursuant to this Article or Article 18.

17. WAIVER OF SUBROGATION

In any case in which Tenant shall be obligated under any provision of this Lease to pay to Landlord or Prime Landlord any loss, cost, damage, liability, or expense suffered or incurred by Landlord or Prime Landlord, Landlord shall allow to Tenant as an offset against the amount thereof (i) the net proceeds of any insurance collected by Landlord for or on account of such loss, cost, damage, liability, or expense, provided that the allowance of such offset does not invalidate the policy or policies under which such proceeds were payable and (ii) if such loss, cost, damage, liability or expense shall have been caused by a peril against which Landlord has agreed to procure insurance coverage under the terms of this Lease, the amount of such insurance coverage, if not actually procured by Landlord.

In any case in which Landlord or Prime Landlord shall be obligated under any provision of this Lease to pay to Tenant any loss, cost, damage, liability or expense suffered or incurred by Tenant, Tenant shall allow to Landlord as an offset against the amount thereof (i) the net proceeds of any insurance collected by Tenant for or on account of such loss, cost, damage, liability, or expense, provided that the allowance of such offset does not invalidate the policy or policies under which such proceeds were payable and (ii) if such loss, cost, damage, liability or expense shall have been caused by a peril against which Tenant has agreed to procure insurance

coverage under the terms of this Lease, the amount of such insurance coverage, if not actually procured by Tenant.

The parties hereto shall each endeavor to procure an appropriate clause in, or endorsement on, any fire or extended coverage insurance policy covering the Demised Premises and the Building and personal property, fixtures and equipment located thereon or therein, pursuant to which the insurance companies waive subrogation or consent to a waiver of right of recovery, and having obtained such clauses and/or endorsements of waiver of subrogation or consent to a waiver of right of recovery each party hereby agrees that it will not make any claim against or seek to recover from the other for any loss or damage to its property or the property of others resulting from fire or other perils covered by such fire and extended coverage insurance; provided, however, that the release, discharge, exoneration and covenant not to sue herein contained shall be limited by the terms and provisions of the waiver of subrogation clauses and/or endorsements or clauses and/or endorsements consenting to a waiver of right of recovery and shall be co-extensive therewith. If either party may obtain such clause or endorsement only upon payment of an additional premium, such party shall promptly so advise the other party and shall be under no obligation to obtain such clause or endorsement unless such other party pays the premium.

18. CONDEMNATION - EMINENT DOMAIN

In the event that the whole or more than 40% of the Building shall be taken or appropriated by eminent domain or shall be condemned for any public or quasi-public use, or (by virtue of any such taking, appropriation or condemnation) shall suffer any damage (direct, indirect or consequential) for which Landlord or Tenant shall be entitled to compensation then (and in any such event) this Lease and the Term hereof may be terminated at the election of Landlord by a notice in writing of its election so to terminate which shall be given by Landlord to Tenant within sixty (60) days following the date on which Landlord shall have received notice of such taking, appropriation or condemnation. In the event that more than fifty percent (50%) of the floor area of the Demised Premises or a substantial part of the means of access thereto within the perimeter of the Property so as to substantially interfere with the use of the Demised Premises shall be so taken, appropriated or condemned, then (and in any such event) this Lease and the Term hereof may be terminated at the election of Tenant by a notice in writing of its election so to terminate which shall be given by Tenant to Landlord within sixty (60) days following the date on which Tenant shall have received notice of such taking, appropriation or condemnation. Tenant hereby waives the benefits of California Code of Civil Procedure Section 12165.130.

Upon the giving of any such notice of termination (either by Landlord or Tenant) this Lease and the Term hereof shall terminate on or retroactively as of the

date on which Tenant shall be required to vacate any part of the Demised Premises or shall be deprived of a substantial part of the means of access thereto, provided, however, that Landlord may in Landlord's notice elect to terminate this Lease and the Term hereof retroactively as of the date on which such taking, appropriation or condemnation became legally effective. In the event of any such termination, this Lease and the Term hereof shall expire as of the effective termination date as fully and completely as if such date were the date originally fixed herein for the end of the Term of this Lease. If neither party (having the right so to do) elects to terminate Landlord will, with reasonable diligence and at Landlord's expense, restore the remainder of the Demised Premises, or the remainder of the means of access thereto, as nearly as practicably may be to the same condition as obtained prior to such taking, appropriation or condemnation in which event (i) a just proportion of the Yearly Fixed Rent, according to the nature and extent of the taking, appropriation or condemnation and the resulting permanent injury to the Demised Premises and the means of access thereto, shall be permanently abated, and (ii) a just proportion of the remainder of the Yearly Fixed Rent, according to the nature and extent of the taking, appropriation or condemnation and the resultant injury sustained by the Demised Premises and the means of access thereto, shall be abated until what remains of the Demised Premises and the means of access thereto shall have been restored as fully as may be possible for permanent use and occupation by Tenant hereunder. Except for any award specifically reimbursing Tenant for moving or relocation expenses and Tenant's moveable personal property (but not leasehold improvements), there are expressly reserved to Landlord all rights to compensation and damages created, accrued or accruing by reason of any such taking, appropriation or condemnation, in implementation and in confirmation of which Tenant does hereby acknowledge that Landlord shall be entitled to receive and retain all such compensation and damages, grants to Landlord all and whatever rights (if any) Tenant may have to such compensation and damages, and agrees to execute and deliver all and whatever further instruments of assignment as Landlord may from time to time request. In the event of any taking of the Demised Premises or any part thereof for temporary use, (i) this Lease shall be and remain unaffected thereby, and (ii) Tenant shall be entitled to receive for itself any award made for such use, provided, that if any taking is for a period extending beyond the Term of this Lease, such award shall be apportioned between Landlord and Tenant as of the Termination Date.

19. DEFAULT

19.1 Events of Default. Occurrence of any of the following events shall constitute an Event of Default under this Lease: (a) Tenant shall neglect or fail to perform or observe any of the Tenant's covenants herein, including (without limitation) the covenants with regard to the payment when due of Rent, which default continues, in the case of payment of Rent, for five (5) days after notice of default or, in the case of defaults other then payment of Rent, for thirty (30) days

after such notice of default (provided that if more time, but not more than 30 additional days) is required lo complete such performance, Tenant shall not be in default if Tenant commences such performance within the thirty (30) day period and thereafter diligently pursues its completion); or (b) Tenant shall default in payment of Rent under Subparagraph (a) above more than two (2) times in any consecutive twelve (12) month period, in which case no prior notice shall be required; or (c) Tenant shall be involved in financial difficulties as evidenced by an admission in writing by Tenant of Tenant's inability to pay its debts generally as they become due, or by the making or offering to make a composition of its debts with its creditors; or (d) Tenant shall make an assignment or trust mortgage, or other conveyance or transfer of like nature, of all or a substantial part of its property for the benefit of its creditors; or (e) the leasehold hereby created shall be taken on execution or by other process of law and shall not be revested in Tenant within sixty (60) days thereafter; or (f) a receiver, sequester, trustee or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or a substantial part of Tenant's property and such appointment shall not be vacated within sixty (60) days; or (g) any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganization, arrangements, compositions or other relief from creditors, and, in the case of any such proceeding instituted against it, if Tenant shall fail to have such proceeding dismissed within thirty (30) days or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding; or (h) any event shall occur or any contingency shall arise whereby this Lease, or the term and estate thereby created, would (by operation of law or otherwise) devolve upon or pass to any person, firm or corporation other than Tenant, except as expressly permitted under Article 14 hereof.

19.2 Remedies Available upon Default. Upon the occurrence of an Event of Default, Landlord shall have the following remedies to the extent available under applicable law, which shall not be exclusive but shall be cumulative and shall be in addition to any other remedies now or hereafter allowed by law:

(a) Landlord may terminate Tenant's right to possession of the Premises at any time by written notice to Tenant. Tenant expressly acknowledges that in the absence of such written notice from Landlord, no other act of Landlord, including re-entry into the Premises, efforts to relet the Premises, reletting of the Premises for Tenant's account, storage of Tenant's personal property and trade fixtures, acceptance of keys to the Premises from Tenant or exercise of any other rights and remedies under this Section, shall constitute an acceptance of Tenant's surrender of the Premises or constitute a termination of this Lease or of Tenants right to possession of the Premises. Upon such termination in writing of Tenant's right to possession of the Premises, as herein provided, this Lease shall terminate and Landlord shall be entitled to recover damages from Tenant as provided in California Civil

Code Section 1951.2 and any other applicable existing or future Law providing for recovery of damages for such breach, including the worth at the time of award of the amount by which the rent which would be payable by Tenant here under for the remainder of the Term after the date of the award of damages, including Additional Rent as reasonably estimated by Landlord, exceeds the amount of such rental loss as Tenant proves could have been reasonably avoided, discounted at the discount rate published by the Federal Reserve Bank of San Francisco for member banks at the time of the award plus one percent (1%).

(b) Landlord shall have the remedy described in California Civil Code Section 1951.4 (Landlord may continue this Lease in effect after Tenant's breach and abandonment and recover rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations).

(c) Landlord may immediately, or at any time thereafter, without notice, cure said Event of Default for the account of Tenant. If Landlord at any time is compelled to pay of elects to pay any sum of money, or do any act which will require the payment of any sum of money, by reason of the failure of Tenant to comply with any provision hereof, or if Landlord is compelled to or does incur any expense, including without limitation reasonable attorneys' fees, in instituting, prosecuting and/or defending any action or proceeding arising by reason of any default of Tenant hereunder, Tenant shall on demand pay to Landlord by way of reimbursement the sum or sums so paid by Landlord with all interest, costs and damages together with interest at the Interest Rate for the period such sums remain outstanding.

(d) Landlord may remove all of Tenant's property from the Premises, and such property may be stored by Landlord in a public warehouse or elsewhere at the sole cost and for the account of Tenant. If Landlord does not elect to store any or all of Tenant's property left in the Premises, Landlord may consider such property to be abandoned by Tenant, and Landlord may thereupon dispose of such property in the manner and as prescribed by California Civil Code Section 1980 et seq. Any proceeds realized by Landlord on the disposal of any such property may be applied to offset all expenses of storage and sale and as permitted under California Civil Code Section 1980 et seq.

(e) The damages recoverable by Landlord pursuant to this Section shall in all events include reimbursement of any concessions made by Landlord in connection with the leasing of the Demised Premises to Tenant, including without limitation (a) abated Rent, (b) allowances or improvements in excess of any Building standard work, (c) sums paid to any former landlord

of Tenant under a so-called “take-over”, lease assumption or similar agreement and (d) signing bonuses and other incentive payments. Any allowances, abated rent, signing bonuses, incentive payments or takeover payments shall be deemed commercially reasonable if recommended to Landlord by a reputable commercial real estate broker as being appropriate and necessary for the leasing of said Premises to a creditworthy tenant.

19.3 Grace Period. Notwithstanding anything to the contrary in this Article contained, Landlord agrees not to take any action to terminate this Lease (a) for default by Tenant in the payment when due of Rent, if Tenant shall cure such default within five (5) days after written notice thereof given by Landlord to Tenant, unless there has been two (2) or more defaults in any 12-month period as set forth in Section 19.1(b), or (b) for default by Tenant in the performance of any other covenant, if Tenant shall cure such default within a period of thirty (30) days after written notice thereof given by Landlord to Tenant (except where the nature of the default is such that remedial action should appropriately take place sooner, as indicated in such written notice), or with respect to covenants other than to pay a sum of money within such additional period as may reasonably be required to cure such default if (because of governmental restrictions or any other cause beyond the reasonable control of Tenant) the default is of such a nature that it cannot be cured within such thirty (30)-day period, provided, however, (1) that there shall be no extension of time beyond such thirty (30)-day period for the curing of any such default unless, not more than ten (10) days after the receipt of the notice of default, Tenant in writing (i) shall specify the cause on account of which the default cannot be cured during such period and shall advise Landlord of its intention duly to institute all steps necessary to cure the default and (ii) shall as soon as may be reasonable duly institute and thereafter diligently prosecute to completion all steps necessary to cure such default and, (2) that no notice of the opportunity to cure a default need be given, and no grace period whatsoever shall be allowed to Tenant, if the default is incurable or if the subject of the breach which gave rise to the default had, by reason of regular repetitive breaches on prior occasions (i.e., showing a pattern of intentional conduct or indifferent regard to performance of the Lease), been the subject of prior notices hereunder to cure such defaults.

20. END OF TERM — ABANDONED PROPERTY

Upon the expiration or other termination of the Term of this Lease, Tenant shall peaceably quit and surrender to Landlord the Demised Premises and all alterations and additions thereto which Tenant is not entitled or required to remove under the provisions of this Lease, broom clean in good order, repair and condition excepting only reasonable use and wear and damage by fire or other casualty for which, under other provisions of this Lease, Tenant has no responsibility of repair or restoration. Tenant’s obligation to observe or perform this covenant shall survive the expiration or other termination of the Term of this Lease. If the last day of the

Term of this Lease or any renewal thereof falls on a day other than a Business Day, this Lease shall expire on the Business Day immediately following. Tenant shall pay two (2) times the amount of Rent applicable to each month (or fraction thereof) during which Tenant remains in possession of any part of the Demised Premises in violation of the foregoing covenants, without prejudice to eviction and any other remedy available to Landlord on account thereof.

Any personal property in which Tenant has an interest which shall remain in the Building or on the Demised Premises after the expiration or termination of the Term of this Lease shall to the extent in accordance with California Civil Code Section 1980 et seq., be conclusively deemed to have been abandoned, and may be disposed of in such manner as Landlord may see fit; provided, however, notwithstanding the foregoing, that Tenant will, upon request of Landlord made not later than ten (10) days after the expiration or termination of the Term hereof, promptly remove from the Building any such personal property or, if any part thereof shall be sold, that Landlord may receive and retain the proceeds of such sale and apply the same, at its option, against the expenses of the sale, the cost of moving and storage, any arrears of Rent payable hereunder by Tenant to Landlord and any damages to which Landlord may be entitled under Article 19 hereof or pursuant to law, with the balance if any, to be paid to Tenant.

21. RIGHTS OF MORTGAGEES

21.1 Entry and Possession. Upon entry and taking possession of the Property by a Mortgagee, for the purpose of foreclosure or otherwise, such Mortgagee shall have all the rights of Landlord, and shall be liable to perform all the obligations of Landlord arising and accruing during the period of such possession by such Mortgagee.

21.2 Right to Cure. No act or failure to act on the part of Landlord which would entitle Tenant under the terms of this Lease, or by law, to be relieved of Tenant's obligations hereunder or to terminate this Lease, shall result in a release or termination of such obligations or a termination of this Lease unless (i) Tenant shall have first given written notice of Landlord's act or failure to act to first Mortgagees of record, if any, and to any other Mortgagees of whom Tenant has been given written notice, specifying the act or failure to act on the part of Landlord which could or would give basis to Tenant's rights; and (ii) such Mortgagees, after receipt of such notice, have failed or refused to correct or cure the condition complained of within a reasonable time thereafter, but nothing contained in this paragraph shall be deemed to impose any obligation on any such Mortgagees to correct or cure any such condition.

" Reasonable time" as used above means and includes a reasonable time to obtain possession of the land and Building if any such mortgagee elects to do so and

a reasonable time to correct or cure the condition if such condition is determined to exist.

21.3 Prepaid Rent. No Rent shall be paid more than thirty (30) days prior to the due dates thereof and, as to a first Mortgagee of record and any other Mortgagees of whom Tenant has been given written notice, payments made in violation of this provision shall (except to the extent that such Rent is actually received by such Mortgagee) be a nullity as against such Mortgagee and Tenant shall be liable for the amount of such payments to such Mortgagee.

21.4 Continuing Offer. The covenants and agreements contained in this Lease with respect to the rights, powers and benefits of a Mortgagee (particularly, without limitation thereby, the covenants and agreements contained in this Article) constitute a continuing offer to any person, corporation or other entity, which by accepting or requiring an assignment of this Lease or by entry or foreclosure assumes the obligations herein set forth with respect to such Mortgagee; every such Mortgagee is hereby constituted a party to this Lease as an obligee hereunder to the same extent as though its name was written hereon as such; and such Mortgagee shall be entitled to enforce such provisions in its own name.

21.5 Subordination. This lease shall be subordinate to all mortgages encumbering the Land and/or Building, but Tenant shall nevertheless have the benefit of the non-disturbance provisions hereinafter set forth, and Tenant agrees, at the request of Landlord or any Mortgagee, to execute and deliver promptly any certificate or other instrument which Landlord or such Mortgagee may reasonably request subordinating this Lease and all rights of Tenant hereunder to any Mortgage, and to all advances made under such Mortgage and/or agreeing to attorn to such Mortgagee in the event that it succeeds to Landlord's interest in the Property. Landlord shall use reasonable efforts to request that (i) the holder of each such Mortgage shall execute and deliver to Tenant said Lender's customary non-disturbance agreement to the effect that, in the event of any foreclosure of such Mortgage, such holder will not name Tenant as a party defendant to such foreclosure nor disturb its possession under the Lease. In addition if the Prime Lease shall be terminated due to foreclosure of the mortgage made by Prime Landlord in favor of its mortgagee or due to such mortgagee's acceptance of a deed in lieu of foreclosure, Tenant shall attorn to mortgagee as landlord hereunder and this lease shall continue in full force and effect for its remaining term as a direct lease between Tenant and such mortgagee without the necessity of any additional act or agreement; provided, however, if requested by such Mortgagee, Tenant shall execute and deliver a new lease with such mortgagee on the same terms and conditions as set forth herein except that the term of such new lease shall be equal to the then remaining term hereunder. Landlord represents and warrants that as of the date of this Lease, Bank of America is the sole mortgagee of the Land and Building. Landlord shall use reasonable efforts to obtain from Bank of America for

the benefit of Tenant a Subordination, Non-Disturbance and Attornment Agreement in a commercially reasonable standard form, which Tenant will also execute for the benefit of Bank of America, providing for the subordination of the Lease, the attornment of Tenant to Bank of America, and the non-disturbance of Tenant under this Lease and the other subleases of space within the Building as long Tenant is not in default hereunder or thereunder. Tenant will reimburse Landlord for all costs and expenses in connection with obtaining said agreement.

21.6 Limitations on Liability. Nothing contained in the foregoing Section 21.6 or in any such non-disturbance agreement or non-disturbance provision shall however, affect the prior rights of the holder of any Mortgage with respect to the proceeds of any award in condemnation or of any fire insurance policies affecting the Building, or impose upon any such holder any liability (i) for the erection or completion of the Building, or (ii) in the event of damage or destruction to the Building or the Demised Premises by fire or other casualty, for any repairs, replacements, rebuilding or restoration except such repairs, replacements, rebuilding or restoration as can reasonably be accomplished from the net proceeds of insurance actually received by, or made available to, such holder, or (iii) for any default by Landlord under the Lease occurring prior to any date upon which such holder shall become Tenant's landlord, or (iv) for any credits, offsets or claims against the Rent as a result of any acts or omissions of Landlord committed or omitted prior to such date, or (v) for return of any security deposit or other funds unless the same shall have been received by such holder, and any such agreement or provision may so state.

22. QUIET ENJOYMENT

Landlord covenants that if, and so long as, Tenant keeps and performs each and every covenant, agreement, term, provision and condition herein contained on the part and on behalf of Tenant to be kept and performed, Tenant shall quietly enjoy the Demised Premises from and against the claims of all persons claiming by, through or under Landlord subject, nevertheless, to the covenants, agreements, terms, provisions and conditions of this Lease and to all Mortgages to which this Lease is subject and subordinate.

Without incurring any liability to Tenant, Landlord may permit access to the Demised Premises and open the same, whether or not Tenant shall be present, upon any demand of any receiver, trustee, assignee for the benefit of creditors, sheriff, marshall or court officer entitled to, or reasonably purporting to be entitled to, such access for the purpose of taking possession of, or removing Tenant's property or for any other lawful purpose (but this provision and any action by Landlord hereunder shall not be deemed a recognition by Landlord that the person or official making such demand has any right or interest in or to this Lease, or in or to the Demised

Premises), or upon demand of any representative of the fire, police, building, sanitation or other department of the city, county, state or federal governments.

23. ENTIRE AGREEMENT — WAIVER — SURRENDER

23.1 Entire Agreement. This Lease and the Exhibits made a part hereof contain the entire and only agreement between the parties relating to the lease of the Premises and any and all statements and representations, written and oral, including previous correspondence and agreements between the parties hereto, are merged herein. Tenant acknowledges that all representations and statements upon which it relied in executing this Lease are contained herein and that Tenant in no way relied upon any other statements or representations, written or oral. Any executory agreement hereafter made shall be ineffective to change, modify, discharge or effect an abandonment of this Lease in whole or in part unless such executory agreement is in writing and signed by the party against whom enforcement of the change, modification, discharge or abandonment is sought. Nothing herein shall prevent the parties from agreeing to amend this Lease and the Exhibits made a part hereof as long as such amendment shall be in writing and shall be duly signed by both parties.

23.2 Waiver by Landlord. The failure of Landlord to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease, or any of the Rules and Regulations promulgated hereunder, shall not prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. The failure of Landlord to enforce any of such Rules and Regulations against Tenant and/or any other tenant or subtenant in the Building shall not be deemed a waiver of any such Rules and Regulations. No provisions of this Lease shall be deemed to have been waived by Landlord unless such waiver be in writing signed by Landlord. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly rent herein stipulated shall be deemed to be other than on account of the stipulated rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord’s right to recover the balance of such rent or pursue any other remedy in this Lease provided.

23.3 Surrender. No act or thing done by Landlord during the term hereby demised shall be deemed an acceptance of a surrender of the Demised Premises, and no agreement to accept such surrender shall be valid, unless in writing signed by Landlord. No employee of Landlord or of Landlord’s agents shall have any power to accept the keys of the Demised Premises prior to the termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord’s agents shall not

operate as a termination of the Lease or a surrender of the Demised Premises. In the event that Tenant at any time desires to have Landlord underlet the Demised Premises for Tenant's account, Landlord or Landlord's agents are authorized to receive the keys for such purposes without releasing Tenant from any of the obligations under this Lease, and Tenant hereby relieves Landlord of any liability for loss of or damage to any of Tenant's effects in connection with such underletting.

24. INABILITY TO PERFORM — EXCULPATORY CLAUSE

Except as otherwise expressly provided in this Lease, this Lease and the obligations of Tenant to pay Rent hereunder and perform all other covenants, agreements, terms, provisions and conditions hereunder on the part of Tenant to be performed shall in no way be affected, impaired or excused because Landlord is unable to fulfill any of its obligations under this Lease or is unable to supply or is delayed in supplying any service expressly or impliedly to be supplied or is unable to make or is delayed in making any repairs, replacements, additions, alterations, improvements or decorations or is unable to supply or is delayed in supplying any equipment or fixtures if Landlord is prevented or delayed from doing so by reason of any cause whatsoever beyond Landlord's reasonable control, including but not limited to governmental preemption in connection with a national emergency or by reason of any rule, order or regulation of any department or subdivision thereof of any governmental agency or by reason of strikes, labor troubles, shortages of labor or materials or conditions of supply and demand which have been or are affected by war, hostilities or other similar or dissimilar emergency. In each such instance of inability of Landlord to perform, Landlord shall exercise reasonable diligence to eliminate the cause of such inability to perform.

Tenant shall neither assert nor seek to enforce any claim for breach of this Lease against any of Landlord's assets other than Landlord's or Prime Landlord's interest in the Building of which the Demised Premises are a part and in the rents, issues and profits thereof, and Tenant agrees to look solely to such interest for the satisfaction of any liability of Landlord under this Lease, it being specifically agreed that in no event shall Landlord (which term shall include, without limitation any of the officers, trustees, directors, partners, beneficiaries, joint venturers, managers, members, stockholders or other principals or representatives, disclosed or undisclosed, of Landlord or any managing agent) ever be personally liable for any such liability. This paragraph shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord or to take any other action which shall not involve the personal liability of Landlord to respond in monetary damages from Landlord's assets other than the Landlord's interest in said real estate, as aforesaid. In no event shall Landlord ever be liable for consequential damages arising from a breach of this Lease.

25. BILLS AND NOTICES

Any notices required under this Lease shall be in writing and delivered by hand or mailed by registered or certified mail or by nationally recognized overnight delivery service (such as Federal Express) for next business day delivery to Landlord or Tenant at the addresses set forth in Article 1. Either party may at any time change the Address for such notices, consents, requests, bills, demands or statements by delivering or mailing, as aforesaid, to the other party a notice stating the change and setting forth the changed Address, provided such changed Address is within the United States. Notices shall be deemed delivered upon the earlier of receipt or refusal of receipt.

All bills and statements for reimbursement or other payments or charges due from Tenant to Landlord hereunder shall be due and payable in full fifteen (15) days, unless herein otherwise provided, after submission thereof by Landlord to Tenant. Tenant's failure to make timely payment of any amounts indicated by such bills and statements within applicable notice and grace periods, whether for work done by Landlord at Tenant's request, reimbursement provided for by this Lease or for any other sums properly owing by Tenant to Landlord, shall be treated as a default in the payment of Rent, in which event Landlord shall have all rights and remedies provided in this Lease for the nonpayment of Rent.

26. SUCCESSORS AND ASSIGNS

The covenants, agreements, terms, provisions and conditions of this Lease shall bind and benefit the successors and assigns of the parties hereto with the same effect as if mentioned in each instance where a party hereto is named or referred to, except that no violation of the provisions of Article 14 hereof shall operate to vest any rights in any successor or assignee of Tenant and that the provisions of this Article shall not be construed as modifying the conditions of limitation contained in Article 19 hereof.

If in connection with or as a consequence of the sale, transfer or other disposition of the real estate (Land and/or Building, either or both, as the case may be) of which the Demised Premises are a part Landlord ceases to be the owner of the reversionary interest in the Demised Premises, Landlord shall be entirely freed and relieved from the performance and observance thereafter of all covenants and obligations hereunder accruing thereafter on the part of Landlord to be performed and observed, it being understood and agreed in such event (and it shall be deemed and construed as a covenant running with the land) that the person succeeding to Landlord's ownership of said reversionary interest shall thereupon and thereafter assume, and perform and observe, any and ail of such covenants and obligations of Landlord.

27. MISCELLANEOUS

27.1 Separability. If any provision of this Lease or portion of such provision or the application thereof to any person or circumstance is for any reason held invalid or unenforceable, the remainder of the Lease (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

27.2 Captions. The captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Lease nor the intent of any provisions thereof.

27.3 Broker. Each party represents and warrants that it has not directly or indirectly dealt, with respect to the leasing of space in the Building, with any broker or had its attention called to the Demised Premises or other space to let in the Building, by any broker. Each party agrees to exonerate and save harmless and indemnify the other against any claims for a commission by any other broker, person or firm, with whom such party has dealt in connection with the execution and delivery of this Lease or out of negotiations between Landlord and Tenant with respect to the leasing of other space in the Building.

27.4 Governing Law. This Lease is made pursuant to, and shall be governed by, and construed in accordance with, the laws of the State of California.

27.5 Assignment of Lease and/or Rents. With reference to any assignment by Landlord or Prime Landlord of its interest in this Lease and/or the Rent payable hereunder, conditional in nature or otherwise, which assignment is made to or held by a bank, trust company, insurance company or other institutional lender holding a Mortgage on the Building, Landlord and Tenant agree:

(a) that the execution thereof by Landlord and acceptance thereof by such Mortgagee shall never be deemed an assumption by such Mortgagee of any of the obligations of the Landlord hereunder, unless such Mortgagee shall, by written notice sent to the Tenant, specifically otherwise elect; and

(b) that, except as aforesaid, such Mortgagee shall be treated as having assumed the Landlord’s obligations hereunder only upon foreclosure of such Mortgagee’s Mortgage and the taking of possession of the Demised Premises after having given notice of its intention to succeed to the interest of the Landlord under this Lease.

27.6 Memorandum of Lease. Neither party shall record this Lease; provided, however, that either party shall at the request of the other, execute and deliver a recordable memorandum of this Lease setting forth the parties to this

Lease, a description of the Demised Premises and the term of this Lease for recordation in the Official records of the County of San Mateo.

27.7 Sublease. Notwithstanding anything to the contrary herein, Landlord and Tenant acknowledge that this is a sublease and that Landlord derives its estate to the Demised Premises through the Prime Lease. Landlord represents and warrants that, as of the date hereof, Prime Landlord and Landlord are under common control. At such time as Landlord and Prime Landlord are no longer under common control, the responsibility for furnishing services, repairs, restoration and other similar functions of Landlord shall be performed by Prime Landlord, and Landlord shall be required to use reasonable efforts to enforce the provisions of the Prime Lease relating thereto, but without obligation to provide such services, repairs, restoration, and the like, and Prime Landlord, by its consent hereto, agrees that Tenant may enforce the provisions of the this Lease to provide such services directly against Prime Landlord. Landlord shall have the right, but not the obligation, to assign this Lease to Prime Landlord, and after such assignment this Lease shall no longer be a sublease, but rather a direct lease between Tenant and Prime Landlord. The effectiveness of this Lease is conditioned upon obtaining the consent of Prime Landlord to this Lease in the form attached hereto and made a part hereof as Exhibit E on or before December ___, 2001.

27.8 Holdover. If for any reason Tenant retains possession of the Premises or any part thereof after the termination of the Term or any extension thereof, such holding over shall constitute a tenancy from month to month, terminable by either party upon thirty (30) days prior written notice to the other party, and Tenant shall pay Landlord monthly rental during the month to month tenancy computed at 200% of the rent (including Yearly Fixed Rent and all additional rent) payable hereunder for the final month of the last year of the Term prior to such holding over. The month to month tenancy shall otherwise be on the same terms and conditions aa set forth in this Lease, as far as applicable.

27.9 Lease Amendments. Tenant acknowledges that amendments to this Lease may be required in connection with the financing of the Land or Building and Tenant hereby agrees that it will enter into any reasonable modifications requested by a mortgagee in connection with such financing, provided the same do not (a) increase the Monthly Fixed Rent or additional rents payable by Tenant or increase Tenant's financial obligations hereunder; (b) reduce or extend the Term hereof; (c) change the Permitted Use; or (d) otherwise materially impair Tenant's rights hereunder.

27.10 Sierra Point CCRs. This Lease shall be subject to the Amended and Restated Declaration of Covenants, Conditions and Restrictions for Sierra Point recorded in the Official Records of San Mateo on October 23, 1998, as Document No. 98-172218, as amended by that certain First Amendment to Amended and Restated

Declaration of Covenants, Conditions and Restrictions for Sierra Point recorded in the Official Records of San Mateo on August 6, 1999, as Document No. 1999-134787 (as amended, the "CCRs"). Tenant shall comply with the CCRs.

27.11 Financial Statements. Tenant shall furnish Landlord with complete audited financial statements within one hundred twenty (120) days after the close of each fiscal year of Tenant prepared by a certified public accountant (but not necessarily certified statements) and shall, upon written request from Landlord, provide copies of Tenant's quarterly unaudited financial statements within fifteen (15) days after Landlord's request.

28. SECURITY DEPOSIT

28.1 Security Deposit. Tenant has deposited with Landlord the Security Deposit described in Article 1 hereof as security for the faithful performance and observance by Tenant of the terms, provisions, covenants and conditions of this Lease, and it is agreed that if an Event of Default by Tenant exists in respect of any of the terms, provisions, covenants and conditions of this Lease, including, but not limited to, the payment of Rent, Landlord may use, apply or retain the whole or any part of the security so deposited to the extent required for the payment of any Rent or any other sum as to which there exists an Event of Default by Tenant or for any sum which Landlord may expend or may he required to expend by reason of Tenant's Event of Default in respect of any of the terms, provisions, covenants and conditions of this Lease, including, but not limited to, any damages or deficiency accrued before or after summary proceedings or other re-entry by Landlord. Upon the expiration or earlier termination of this Lease, and providing there exists no default or Event of Default hereunder, any remaining balance of the Security Deposit (including, without limitation, any and all interest accrued thereon) shall be returned by Landlord to Tenant after the date fixed as the end of the Term and not later than thirty (30) days after delivery of entire possession of the Premises to Landlord as provided hereunder. In the event of a sale of the Land and Building or leasing of the Building, of which the Premises form a part, Landlord shall have the right to transfer the security to the vendee or lessee and Landlord shall thereupon be released by Tenant from all liability for the return of such security, and Tenant agrees to look solely to the new Landlord for the return of said security, and it is agreed that the provisions hereof shall apply to every transfer or assignment made of the security to a new Landlord. Tenant further covenants that it will not assign or encumber or attempt to assign or encumber the monies deposited herein as security and that neither Landlord nor its successors or assigns shall be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. In the event Landlord applies pr retains any portion or all of the security deposited pursuant to the terms of this Section 28.1, Tenant shall forthwith restore the amount so applied or retained so that at all times the amount deposited shall be the full amount of the security deposit required at the relevant time.

Landlord shall not be responsible for the payment of any interest on the Security Deposit.

29. FURNITURE

The Premises includes nineteen (19) new modular offices and twenty nine (29) new workstations, which are the property of Landlord and must be returned to Landlord upon the termination of this Lease for any reason in good and first class condition, reasonable wear and tear and acts of God excepted.

IN WITNESS WHEREOF, Landlord and Tenant have caused this instrument to be executed under seal, all as of the day and year first above written.

MJ RESEARCH COMPANY, INC.	FLUIDIGM CORPORATION
By /s/ Illegible	By /s/ Illegible
Its President	Its VP MFG
title (duly-authorized)	title (duly-authorized)

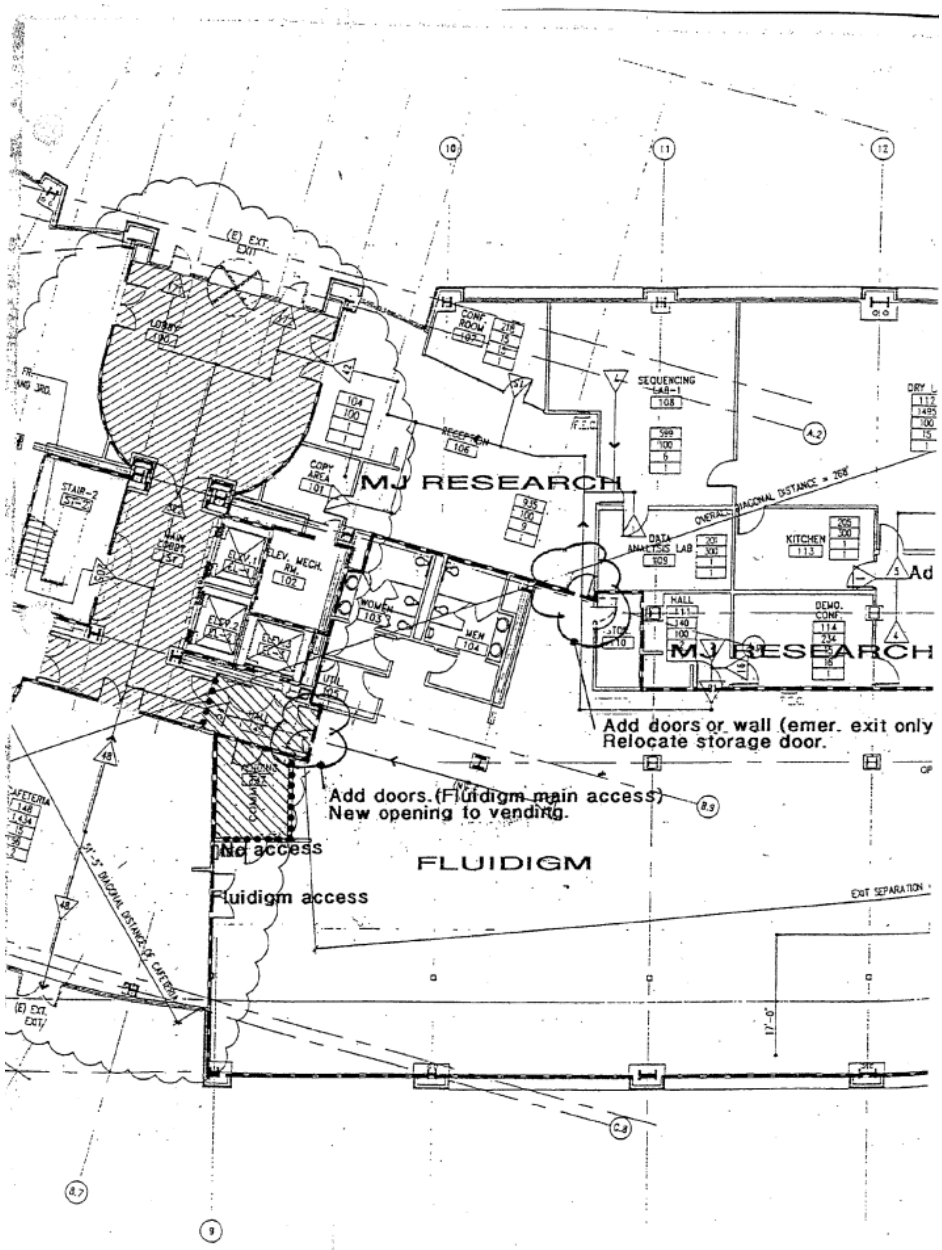
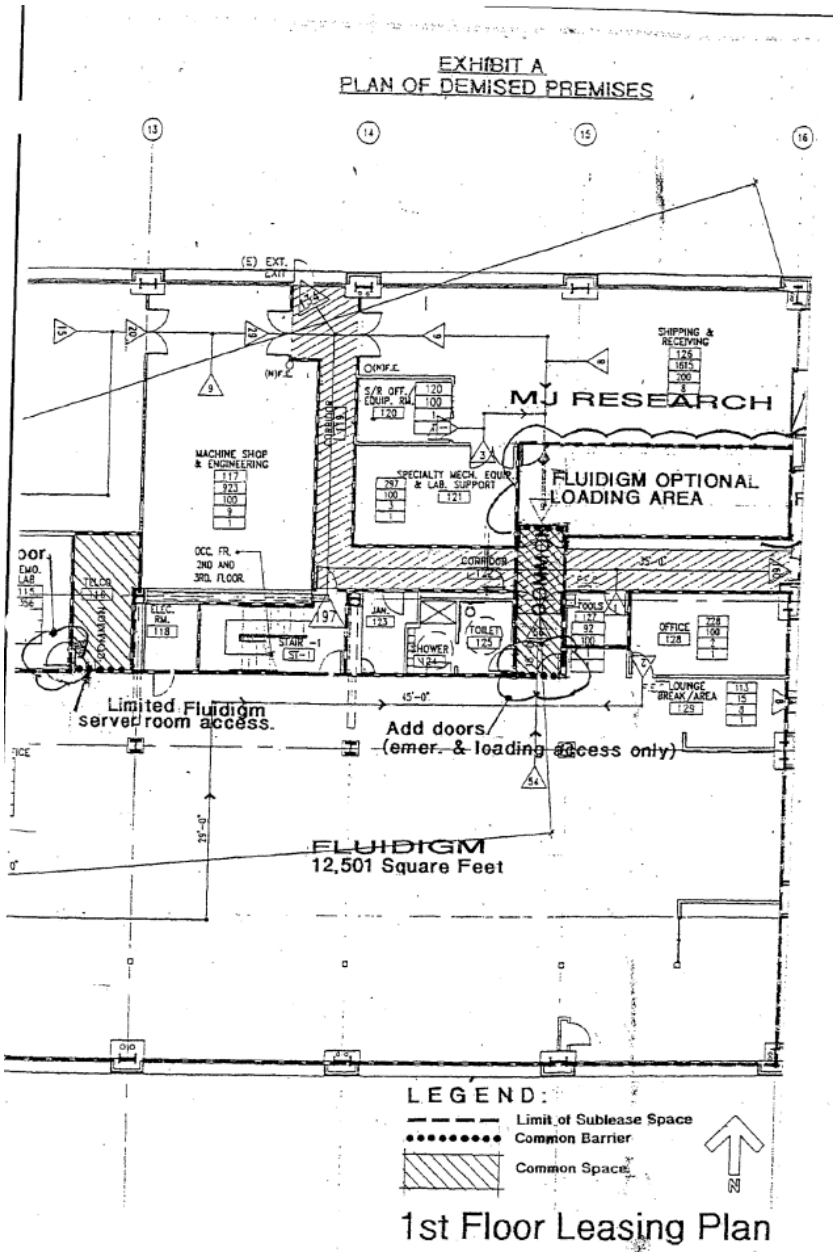

MJ RESEARCH
MJ RESEARCH
FLUIDIGM
Add doors or wall (emer. exit only
Relocate storage door.
Add doors. (Fluidigm main access)
New opening to vending.
No access
Fluidigm access
SEQUENCING LAB-1
108
DATA ANALYSIS LAB
109
KITCHEN
113
HALL
111
CONF. ROOM
107
RECEPTION
106
COPY AREA
101
LOBBY
100
WOMEN
103
MEN
104
ELEV. MECH. RM.
102
MAIN CIRCUIT
ELEV. 1
ELEV. 2
STAIR-2
STAIR-3
CAFETERIA
148
(E) EXIT
EXIT
EXIT SEPARATION
OVERALL DIAGONAL DISTANCE = 265'
51'-3" DIAGONAL DISTANCE OF CAFETERIA
17'-0"

EXHIBIT A
PLAN OF DEMISED PREMISES



1st Floor Leasing Plan

EXHIBIT B

CLEANING SCHEDULE

I. Premises

Daily on Business Days:

a. Empty all waste receptacles and ash trays and remove waste materials from the Premises.

b. Sweep and dust mop all uncarpefced areas using a dust-treated mop.

c. Vacuum all rugs and carpeted areas.

d. Hand dust and wipe clean with treated cloths all horizontal cleared surfaces including desk tops, office equipment, window sills, door ledges, chair rails and counter tops, within normal reach.

e. Wash clean all water fountains.

f. Upon completion of cleaning, all lights will be turned off and doors locked, leaving the Premises in an orderly condition.

Quarterly

Render high dusting not reached in daily cleaning to include:

a. Dusting all pictures, frames, charts, graphs and similar wall hangings.

b. Dusting all vertical surfaces, such as walls, partitions, doors and ducts.

c. Dusting of all pipes, ducts and high moldings.

II. Lavatories

Daily on Business Days:

a. Sweep and damp mop floors.

b. Clean all mirrors, powder shelves, dispensers and receptacles, bright work, flushometers, pipes and toilet seats.

c. Wash both sides of all toilet seats.

d. Wash all basins, bowls and urinals.

e. Dust and clean all powder room fixtures.

f. Empty and clean paper towel and sanitary disposal receptacles.

g. Remove waste paper and refuse.

h. Refill tissue holders, soap dispensers, towel dispensers, vending sanitary dispensers; materials to be furnished by Landlord,

i. A sanitizing solution will be used in all lavatory cleaning.

Monthly:

a. Machine scrub lavatory floors.

b. Wash all partitions and tile walls in lavatories.

III. Main Lobby, Elevators, Building Exterior and Corridors

Daily on Business Days:

a. Sweep and wash or spray buff all marble floors.

b. Sweep all entrance mats.

c. Clean elevators, wash or vacuum floors, wipe down walls and doors.

d. Spot clean any metal work surrounding building entrance doors.

Monthly:

All resilient tile floors in public areas to be treated equivalent to spray buffing.

IV. Window Cleaning

The outside of exterior wall windows will be washed once every three months, weather permitting, and the inside of exterior wall windows will be washed every six months.

V. Tenants requiring services in excess of those described above shall request same through Landlord, at Tenant's expense.

EXHIBIT C
RULES AND REGULATIONS

1. The sidewalks, entrances, passages, courts, elevators, vestibules, stairways, corridors or halls of the Building shall not be obstructed or encumbered or used for any purpose other than ingress and egress to and from the premises demised to any tenant or occupant.

2. No awnings or other projections shall be attached to the outside walls or windows of the Building without the prior consent of Landlord. No curtains, blinds, shades, or screens shall be attached or hung in, or used in connection with, any window or door of the premises demised to any tenant or occupant, without the prior consent of Landlord. Such awnings, projections, curtains, blinds, shades, screens, or other fixtures must be of a quality type, design and color, and attached in a manner, approved by Landlord.

3. No sign, advertisement, object, notice or other lettering shall be exhibited, inscribed, painted or affixed on any part of the outside or inside of the premises demised to any tenant or occupant or of the Building without the prior consent of Landlord. Interior signs on doors and directory tables, if any, shall be of a size, color and style approved by Landlord.

4. The sashes, sash doors, skylights, windows, and doors that reflect or admit light and air into the halls, passageways or other public places in the Building shall not be covered or obstructed, nor shall any bottles, parcels, or other articles be placed on any window sills.

5. No show cases or other articles shall be put in front of or affixed to any part of the exterior of the Building, nor placed in the halls, corridors, vestibules or other parts of the Building.

6. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags, or other substances shall be thrown therein.

7. No tenant or occupant shall mark, paint, drill into, or in any way deface any part of the Building or the premises demised to such tenant or occupant, except to the extent required for the mounting of pictures and other normal office fixtures. No boring, cutting or stringing of wires shall be permitted, except with the prior consent of the Landlord, and as Landlord may direct. No tenant or occupant shall install any resilient tile or similar floor covering in the premises demised to such tenant or occupant except in a manner reasonably approved by Landlord.

8. No bicycles, vehicles or animals of any kind (other than, animals allowed under the Permitted Uses) shall be brought into or kept in or about the premises demised to any tenant. Bicycles may be stored in racks, if any, furnished for such purpose by Landlord in a common area of the Property. No cooking shall be done or permitted in the Building (other than microwave use and coffee machines) by any tenant without the approval of Landlord. No tenant shall cause or permit any unusual or objectionable odors to emanate from the Premises demised to such tenant.

9. Without the prior consent of Landlord, no space in the Building shall be used for manufacturing, or for the sale of merchandise, goods or property of any kind at auction.

10. No tenant shall make, or permit to be made, any unseemly or disturbing noises or disturb or interfere with other tenants or occupants of the Building or neighboring buildings or premises whether by the use of any musical instrument, radio, television set or other audio device, unmusical noise, whistling, signing, or in any other way. Nothing shall be thrown out of any doors or windows.

11. Each tenant must, upon the termination of its tenancy, restore to Landlord all keys of stores, storage areas, offices and toilet rooms, either furnished to, or otherwise procured by, such tenant.

12. All removals from the Building, or the carrying in or out of the Building or the premises demised to any tenant, of any sales, freight, furniture, or bulky matter of any description must take place at such time and in such manner as Landlord or its agents may determine, from time to time. Landlord reserves the right to inspect all freight to be brought into the Building and to exclude from the Building all freight which violates any of the Building Rules or the provisions of such tenant's lease.

13. No tenant shall use or occupy, or permit any portion of the premises demised to such tenant to be used or occupied, as an office for a public stenographer, messenger service or typist, or as a barber or manicure shop, or as an employment bureau. No tenant or occupant shall engage or pay any employees in the Building, except those actually working for such tenant or occupant in the Building, nor advertise for laborers giving an address at the Building.

14. No tenant or occupant shall purchase spring water, ice, food, beverage, lighting maintenance, cleaning towels or other like service, from any company or person not approved by Landlord, such approval not unreasonably to be withheld.

15. Landlord shall have the right to prohibit any advertising by any tenant or occupant which, in Landlord's opinion, tends to impair the reputation of the

Building or its desirability as a building for offices, and upon notice from Landlord, such tenant or occupant shall refrain from or discontinue such advertising.

16. Landlord reserves the right to exclude from the Building, between the hours of 6:00 p.m. and 8:00 a.m. on Business Days and otherwise at all hours, all persons who do not present adequate identification or a pass to the building signed by the Landlord. Landlord will furnish passes to persons for whom any tenant requests such passes. Each tenant shall be responsible for all persons for whom it requests such passes and shall be liable to Landlord for all wrongful acts of such persons.

17. Each tenant, before closing and leaving the premises demised to such tenant at any time, shall see that all entrance doors are locked and windows closed.

18. Each tenant shall, at its expense, provide artificial light in the premises demised to such tenant for Landlord's agency, contractors, and employees while performing janitorial or other cleaning services and making repairs or alterations in said premises.

19. No premises shall be used, or permitted to be used, for lodging or sleeping, or for any immoral or illegal purpose.

20. There shall not be used in the Building, either by any tenant or occupant or by their agents or contractors, in the delivery or receipt of merchandise, freight or other matter, any hand trucks or other means of conveyance except those equipped with rubber tires, rubber side guards and such other safeguards as Landlord may require.

21. Canvassing, soliciting and peddling in the Building are prohibited and each tenant and occupant shall co-operate in seeking their prevention.

22. If the premises demised to any tenant become infested with vermin, such tenant, at its sole cost and expense, shall cause its premises to be exterminated from time to time, to the satisfaction of Landlord, and shall employ such exterminators therefor as shall be approved by Landlord.

23. No premises shall be used, or permitted to be used, at any time, without the prior approval of Landlord, as a store for the sale or display of goods, wares or merchandise of any kind, or as a restaurant, shop, booth, bootblack or other stand, or for the conduct of any business or occupation which predominantly involves direct patronage of the general public in the premises demised to such tenant, or for manufacturing or for other similar purpose.

24. No tenant shall move, or permit to be moved, into or out of the Building or the premises demised to such tenant, any heavy or bulky matter,

without the specific approval of Landlord. If any such matter requires special handling, only a person holding a Master Rigger's license shall be employed to perform such special handling. No tenant shall place, or permit to be placed, on any part of the floor or floors of the premises demised to such tenant, a load exceeding the floor load per square foot which such floor was designed to carry and which is allowed by law. Landlord reserves the right to prescribe the weight and position of safes and other heavy matter, which must be placed so as to distribute the weight.

25. The requirements of tenants will be attended to only upon application at the office of the Building. Building employees shall not be required to perform, and shall not be requested by any tenant or occupant to perform, any work outside of their regular duties, unless under specific instructions from the office of the managing agent of the Building.

EXHIBIT D

LIST OF ENVIRONMENTAL REPORTS GIVEN TO TENANT

1. ENVIRONMENTAL DUE DILLIGENCE REVIEW OF THE SIERRA POINT ASSOCIATES TWO PROPERTIES BRISBANE AND SOUTH SAN FRANCISCO, CALIFORNIA

Prepared for
Jon K. Wactor of Luce Forward, Hamilton and Scripps as attorney for potential purchaser Opus West Corporation, Plessanton, California

Prepared By
ENVIRON Corporation, Emeryville, California

Dated
February 4, 1998
Project No. 03-6248A

2. UPDATE OF ENVIRONMENTAL DUE DILLIGENCE REVIEW, PARCEL 10, SHORELINE COURT, SIERRA POINT, SOUTH SAN FRANCISCO, CALIFORNIA

Prepared For
MJ Sierra Point, LLC, South San Francisco, California

Prepared By
Harding Lawson Associates, Novato, California

Dated
December 14,1998
HLA Project No. 43142 001

3. FIRST AMENDED AND RESTATED DECLARATION OF COVENANTS, CONDITIONS AND ENVIRONMENTAL RESTRICTIONS RELATING TO ENVIRONMENTAL COMPLIANCE FOR SIERRA POINT

Recorded By
Luce, Forward, Hamilton and Scripps, San Diego, California

Dated
August 5, 1999

4. SUPPLEMENTAL ENVIRONMENTAL DUE DILLIGENCE, PARCEL 10, SHORELINE COURT, SIERRA POINT, SOUTH SAN FRANCISCO, CALIFORNIA

Prepared by
Harding Lawson Associates, Novato, California

Dated
August 24, 1999

FORM OF
CONSENT OF
MASTER LANDLORD

Mountain Cove Tech Center LLC ("Master Landlord"), the lessor, under that certain Lease, dated as of November , 1999 (herein the "Master Lease") with MJ Research, Incorporated., ("Landlord") as lessee, affecting that certain 141,677 square foot premises commonly known as the Mountain Cove Tech Center, South San Francisco, California ("Master Lease Premises"), hereby consents to the above First Amendment to Lease, relating to that certain Lease, dated as of December 1, 2001, by and between Landlord, as lessor, and Fluidigm Corporation, a California corporation ("Tenant"), as lessee (as so amended, the "Lease") subject to and in consideration of the covenants, representations and agreements set forth below in this Consent.

1. In consideration of such consent the Master Landlord, Landlord, and Tenant hereby agree and acknowledge that:

A. All capitalized terms not defined in this Consent shall have the meanings given to such terms in the First Amendment.

B. A true correct and complete copy of the Master Lease is attached as Exhibit F to the First Amendment;

C. As of the date hereof, the Master Lease is in full force and effect and, to the actual knowledge of Master Landlord there is no default (nor any circumstance which with the giving of notice or the passage of time would result in a default) by Landlord or Master Landlord under the Master Lease.

2. This Consent shall not be deemed to release the lessee under the Master Lease or be a consent to any other or future amendment of the Lease, nor a waiver of the restriction on assignment and subletting contained in the Master Lease.

3. So long as the Lease has not been terminated and notwithstanding anything to the contrary in the Master Lease or the Lease:

A. Master Landlord agrees to perform the obligations of Landlord under Sections 16(a) and 16(b) of the Lease.

B. (Intentionally Omitted)

C. The consent of Master Landlord for subleasing and assignment shall not be withheld if the consent of Landlord may not be withheld under Section 14 of the Lease.

D. The insurance required of Tenant under the Lease will satisfy any insurance requirement that may become applicable to Tenant as a consequence of the Master Lease.

E. Tenant shall not be liable for, have any duty to reimburse Master Landlord, Landlord, or any other party for, nor to perform any order, requirement, liability, claim, action, judgment, loss, cost or expense arising out of any hazardous substances located on or about the Premises (other than those hazardous substances placed on or about the Premises by Tenant or its agents, employees, contractors, invitees, successors or assigns.

4. The Lease is and remains subject and subordinate to the Master Lease and, except as herein provided, a termination of the Master Lease may, at the election of Landlord, result in a termination of the Lease. Notwithstanding the foregoing, if the Master Lease should terminate for any reason, other than because of a breach of Tenant's obligation under the Lease, a taking by eminent domain or subject to Section 16 of the Lease above, the election of Master Landlord not to restore the Building following a casualty, then this Lease shall become a direct lease between Landlord and Tenant on the terms and conditions of the Lease and this Consent (except that the Tenant shall look solely to the Landlord for return of the Security Deposit held by Landlord).

[SIGNATURES APPEAR ON NEXT PAGES]

IN WITNESS WHEREOF, Landlord has caused this instrument to be executed effective as of the day and year first above written.

MOUNTAIN COVE TECH CENTER LLC
a California limited liability company

By _____
Name: _____
Title: _____

[SIGNATURES CONTINUE ON FOLLOWING PAGES]

IN WITNESS WHEREOF, Landlord has caused this instrument to be executed effective as of the day and year first above written.

MJ RESEARCH, INCORPORATED,
a Massachusetts corporation

By _____
Name: _____
Title: _____

[SIGNATURES CONTINUE ON FOLLOWING PAGES]

AGREED AND ACCEPTED:

FLUIDIGM CORPORATION;
a California corporation

By _____
Name: _____
Title: _____

By _____
Name: _____
Title: _____

First Amendment to Sublease

This First Amendment made as of this 25th day of March, 2004 between MJ Research, Incorporated ("Landlord") and Fluidigm Corporation ("Tenant").

RECITALS

Landlord and Tenant are parties to a certain Sublease dated December 1st, 2001 (the "Lease") with respect to space on the first floor at 7000 Shoreline Court, South San Francisco, California (the "Building"). The parties agree that the Lease was dated as of December 1, 2001. The parties wish to amend the Lease by (i) amending the rent and term, (ii) adding on April 1, 2004 an additional 6,323 rentable square feet to the first floor space, bringing the total of first floor space to 18,824 rentable square feet, and (iii) adding 10,720 rentable square feet on the second floor (the "Second Floor Space"). All of the existing space currently leased by Tenant and the new space to be added on the first and second floors are located on the east wing of the Building. This First Amendment to Sublease is sometimes hereinafter called the "Amendment".

In consideration of the mutual promises and covenants herein made, the parties hereby agree to amend the Lease as follows:

1. First Floor Space. Effective April 1, 2004, the additional space on the first floor comprising 6,323 rentable square feet shown as on the attached Exhibit A is added to the Premises, and the total first floor space leased by Tenant will be 18,824 rentable square feet. The new first floor space is leased in an as-is condition, provided that on or before April 1, 2004, Landlord will, at its expense, install up to two fume hood exhaust connections and ducting into the dry lab area in locations designated by Tenant. Additionally, Landlord and Tenant agree to share the cost of an air compressor and air dryer installation on or before June 1, 2004 pursuant to specifications mutually approved by Landlord and Tenant, which approval shall not be unreasonably withheld or delayed, to be located on the first floor (up to a total maximum cost of $20,000.00) (i.e., $10,000 each), the use of which compressor and dryer system shall be equally shared between Landlord and Tenant. The location of the exhaust connection, air compressor and air dryer system are set forth on Exhibit A attached hereto. Said air compressor and dryer system shall remain the property of the Landlord at the expiration of this Lease. Landlord hereby consents to Tenant making the installations set forth on Exhibit B-l at Tenant's sole cost and expense.

2. Term. The term of the Lease is extended so as to end on December 31, 2007.

3. Second Floor Space.

3.1 Effective on the Second Floor Term Commencement Date (as that term is hereinafter defined) the Premises shall also include the 10,720 rentable square feet on the second floor shown on Exhibit B-l attached hereto being the Second Floor Space. The Second Floor Space shall be built out ("Landlord's Work") on or before the Second Floor Term Commencement Date by Landlord in accordance with the outline specifications attached as Exhibit B-2 (the "Outline Specifications") and the architectural floor plan attached as Exhibit B-l and the "Final Second Floor Plans" as described below. Attached to this Amendment as Exhibit B-l is the preliminary architectural layout of the Second Floor (the "Second Floor Plans") approved by Landlord and Tenant. Landlord shall develop a final architectural floor plan (the "Final Second Floor Plans") for Tenant's review and approval, which approval shall not be unreasonably withheld or delayed and which shall be exercised in accordance with this Section 3.1. Said plan shall be consistent with and a logical extension of Exhibit B-l, the Outline Specifications and build-out of the East wing. Tenant may require modifications to Exhibit B-l with respect to open work areas and perimeter offices (but not lab locations) provided such modifications (a) as to perimeter offices, have walls aligned with window mullions, and (b) otherwise are consistent with the Outline Specifications. Finishes and colors shall be as selected by Landlord and shall be generally consistent with those in the East wing of the Building. Tenant shall within ten (10) days after presentation by Landlord of the proposed final architectural Second Floor Plan, respond with any comments or requested changes. Tenant shall also cooperate with Landlord in an informal review process and shall meet with Landlord or its architect from time to time as reasonably requested by Landlord. When the Second Floor Plans have been so approved by the Tenant as provided herein, they shall be deemed the Final Second Floor Plans and any clarifications or changes to the Final Second Floor Plans shall require the written approval of Landlord and Tenant, which approvals shall not be unreasonably withheld provided the same does not materially delay completion of Landlord's Work (or the requesting party bears the rental expense for such delay) or increase the cost thereof (or the party requesting the change pays the additional cost thereof) or interfere with the intended use of the Second Floor Space by Tenant. The completed working or construction drawings and plans shall be logical evolutions of the Final Second Floor Plans; however, Tenant agrees that its sole approval rights hereunder shall be with respect to the architectural floor plan, not complete working or construction drawings and plans.

3.2 Landlord agrees to use diligent efforts to substantially complete Landlord's Work on or before January 1, 2005, the Anticipated Second Floor Term Commencement Date, but except as hereinafter set forth, shall have no liability to Tenant if the actual Second Floor Term Commencement Date occurs later than January 1, 2005. If for reasons other than those beyond the control of Landlord, the Second Floor Space is not ready for occupancy by June 1, 2005, Tenant shall receive a credit against the Rent payable for the remainder of the Premises equal to one (1)

day of free rent for the Second Floor Space for each day of such delay in addition until the Second Floor space is deemed ready for occupancy as provided herein, provided, however, that the June 1, 2005 date shall be extended one day for each day that completion of the Second Floor Space is actually delayed because of (a) delays caused by change orders requested by Tenant after the Final Second Floor Plans have been approved by Tenant as hereinbefore provided, (b) the failure of Tenant to respond in a timely manner to the proposed Final Second Floor Plans as required above, or (c) other acts of omissions of Tenant which are not corrected by Tenant within 48 hours after notice to Tenant that the same is delaying the work. Landlord shall have access, as needed, to Tenant's space on the first floor for purposes of performing Landlord's work, provided such access shall not unreasonably interfere with the conduct of Tenant's business. Landlord shall use reasonable efforts to minimize disruption to Tenant in connection with said construction, but shall not be deemed in violation of the covenant of quiet enjoyment or other provision of the Lease by virtue of said construction activities, provided such construction does not unreasonably interfere with the conduct of Tenant's business.

3.3 The Second Floor Term Commencement Date shall occur on the date on which (a) Landlord's Work shall have been substantially completed in accordance with the Final Second Floor Plans as the same may be modified in accordance with Section 3.1 (with the exception of minor items (and adjustment of equipment and fixtures) which do not create and can be completed without material interference to Tenant's use of the Premises), all as certified by Landlord, (b) a temporary or final certificate of occupancy shall have been issued by the City of South San Francisco for the Second Floor Space permitting Tenant to occupy such space for the conduct of its business; and (c) all utilities are hooked up and all services to be provided by Landlord are available to the Second Floor Space. Notwithstanding the foregoing, the Second Floor Term Commencement Date shall be deemed to occur if all of the conditions to the Second Floor Commencement Date have been fulfilled, except that (i) Landlord has not been able to complete items of Landlord's Work as describe in subpart (a) of the preceding sentence, solely because of work or improvements performed by Tenant or to be performed by Tenant are not completed, and/or (ii) a Certificate of Occupancy cannot be obtained due solely because work or alterations performed by Tenant, or which should have been performed by Tenant, have not been completed or properly completed. If such substantial completion has occurred and the Second Floor Term Commencement Date is a date prior to January 1, 2005, Tenant may by written notice to Landlord, defer occupancy of the Second Floor Space and the Second Floor Term Commencement Date to January 1, 2005 or may elect to occupy the Second Floor Space, in which case rent shall commence upon such occupancy of the Second Floor Space for the conduct of its business.

3.4 If the Landlord is unable to give possession of the Second Floor Space on the originally stated Anticipated Second Floor Term Commencement Date to the extent of delays caused by, or chargeable to, Tenant or anyone employed by Tenant,

including without limitation, change orders requested by Tenant or any other actions or inactions by Tenant or anyone employed by Tenant in violation of this Lease, Tenant's failure to complete work or improvements to be performed by Tenant in the Premises which prevents or delays Landlord in performing or completing any construction or work to be performed by Landlord or its contractors, including without limitation Landlord's Work, Tenant shall pay to Landlord for each day of such delay actually delays the Second Floor Commencement Date beyond January 1, 2004, an amount equal to one day's Annual Fixed Rent, provided, however that such additional rent for change orders shall not exceed the maximum amount of delay set forth in any change order approved by Tenant. Any payments due Landlord under this clause shall be paid within five (5) days of the invoice from Landlord stating the charge.

3.5 Landlord shall complete all incomplete punch-list items and other defective or incomplete Landlord's Work with due diligence and will use good faith efforts to complete all such incomplete items as soon as reasonably practicable, but within sixty (60) days after the Second Floor Term Commencement Date. Tenant shall permit Landlord access to the Premises for purposes of performing such work, which work may, at Landlord's option, be completed during business hours on business days, provided such work does not unreasonably interfere with the conduct of Tenant's business.

4. Option to Extend.

4.1 Provided Tenant gives at least 270 days prior written notice of its election to extend, time being of the essence, Tenant is not in default under the Lease after any applicable notice and grace period, and Tenant has caused the final expiration date of the letter of credit referred to in Section 6 to be extended to March 31, 2011, Tenant is hereby granted the option to extend the Term for an additional three (3) years commencing January 1, 2008 at a fixed rent which is the greater of (a) 103.5% of the fixed rent rate in effect (without abatement) during December, 2007, and (b) ninety five percent (95%) of fair market rent for the Premises as of the commencement of the extension period. The fixed rent for said option term shall increase by three and one-half percent (3.5%) (compounded) on January 1, 2009 and on January 1, 2010.

4.2 If the parties are unable to agree upon a fair market rent prior to four (4) months before the commencement of the option term, the matter shall be referred to appraisal as set forth in the following sections.

4.3 Whenever the issue of fair market rent shall be referred to appraisal, such appraisal shall be by three disinterested appraisers, one to be appointed by the Landlord, one to be appointed by the Tenant and the third to be appointed by the two appraisers so named. Within thirty (30) days after the selection of the third appraiser, the three appraisals shall be added together and their total divided by

three; the resulting quotient shall be the fair market rent for the Premises. If, however, the low appraisal and/or the high appraisal are more than ten (10%) percent lower and/or higher than the middle appraisal, the low appraisal and/or high appraisal shall be disregarded, as applicable. If only one appraisal is disregarded, the remaining two appraisals shall be added together and their total divided by two; the resulting quotient shall be the fair market rent for the Premises. If both the low appraisal and the high appraisal are disregarded as stated in this paragraph, the middle appraisal shall be the fair market rent of the Premises. Each party shall pay the costs of the appraiser selected by such party, and the parties shall share equally the cost of the third appraiser. Each individual appraiser shall have at least ten years of experience in appraising fair market rents of comparable properties and shall hold one or more of the following designations: MAI of the American Institute of Real Estate Appraisers, SREA from the Society of Real Estate Appraisers or ASA from the American Society of Appraisers.

4.4 If the fair market rental value per year is not determined prior to the commencement of the option term, the Tenant shall pay Fixed Rent as though the Fixed Rent was that Fixed Rent in effect (without abatement) during the last year of said preceding lease year period until such determination has been made. Following such determination, the Tenant shall promptly pay the Landlord the difference, if any, between the aggregate rent which would have been paid during said period and the aggregate rent actually paid. Thereafter, all rent shall be computed and paid in accordance with Section 4.2.

5. Rent. The annual fixed rent for the Premises, shall, commencing April 1, 2004, be $3.00 per rentable square foot per month. Rent shall increase by three and one half percent (3.5%) compounded on the first day of each April commencing April 1, 2005. Rent for the Second Floor Space shall commence, on a prorated basis, as of Second Floor Term Commencement Date. Rent for the option term shall be as set forth in Section 4. The above rent is inclusive of (and Landlord shall provide to Tenant) utilities, maintenance, janitorial services, window washing, access cards, real estate (but not personal property) taxes, telephone and data wiring infrastructure currently in the Building or as set forth on Exhibit B or constructed by Landlord pursuant to Section 3, and other services to be provided by Landlord as set forth in the Lease as amended hereby. The cleaning specifications attached to the Lease as Exhibit B are amended to provide that cleaning of the Premises shall be done every other business day and window washing every six (6) months.

6. Security Deposit. The security deposit is hereby increased to $250,000.00 and shall take the form of a Letter of Credit. Section 28 of the Lease is hereby amended and replaced with the following new Section 28:

28. Security Deposit.

(a) Amount. Simultaneously with the execution of this Lease, Tenant shall deposit with Landlord the sum of Two Hundred Fifty Thousand and No/100 Dollars ($250,000.00) as a security deposit.

(b) Security. Such security deposit shall be considered as security for the payment and performance by Tenant of all of Tenant's obligations, covenants, conditions and agreements under this Lease except as hereinafter provided.

(c) Form. The security deposit shall, as of the date hereof, be a cash deposit given to Landlord. Tenant shall use best efforts to deliver to Landlord by April 30, 2004, an irrevocable letter of credit (the "Letter of Credit"), in the amount of Two Hundred Fifty Thousand and No/100 Dollars ($250,000.00). Thereafter, Tenant shall maintain the Letter of Credit in full force and effect throughout the entire term of this Lease and until ninety (90) days after the end of the calendar year in which the Expiration Date occurs, and shall cause the Letter of Credit to be renewed or replaced not less than thirty (30) days prior to its expiry date, subject to the terms and conditions of Section 28(g) of this Lease. Upon delivery of said letter of credit, the initial cash deposit shall be refunded by Landlord. The Letter of Credit shall (i) be unconditional, irrevocable, transferable, payable to Landlord on sight at a financial institution located in San Francisco, California, in partial or full draws, (ii) be substantially in the form attached hereto and incorporated herein as Exhibit C, and otherwise be in form and content acceptable to Landlord and Tenant, (iii) shall be issued by Silicon Valley Bank or another financial institution reasonably acceptable to Landlord which meets the asset and credit rating tests set forth in Section 28(d)(2)(i)), and (iv) contain an "evergreen" provision which provides that it is automatically renewed on an annual basis unless the issuer delivers sixty (60) days' prior written notice of cancellation to Landlord and Tenant. Any and all fees or costs charged by the issuer in connection with the Letter of Credit shall be paid by Tenant.

(d) Right to Draw.

(1) In the event of any default (after the expiration of any applicable cure period expressly set forth in this Lease, except in the event a bankruptcy has been filed by or with respect to Tenant; in which case, no such notice and cure period shall be required) by Tenant hereunder, Landlord shall have the right, but shall not be obligated, to draw upon the Letter of Credit in whole or in part and apply the proceeds thereof as may be necessary to compensate Landlord for any default under this Lease on the part of Tenant, and Tenant, within fifteen (15) days after Landlord delivers written demand therefore to Tenant, shall forthwith either restore the Letter

of Credit to (or, if Tenant is unable to obtain a letter of credit, delivery to Landlord a cash security deposit in) the amount required to be maintained under this Lease; provided, however, neither the application of the security deposit as set forth above nor the restoration by Tenant of such security deposit shall operate to cure such default or to estop Landlord from pursuing any remedy to which Landlord would otherwise be entitled. Should Landlord elect to draw the full amount of the Letter of Credit as permitted by this Lease upon a default by Tenant, Tenant expressly waives any right it might otherwise have to prevent Landlord from drawing on the Letter of Credit and agrees that an action for damages and not injunctive or other equitable relief shall be Tenant's sole remedy in the event Tenant disputes Landlord's claim to any such amounts. At the expiration of the Term, Landlord shall use reasonable efforts to assess any damage to the Premises and notify Tenant of the same within sixty (60) days after said expiration.

(2) In addition to Landlord's rights set forth in Section 28(d)(l) above, Landlord shall have the right to draw upon the Letter of Credit in any of the following circumstances: (i) if the total assets of the issuer of the Letter of Credit are at anytime less than Three Billion Dollars ($3,000,000,000.00), or such issuer has a Standard & Poor's commercial paper rating of less than A-l (provided if at anytime the current Standard & Poor's commercial paper rating system is no longer in existence, a comparable rating of a comparable commercial paper rating system from a comparable company shall be selected by Landlord, in its reasonable discretion, for purposes of this Section 28) and Tenant fails to deliver to Landlord a replacement Letter of Credit complying with the terms of this Lease within thirty (30) days of request therefore from Landlord, (ii) the issuer of the Letter of Credit shall enter into any supervisory agreement with any governmental authority, or the issuer of the Letter of Credit shall fail to meet any capital requirements imposed by applicable law, and Tenant fails to deliver to Landlord a replacement Letter of Credit complying with the terms of this Lease within thirty (30) days of request therefore from Landlord, or (iii) if Tenant fails to provide Landlord with any renewal or replacement Letter of Credit complying with the terms of this Lease at least thirty (30) days prior to expiration of the then-current Letter of Credit. In the event the Letter of Credit is drawn upon due solely to the circumstances described in the foregoing clauses (i), (ii) or (iii) or in an amount exceeding the damages owing by Tenant to Landlord on account of a default, the amount drawn shall be held by Landlord (with interest payable thereon at the prevailing money market rate of the financial institution in which such funds are deposited) as a security deposit to be otherwise retained, expended or disbursed by Landlord for any amounts or sums due under this Lease to which the proceeds of the Letter of Credit could have been applied pursuant to this Lease, and Tenant shall be liable to Landlord for restoration, in cash or

Letter of Credit complying with the terms of this Lease, of any amount so expended to the same extent as set forth in this Section 28.

(e) Right to Assign. Landlord shall have the right, with Tenant's written consent, to assign its interest in the security deposit and proceeds thereof to any assignee of Landlord's interest in the Lease Premises and/or the Prime Lease, provided that such consent by Tenant shall not be unreasonably withheld, conditioned or delayed and Tenant shall respond in writing to Landlord's request for such consent within ten (10) days after Landlord delivers to Tenant a written request for such consent, and provided further that no such consent shall be required for assignment to a corporation or other entity controlling, controlled by or under common control with Landlord. In the event of any such assignment, Landlord shall have the right to transfer the security deposit to such assignee, in which event Tenant shall look solely to the new Landlord for the return of the security deposit and Landlord shall thereupon be released from all liability to Tenant for the return of such security deposit, provided that the Landlord has transferred such security deposit to such assignee and such assignee has actually received such security deposit. If the security deposit is in the form of a Letter of Credit and if requested by any such assignee, Tenant shall cooperate with Landlord at no material cost to Tenant to obtain an amendment to the Letter of Credit which names such assignee as the beneficiary thereof in lieu of Landlord. This security deposit shall not be transferable by Tenant to any subtenant, but shall be held and returned directly to Tenant.

(f) Reservation of Rights. No right or remedy available to Landlord as provided in this Section 28 shall preclude or extinguish any other right to which Landlord may be entitled. In furtherance of the foregoing, it is understood that in the event Tenant fails to perform its obligations hereunder, any amounts recovered from the security deposit shall not be deemed liquidated damages. Landlord may apply such sums to reduce Landlord's damages and such application of funds shall not in any way limit or impair Landlord's right to seek or enforce any and all other remedies available to Landlord to the extent allowed hereunder, at law or in equity.

(g) Return of Security Deposit. Unless already returned to Tenant pursuant to Section (f) above, then upon the expiration of the term hereof, Landlord shall (provided that Tenant is not in default under the terms hereof) return and pay back any security deposit to Tenant not previously returned to Tenant, less such portion thereof as Landlord shall have retained to make good any default by Tenant with respect to any of Tenant's aforesaid obligations, covenants, conditions or agreements.

7. Definitions. Consistent with the foregoing, certain defined terms as set forth in the reference data comprising Article 1.1 are hereby amended. Specifically, the Premises shall be, until April 1, 2004, the space shown on Exhibit A to the Lease. From and after April 1, 2004, the Premises shall be the space on the first floor set forth on Exhibit A attached hereto, and from and after the Second Floor Term Commencement Date, the Premises shall also include the Second Floor Space. The rentable area of the Premises shall be 12,501 square feet up until April 1, 2004; 18,824 square feet from April 1, 2004 until the Second Floor Term Commencement Date, and 29,544 rentable square feet from and after the Second Floor Term Commencement Date. The Termination Date shall be December 31, 2007, and the term of this Lease shall be adjusted accordingly; provided, however, that the Termination Date and Term may be extended in accordance with this Lease.

8. Conference Room. The fee for use of the conference room, as set forth in Section 2.5 of the Lease, is reduced to $500.00 for a full day and $300.00 for a half day.

9. Maintenance, Repairs and Liability. Notwithstanding anything to the contrary in the Lease, Tenant shall have no obligation to indemnify, defend, or reimburse Landlord or Master Landlord, with respect to, nor any obligation to perform, construct, repair, maintain or make any improvement, (i) to the extent necessitated by the acts or omissions of Landlord, Master Landlord, any other occupant of the building or the project, or their respective agents, employees or contractors, (ii) occasioned by the exercise of the power of eminent domain or any peril that would be covered by the customary form of so-called “special form, extended coverage” casualty insurance, (iii) required as a consequence of any Law (other than those only applicable to the Premises because of Tenant’s peculiar use of the Premises or alterations to the Premises by Tenant), (iv) occasioned by any legal violation of the Premises or the Project as of the date Tenant took (or takes) possession of the affected portion of the Premises, (iv) for which Landlord or Master Landlord has a right of reimbursement from any insurer or other third party, (vi) to the structure or common areas of the building or the project or the heating, ventilating, air conditioning, electrical, water, sewer, and plumbing systems serving the Premises, the building, or the project not due to the fault or neglect of Tenant, (vii) to any portion of the Building or the Project outside of the demising walls of the then existing Premises not due to the fault or neglect of Tenant, (viii) occasioned by the presence of any Hazardous Material on or about the Premises, other than Hazardous Materials introduced to the Premises by Tenant or its invitees, employees, agents or contractors or those for whom Tenant is legally responsible, (ix) which is a repair or modification to the Premises or the Project not caused by the fault or neglect of Tenant and which must be capitalized under generally accepted accounting rules, or (x) which is expressly the obligation of the Master Landlord under the Prime Lease or of the Landlord under this Lease.

10. Signage. At no additional cost, Tenant shall have permission for one (1) lobby sign of the size and style set forth on Exhibit E, plus signage on any building directory comparable to signs for other tenants. Tenant may, upon payment of a monthly fee in amount mutually approved by Tenant and Landlord not exceeding $2,500 per month, maintain an exterior sign in accordance with plans approved by Landlord. At the expiration of the term, said signs shall, at Tenant's expense, be removed by Landlord, who shall restore the surfaces of the building (interior or exterior) to their condition prior to the installation of said signage, and Tenant shall promptly reimburse Landlord for the reasonable cost therefor.

11. Permitted Uses. The Permitted Uses are amended to include research and development, light manufacturing, office, and related ancillary uses as permitted by applicable law and the Master Lease, provided the same are permitted by the Allowable Class Facilities set forth in Section 5.3(c) of the Lease.

12. Access & Egress. Notwithstanding anything to the contrary in this Lease, with respect to access and egress to, through and from the Premises the parties agree as follows:

(A) A common data room is located within the Premises on the first floor of the Building. Only limited representatives of Landlord reasonably approved by Tenant shall have 24 hour access to the data room through the Premises. Other representatives of Landlord shall have access to the data room during normal business hours, provide reasonable email or telephonic notice is provided to Tenant and a representative of Tenant is allowed to be present during such entry. All representatives of Landlord accessing the data room through the Premises shall comply with Tenant's reasonable security requirements and shall minimize, to the extent reasonably possible, any interference with Tenant's use of the Premises as a consequence of such access.

(B) Tenant will have card key access to the data room on the first floor. Said access shall be in common others entitled thereto as described above. Any servers or other equipment installed by Tenant must be approved by Landlord, which approval shall not be unreasonably withheld.

(C) Landlord shall arrange for reasonable access to the second floor freight elevator upon reasonable telephonic or email notice. Such access shall require escort by building management.

(D) Tenant may also use the other elevator serving the second for delivery of its operating materials and other freight deliveries.

13. Energy Conservation. Tenant understands and recognizes that the Building is designed and operated as an energy efficient building. Energy efficiency includes, without limitation, the use of electric conservation methods such as

motion detectors and timers to avoid unnecessary use of electric lights and other equipment after business hours. Tenant agrees that it will not alter, remove or render inoperative any such energy saving devices without the prior written consent of Landlord.

14. Subleasing Profit. Section 14.3(d) of the Lease is amended to delete fifty (50%) percent and substitute therefor sixty two and one half (62.5%) percent.

15. Landlord Access. Section 15.2 of the Lease is modified to permit Landlord twenty-four (24) hour card access to the Premises for purposes of maintenance, cleaning, repairs and the provision of other services required to be provided by Landlord; provided, however that access to the data room is allowed solely pursuant to Section 12.A. Any such entry by Landlord shall comply with Tenant's security regulations and shall minimize to the extent reasonably possible any interference with Tenant's use of the Premises.

16. Furniture. Landlord will provide the modular offices and work stations for the Second Floor Space as set forth in Exhibit B-2. The provision of said offices and work stations shall be subject to the provisions of Section 29 of the Lease.

17. Damage and Destruction. Notwithstanding anything to the contrary in the Lease, in the event the Premises or any space in the building being subleased by Tenant from Genome Therapeutics Corporation ("Genome") or its successor (or access thereto or systems serving the same) are the subject of a fire or other casualty that interferes with the use and enjoyment by Sublessee of a material portion of such space, and such interference is not reasonably likely to be (or has not been) remedied and tenantable occupancy restored (in the case of said space subleased from Genome, to either a cold shell or cold shell plus TI, all as set forth in Sections 16(a) and 16(b) of the lease between Landlord and Genome) after one (1) year (or such longer period as has been agreed to in writing between Landlord and/or Master Landlord and Tenant or is attributable to unavoidable delays) from the date such interference was first experienced, Tenant may, by notice to Landlord terminate this Lease by notice given within 30 days after the expiration of said one year (or mutually agreed longer) period. Sections 16(a) and 16(b) of the Lease are modified to provide that the parties understand that Master Landlord, not Landlord, is the party responsible for restoration after a casualty, that Master Landlord shall be the party to make the determination as to the estimated time to restore after a casualty. Sections 16(a) — (c) of the Lease are deleted and replaces with the following:

(a) If the Demised Premises, or any part thereof, shall be damaged by fire or other casualty, Tenant shall give prompt notice thereof to Landlord, and Landlord, upon receiving such notice and the insurance proceeds for such casualty, shall proceed in a commercially reasonable manner, subject to unavoidable delays,

to repair, or cause to be repaired, such damage to the extent hereinafter provided. If the Demised Premises or any part thereof shall be rendered untenantable by reason of such damage, whether to the Demised Premises or to the Building, Yearly Fixed Rent shall proportionately abate for the period from the date of such damage to the date when the Demised Premises shall have been restored by Landlord.

(b) If, as a result of fire or other casualty, the whole or a substantial portion of the Building is rendered untenantable, within ninety (90) days from the date of such fire or casualty, Landlord shall notify Tenant of its opinion of the time required to restore the Demised Premises, taking into account a reasonable time for adjusting loss and obtaining plans and permits for restoration. If in Landlord's opinion the Demised Premises cannot be made tenantable within one (1) year after such event, Landlord, within ninety (90) days from the date of such fire or casualty, may terminate this Lease by notice to Tenant, specifying a date not less than thirty (30) nor more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. In addition, if in Landlord's opinion said estimated time for restoration exceeds one (1) year and Landlord does not elect to terminate this lease, Tenant shall, by notice given to Landlord within fifteen (15) days of Landlord's notice as aforesaid, elect (a) to terminate this Lease, or (b) accept Landlord's estimated restoration period (the "Longer Restoration Period"). If Tenant accepts a Longer Restoration Period, Tenant's right to terminate as hereinafter provided shall be effective only if actual restoration takes more than 60 days beyond such estimated Longer Restoration Period, such termination to be elected within 30 days after the expiration of said Longer Restoration Period plus 60 days. If neither Landlord or Tenant elects to terminate this Lease as provided above, then Landlord shall (to the extent that proceeds of insurance required to be carried by Landlord, net of any portion thereof retained by a Mortgagee, plus any sums contributed by Tenant or any subtenant of Tenant, are made available for such purpose) proceed with diligence to repair the damage to the Demised Premises and all facilities serving the same, if any, which shall have occurred, and the Yearly Fixed Rent shall meanwhile proportionately abate, all as provided in Paragraph (a) of this Section. However, if such damage is not repaired and the Demised Premises restored to substantially the same condition as they were prior to such damage within one (1) year (or, if elected, the Longer Restoration Period plus 60 days) from the date of such damage, Tenant, within thirty (30) days from the expiration of such one (1) year period (or, if elected, the Longer Restoration Period plus 60 days) or from the expiration of any extension thereof by reason of the delays set forth in the following sentence, may terminate this Lease by notice to Landlord, specifying a date not more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. The period within which the required repairs may be accomplished shall be extended by the number of days, lost as a result of unavoidable delays, which term shall be defined to mean all delays referred to in Article 24.

(c) If the Demised Premises shall be rendered untenantable by fire or other casualty and less than two (2) years would remain left in the Term after Landlord's estimated date of completion of restoration, Landlord may terminate this Lease effective as of the date of such fire and other casualty upon notice to Tenant given within ninety (90) days after such fire and other casualty. Notwithstanding the foregoing to the contrary, in the event Landlord exercises the foregoing termination right, if Tenant has available to it the option to extend and validly exercises said option, Tenant may defeat said termination notice by the valid exercise of said option term so as to add an additional five years on to the Term of this Lease.

18. Alterations and Additions. Section 10 of the Lease is amended to add, after the second sentence thereof, the following:

"Notwithstanding the foregoing, Landlord's consent shall not be required for any alteration, addition or improvement that either (a) costs less than Ten Thousand Dollars ($10,000.00) or (b) satisfies all of the following criteria: (i) is of a cosmetic nature such as painting, wallpapering, hanging pictures and installing carpeting, (ii) is not visible from the exterior of the Premises or Building, and (iii) will not affect the systems or structure of the Building, provided, however, in any such instance Tenant provides plans and specifications for such work not less than ten (10) days before commencing such work.

In addition, Landlord agrees to advise Tenant, upon request, which alterations and additions to be made by Tenant Landlord will require to be so removed at the end of the Term.

19. Ratification. Except as modified herein, the Lease is hereby ratified and confirmed in full force and effect. To the best of their knowledge, neither Landlord nor Tenant are aware of any default by the other party in the terms and conditions of this Lease. Any defined term used herein and not specifically defined herein shall have the meaning ascribed to it in the Lease.

20. Exhibits. Attached hereto and made a part hereof are:

Exhibit A	—	First Floor Plan
Exhibit B-l	—	Second Floor Plan
Exhibit B-2	—	Outline Specifications for Second Floor
Exhibit C	—	Form of Letter of Credit
Exhibit D	—	Permitted Signage
Exhibit E	—	Master Lease

Executed under seal as of this 25th day of March 2004.

MJ RESEARCH, INCORPORATED,
a Massachusetts corporation

By: /s/ Illegible
Name: Illegible
Title: VP Finance

Fluidigm Corporation

By: /s/ Gajus Worthington
President

EXHIBIT A
FIRST FLOOR PLAN

[Diagram depicting the first floor layout.]

EXHIBIT B-l

SECOND FLOOR PLAN

[Diagram depicting the second floor layout.]

EXHIBIT B-2

2nd Floor Improvement Outline Specification — Landlords Work
Based on Exhibit B -1 (2nd Floor Plan)

1. Building Type and Use: 3 Story, Group B, Type III, 1 Hour Rated, fully sprinklered office building. All design and construction in conformance with the 1998 (CBC) Building Standards Administrative Code of the California Building Standards Commission (CBSC) and the City of South San Francisco amendments, all applicable codes and regulations. All building improvements shall be furnished fully ADA compliant, where required and meet the energy and access requirements set forth in the California Title 24 Code.

2. Tenants Program (General Description of Areas): Based on the attached Exhibit B — 1 (2nd Floor Plan), the tenant's space will consist of the following programmatic components.

a. Offices: General open office areas to house up to (20) modular workstations, (12) offices with modular glass panels parallel to the building perimeter and (2) conference rooms with modular glass panels parallel to the building perimeter. All office finished will be consistent with tenants 1st Floor, East Wing office space with the exception of the open lofted ceiling. Due to the excess laboratory mechanicals an acoustical suspended ceiling with recessed lighting is necessary to conceal all HVAC equipment and wiring. To maintain the buildings tall and airy affect all ceilings throughout will be mounted at a height of 11'-0" above the finished floor. Landlord reserves the right to add architectural treatments and lighting to enhance the interior environment of the space including wall facets, columns and metal ceiling accents. All door frames and trim will be brushed chrome or anodized aluminum and all door leafs and other laminates will be light maple to match the existing. Flooring will consist of stained concrete, VCT and carpet where appropriate. Tenant may elect to substitute other office type improvements as approved by landlord that do not adversely affect the buildings design integrity or construction cost. These changes will be addressed on the final floor plans, prior to submission to the building department.

b. Laboratories: (1) Open Plan Biology Laboratory and (1) Open Plan Chemistry Laboratory will be provided, each not to exceed 1,500 square feet of floor area. Each laboratory will be equipped with (1) fume hood exhaust connection and ducting. Copper vacuum and compressed air piping will be connected to each hood. Each laboratory will also be provided with (1) working laboratory type sink complete with hot, cold and de-ionized pure water sources.

Any ultra-pure Dl water connections and equipment are the tenant's sole responsibility. Locations of hoods and sinks where reasonably feasible and as designated by tenant. Up to (4) Stainless steel ceiling mounted lab utility distribution panels will be provided in each laboratory room. Each panel can accommodate electric, data, vacuum and compressed air as specified by tenant and similar to those used by tenant in West Wing of building. Laboratory finishes to consist of vinyl coated acoustical ceiling panels, recessed lighting, tile or sheet vinyl resilient flooring and painted gypsum board walls. Landlord reserves the right to add architectural treatments as appropriate that will not interfere with tenants use.

c. Ancillary Rooms: Ancillary rooms, such as storage, equipment, utility, kitchen, conference or others can be substituted for the improvements described herein and depicted on Exhibit B -1 (2nd Floor Plan) provided that they are approved by the landlord and do not adversely affect the buildings design integrity, use group classification or construction cost.

3. Utilities:

a. Gas: Gas utilities to be provided for general heating of air and to heat water to common building heating devices and domestic water supplies only. No specific gas connections to tenant's laboratories or capital equipment will be provided.

b. Electric: Electric utilities including distribution panels, cabling and receptacles will be provided to tenants space at a ratio common to office use and not less than the minimum set forth in the National Electric Code. Additional high voltage power for laboratories containing tenant specific equipment will be provided in a flexible manner via ceiling mounted panels or wall mounted metal wireways at locations as specified by tenant. Up to (4) ceiling panels or wireways will be provided in each laboratory to house the lab specific utilities. Each panel or wireway will contain up to (4) standard 115V receptacles in metal gang boxes, suspended but cords, (1) UPS or Emergency Back-up receptacle and (1) high voltage receptacle with plug configuration as specified by tenant.

c. Telephone and Data Connections: Each office and workstation will receive (2) Category 5e communications jacks for use with either telephone or computer networking equipment. Each cable will be pulled to common Tele/Data distribution room as shown on 2nd Floor Plan. Cable terminations, phone and networking equipment and distribution panels will not be provided and are the sole responsibility of the tenant. Tenant may make use of landlord pre-existing racks for purposes of mounting their equipment. Conference and laboratory rooms shall receive up to (4) phone or data connections each.

d. Specialty Laboratory and House Utilities: Vacuum and compressed air copper feeds and connections will be provided to each laboratory hood or ceiling panel locations as designated by tenant. Connections not to exceed (4) per laboratory. Vacuum connections will be made to pre-existing house vacuum system. Compressed air connections will be made to new air compressor and dryer subject to joint specification and installation by tenant and landlord. De-ionized water to be provided to each sink location and connected to pre-existing house system. Each laboratory sink location will be provided with chemical and Dl resistant waste lines. Tenant is responsible to monitor at point of use and downstream, the lab waste lines to ensure that no chemicals are being released into the laboratory waste system or public sewer utility.

4. Design: For the improvements described herein and on Exhibit B-1 (2nd Floor Plan), all design, architecture, engineering, color schemes and finish selections will be provided by landlord at landlord's expense and discretion. All final construction and permit documents will be provided by landlords licensed consultants as required.

5. Construction: All construction procedures, materials and methods will be provided in a workmanlike and professional manner under the supervision of the landlord and will be built in accordance with all applicable codes and industry standards. All consultants, vendors, contractors and subcontractors performing the work as described herein and in Exhibit B — 1 (2nd Floor Plan) will be under the direct contract and supervision of the landlord only. Access for construction equipment, building materials and furniture will be provided through an exterior window unit that will serve as a temporary freight passage. This passage will be available to tenant only until landlords work prohibits the handling of materials in that area wherein the window will be re-installed and sealed. Once sealed, the window will not be subject to further removal by landlord. It is understood that the 2nd floor improvements will be ongoing with tenants occupancy of the below 1st floor space. Access, particularly in the ceiling plenum, to the 1st floor space may be required for the duration of the project for purposes of facilitating the construction above. Inherently, some noise, vibration and disruption may occasionally be experienced in the space below and in the adjacent areas. Reasonable accommodations will be made by landlord to minimize such disruptions during regular working hours.

IRREVOCABLE STANDBY LETTER OF CREDIT NO. SVBSF002780

DATE: APRIL 01, 2004

BENEFICIARY:
MJ RESEARCH, INC.
7000 SHORELINE COURT
SOUTH SAN FRANCISCO, CA 94080

APPLICANT:
FLUIDIGM CORPORATION
7100 SHORELINE COURT
SOUTH SAN FRANCISCO, CA 94080

AMOUNT: US$250,000.00 (U.S. DOLLARS TWO HUNDRED FIFTY THOUSAND EXACTLY)

EXPIRATION DATE: MARCH 31, 2008

LOCATION: SANTA CLARA, CALIFORNIA

DEAR SIR/MADAM:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. SVBSF002780 IN YOUR FAVOR AVAILABLE BY YOUR DRAFTS DRAWN ON US AT SIGHT IN THE FORM OF "EXHIBIT B" ATTACHED AND ACCOMPANIED BY THE FOLLOWING DOCUMENTS:

1. THE ORIGINAL OF THIS LETTER OF CREDIT AND ALL AMENDMENT(S), IF ANY.

2. SIGHT DRAFTS DRAWN ON US.

3. A DATED STATEMENT FROM THE BENEFICIARY SIGNED BY AN OFFICER OR AN AUTHORIZED REPRESENTATIVE OF THE BENEFICIARY, FOLLOWED BY HIS/HER DESIGNATED TITLE, STATING THE FOLLOWING:

"THE UNDERSIGNED STATES BENEFICIARY IS ENTITLED TO DRAW UPON THIS LETTER OF CREDIT PURSUANT TO THE TERMS OF THAT LEASE DATED AS OF DECEMBER 1, 2001 BETWEEN BENEFICIARY AND FLUIDIGM CORPORATION, AS SAID LEASE IS AMENDED FROM TIME TO TIME, FOR THE AMOUNT DRAWN HEREUNDER. THE UNDERSIGNED BENEFICIARY HEREBY MAKES DEMAND FOR THE PAYMENT OF US $_____ (DRAW AMOUNT) UNDER THIS LETTER OF CREDIT."

THE LEASE MENTIONED ABOVE IS FOR IDENTIFICATION PURPOSES ONLY AND IT IS NOT INTENDED THAT SAID LEASE BE INCORPORATED HEREIN OR FORM PART OF THIS LETTER OF CREDIT.

PARTIAL DRAWS ARE ALLOWED. THIS ORIGINAL LETTER OF CREDIT MUST ACCOMPANY ANY DRAWINGS HEREUNDER FOR ENDORSEMENT OF THE DRAWING AMOUNT AND WILL BE RETURNED TO THE BENEFICIARY UNLESS IT IS FULLY UTILIZED.

THIS LETTER OF CREDIT MAY ONLY BE TRANSFERRED IN ITS ENTIRETY BY THE ISSUING BANK, ASSUMING SUCH TRANSFER TO SUCH TRANSFEREE WOULD BE IN COMPLIANCE WITH THEN APPLICABLE LAW AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THE REGULATIONS OF THE U.S. DEPARTMENT OF TREASURY AND U.S. DEPARTMENT OF COMMERCE, UPON OUR RECEIPT OF THE ATTACHED "EXHIBIT A" DULY COMPLETED AND EXECUTED BY THE BENEFICIARY AND ACCOMPANIED BY THE ORIGINAL LETTER OF CREDIT AND ALL AMENDMENT(S), IF ANY, TOGETHER WITH THE PAYMENT OF OUR TRANSFER FEE 1/4 OF 1% OF THE TRANSFER AMOUNT (MINIMUM USD250.00) .

DRAFT(S) AND DOCUMENTS MUST INDICATE THE NUMBER AND DATE OF THIS LETTER OF CREDIT.

IRREVOCABLE STANDBY LETTER OF CREDIT NO. SVBSF002780

DOCUMENTS MUST BE FORWARDED TO US BY OVERNIGHT DELIVERY SERVICE TO: SILICON VALLEY BANK, 3003 TASMAN DRIVE, SANTA CLARA, CA 95054, ATTN: INTERNATIONAL DIVISION.

WE HEREBY AGREE WITH THE DRAWERS, ENDORSERS AND BONAFIDE HOLDERS THAT THE DRAFTS DRAWN UNDER AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT SHALL BE DULY HONORED UPON PRESENTATION TO THE DRAWEE, IF NEGOTIATED ON OR BEFORE THE EXPIRATION DATE OF THIS CREDIT.

THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION), INTERNATIONAL CHAMBER OF COMMERCE, PUBLICATION NO. 500.

SILICON VALLEY BANK,

/s/ John M. Dossantos
AUTHORIZED SIGNATURE
John M. Dossantos

/s/ Edward D. Machado
AUTHORIZED SIGNATURE
Edward D. Machado

EXHIBIT "B"

DATE: _____ REF. NO. _____

AT SIGHT OF THIS DRAFT

PAY TO THE ORDER OF _____ US$_____

USDOLLARS _____

DRAWN UNDER SILICON VALLEY BANK, SANTA CLARA, CALIFORNIA, STANDBY LETTER OF CREDIT NUMBER NO. _____ DATED _____

TO: SILICON VALLEY BANK
3003 TASMAN DRIVE
SANTA CLARA, CA 95054

_____
(BENEFICIARY'S NAME)

.....
Authorized Signature

GUIDELINES TO PREPARE THE DRAFT

1. DATE: ISSUANCE DATE OF DRAFT.
2. REF. NO.: BENEFICIARY'S REFERENCE NUMBER, IF ANY.
3. PAY TO THE ORDER OF: NAME OF BENEFICIARY AS INDICATED IN THE L/C (MAKE SURE BENEFICIARY ENDORSES IT ON THE REVERSE SIDE).
4. US$: AMOUNT OF DRAWING IN FIGURES.
5. USDOLLARS: AMOUNT OF DRAWING IN WORDS.
6. LETTER OF CREDIT NUMBER: SILICON VALLEY BANK'S STANDBY L/C NUMBER THAT PERTAINS TO THE DRAWING.
7. DATED: ISSUANCE DATE OF THE STANDBY L/C.
8. BENEFICIARY'S NAME: NAME OF BENEFICIARY AS INDICATED IN THE L/C.
9. AUTHORIZED SIGNATURE: SIGNED BY AN AUTHORIZED SIGNER OF BENEFICIARY.

IF YOU NEED FURTHER ASSISTANCE IN COMPLETING THIS DRAFT, PLEASE CALL OUR L/C PAYMENT SECTION AND ASK FOR:

ALICE DA LUZ: 408-654-7120
EFRAIN TUVILLA: 408-654-6349

EXHIBIT "A"

DATE:

TO: SILICON VALLEY BANK
3003 TASMAN DRIVE
SANTA CLARA, CA 95054
ATTN: INTERNATIONAL DIVISION.
STANDBY LETTERS OF CREDIT

RE: STANDBY LETTER OF CREDIT
NO. ISSUED BY
SILICON VALLEY BANK, SANTA CLARA
L/C AMOUNT:

GENTLEMEN:

FOR VALUE RECEIVED, THE UNDERSIGNED BENEFICIARY HEREBY IRREVOCABLY TRANSFERS TO:

(NAME OF TRANSFEREE)
(ADDRESS)

ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY TO DRAW UNDER THE ABOVE LETTER OF CREDIT UP TO ITS AVAILABLE AMOUNT AS SHOWN ABOVE AS OF THE DATE OF THIS TRANSFER.

BY THIS TRANSFER, ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY IN SUCH LETTER OF CREDIT ARE TRANSFERRED TO THE TRANSFEREE. TRANSFEREE SHALL HAVE THE SOLE RIGHTS AS BENEFICIARY THEREOF, INCLUDING SOLE RIGHTS RELATING TO ANY AMENDMENTS, WHETHER INCREASES OR EXTENSIONS OR OTHER AMENDMENTS, AND WHETHER NOW EXISTING OR HEREAFTER MADE. ALL AMENDMENTS ARE TO BE ADVISED DIRECT TO THE TRANSFEREE WITHOUT NECESSITY OF ANY CONSENT OF OR NOTICE TO THE UNDERSIGNED BENEFICIARY.

THE ORIGINAL OF SUCH LETTER OF CREDIT IS RETURNED HEREWITH, AND WE ASK YOU TO ENDORSE THE TRANSFER ON THE REVERSE THEREOF, AND FORWARD IT DIRECTLY TO THE TRANSFEREE WITH YOUR CUSTOMARY NOTICE OF TRANSFER.

SINCERELY,

_____
(BENEFICIARY'S NAME)

_____
SIGNATURE OF BENEFICIARY

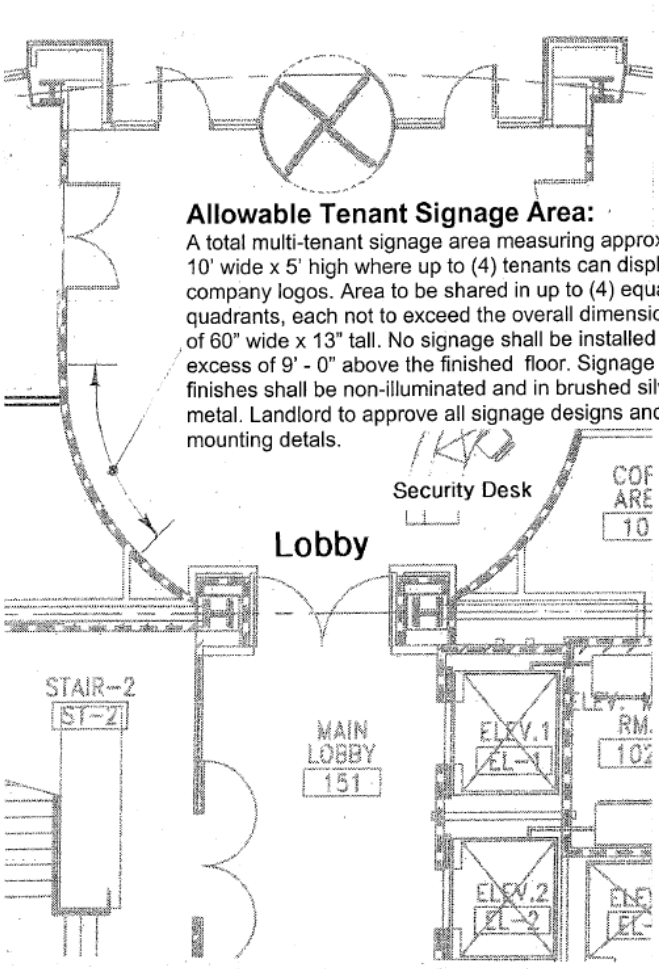
SIGNATURE AUTHENTICATED

_____
(NAME OF BANK)

_____
AUTHORIZED SIGNATURE ** By affixing his/her signature, he or she is certifying that the Bank on whose behalf he or she is signing is regulated either by the FED, the OCC, or the FDIC, and that the Bank has implemented AML (Anti-Money Laundering) procedures in accordance with the Bank Secrecy Act, and that the Transferor named above has been approved under his/her Bank's own CIP (Customer Information Program). VERIFICATION OF TRANSFEROR'S SIGNATURE(S) BY A NOTARY PUBLIC IS UNACCEPTABLE.

EXHIBIT D
PERMITTED LOBBY SIGNAGE

Exhibit D



Permitted Signage

Exhibit E

[SEE ABOVE FOR

SUBLEASE

BETWEEN

MJ RESEARCH COMPANY, INC.

AND FLUIDIGM CORPORATION]

AGREEMENT OF LEASE

AGREEMENT OF LEASE made as of the 6th day of October, 2000, by and between MJ Research Company, Inc. (hereinafter referred to as "Landlord") and Genesoft, Inc. (hereinafter referred to as "Tenant").

WITNESSETH:

Landlord hereby leases to Tenant and Tenant hereby hires from Landlord a portion of the building (the "Building") in South San Francisco, as described in Section 1.1(4) below and shown on the plan attached hereto as Exhibit A and made a part hereof (hereinafter referred to as the "Premises" or the "Demised Premises").

1. REFERENCE DATA

1.1 Definitions. Each reference in this Lease to any of the terms and titles contained in this Article shall be deemed and construed to incorporate the data stated following that term or title in this Article.

1) Additional Rent:	Sums or other charges payable by Tenant to Landlord under this Lease, other than Yearly Fixed Rent, all of which shall be payable as additional rent under this Lease.
2) Broker:	None.
3) Business Day:	All days except Saturdays, Sundays, days defined as "legal holidays" for the entire state under the laws of the State of California, and such other days as Tenant presently or in the future recognizes as holidays for Tenant's general staff.
4) Demised Premises:	Space on the first, second and third floors of the Building at 7000 Shoreline Court, South San Francisco, California 94080 (the "Building"), which space is shown on the plans attached as Exhibit A.
5) Environmental Laws:	As defined in Section 5.3 (a) (1).
6) Event of Default:	The occurrence of an event listed in Section 19.1.
7) Hazardous Materials:	As defined in Section 5.3 (a) (2).

	pigs and relocate such animals off-site or, within a reasonable period of time (not to exceed two (2) business days) make such arrangements as are necessary to eliminate such picketing, signage or other disruption.
16) Prime Landlord:	Mountain Cove Tech Center LLC, a California limited liability company.
17) Prime Lease:	The lease dated November 9, 1999 between Prime Landlord and Landlord.
18) Property:	The Land and Building.
19) Rent:	Yearly Fixed Rent and Additional Rent.
20) Rentable Area of the Demised Premises:	Approximately 68,460 rentable square feet. The rentable square footage of the Demised Premises upon completion of Landlord's Work shall be measured by Landlord according to the most recent BOMA standards, but in any event shall include for computation purposes 50% of all common areas of the Building, including, without limitation, elevators, lobbies, hallways, exercise room, security desk, and lunch room. If Tenant disagrees with Landlord's computation of the rentable square footage of the Premises, Tenant may, at its expense, by notice given no later than ten (10) days after written notice by Landlord of the rentable square feet of the Demised Premises, submit the matter of the square footage as to arbitration as set forth in Section 27.7 herein. The inclusion of elevators, hallways, the exercise room, security desk and lunchroom in the computations of rentable square footage shall not be deemed to make Tenant liable for such facilities as if it were the exclusive lessee thereof.
21) Security Deposit:	One Year's Yearly Fixed Rent, subject to decrease as provided in Section 28.3.

22) Tenant's Address:	Until the Term Commencement Date, Two Corporate Drive South, San Francisco, California 94080, and thereafter, the Demised Premises.
23) Term Commencement Date:	As defined in Section 3.2.
24) Term of this Lease:	As defined in Section 3.1.
25) Termination Date:	As defined in Section 3.1.
26) Yearly Fixed Rent:	$4.50 per rentable square foot per month for the first lease year, which amount shall be increased annually commencing with the third lease year by three and one half percent (3.5%) compounded annually.

1.2 Exhibits. The following exhibits are attached hereto and made a part hereof:

A — Plan of Demised Premises

A-l — Plans and Specifications for Landlord's Work

A-2 — Landlord's Work Necessary for Tenant Improvement Work

B — Cleaning Specifications

C — Rules and Regulations

D — Sign Criteria

E — Form of Letter of Credit

F — List of Environmental Reports Given to Tenant

G — List of Permitted Hazardous Materials

H — List of Fixtures and Equipment to be Removed

2. DESCRIPTION OF DEMISED PREMISES

2.1 Demised Premises. The Demised Premises are that portion of the Building as described above (as the same may from time to time be constituted after changes therein, additions thereto and eliminations therefrom pursuant to rights of Landlord hereinafter reserved).

2.2 Appurtenant Rights. Tenant shall have, as appurtenant to the Demised Premises, rights to use in common, subject to reasonable rules from time to time made by Landlord of which Tenant is given notice, those common roadways, walkways, elevators, hallways and stairways necessary for access to that portion of the Building occupied by the Demised Premises. There is also appurtenant to the Demised Premises at no additional charge the nonexclusive use, in common with Landlord and other entitled thereto, of the parking lot appurtenant to the Building, which lot is designed to have three (3) parking spaces per 1,000 rentable square feet

in the Building. Landlord agrees that such parking lot shall be on a non-exclusive basis for Tenant and others entitled thereto and shall not exclusively assign portions of the parking area without providing equivalent and comparable exclusive assignments to Tenant, provided that, subject to casualty and eminent domain, in no event shall Tenant have the use (non-exclusive or otherwise) of not less than nor more than, three (3) spaces per 1,000 rentable square feet of the Demised Premises during the Term, provided that there shall be deducted from the parking available to Tenant any parking spaces lost due to Tenant's outside storage facility referred to in Section 5.3(c). Tenant may not store cars in the parking lot, i.e., leave cars parked for more than seven (7) days.

2.3 Reservations. All the perimeter walls of the Demised Premises except the inner surfaces thereof, any balconies, terraces or roofs adjacent to the Demised Premises, and any space in or adjacent to the Demised Premises used for serving other portions of the Building exclusively or in common with the Demised Premises, including without limitation (where applicable) shafts, stacks, pipes, conduits, wires and appurtenant fixtures, fan rooms, ducts, electric or other utilities, sinks or other Building facilities, and the use thereof, as well as the right of access through the Demised Premises for the purpose of operation, maintenance, decoration and repair, are expressly reserved to Landlord.

2.4 Certain Amenities. The named Tenant, Genesoft, Inc. shall have access to on a nonexclusive basis, the following facilities:

(a) The exercise room. Landlord may charge a reasonable fee for towel service and janitorial service.

(b) A security desk in the main lobby of the Building to be staffed from 9:00 a.m. through 5:00 p.m. on all Business Days.

(c) The lunchroom and adjacent patio.

In the event the named Tenant Genesoft occupies less than 50% of the Building, Landlord may eliminate said amenities (other than the security desk) or assign them exclusively to Landlord or other occupants of the Building. Such amenities shall not be available to assignees or subtenants of Tenant unless permitted in writing by Landlord.

3. TERM OF LEASE

3.1 Term. The Term of this Lease is ten (10) years (or until such Term shall sooner cease or expire) commencing on the Term Commencement Date and ending on the day immediately prior to the tenth (10^{th}) anniversary thereof, except that if the Term Commencement Date shall be other than the first day of a calendar month, the Term of this Lease shall end on the last day of the calendar month in which said 10^{th} anniversary of the Term Commencement Date shall fall (which date

on which the Term of this Lease is scheduled to expire is hereinafter referred to as the "Termination Date").

3.2 Term Commencement Date. The Term Commencement Date shall be the earlier of (a) the date on which, pursuant to permission therefor duly given by Landlord, Tenant undertakes Use of the Demised Premises for the purposes set forth in Article 1, (b) the date on which the Demised Premises are ready for Tenant's occupancy in accordance with the provisions of Section 4.2, or (c) March 1, 2001, but in no event prior to the date on which Landlord's Work (as defined herein) is substantially completed, unless and only to the extent that the lack of such substantial completion is due to the fault, delay, or inaction by Tenant or to the roof work necessitated by Tenant's mechanical and other equipment to be placed on the roof. Notwithstanding the foregoing to the contrary, if the work set forth on Schedule A-2 is not substantially complete by January 1, 2000 and the lack of such substantial completion is not due to fault, delay or inaction of Tenant or to roof work necessitated by Tenant's mechanical and other equipment to be placed on the roof, then for each day beyond January 1, 2001 for which the work on Schedule A-2 is not substantially complete, the March 1, 2001 date shall be extended for one day. Further notwithstanding anything in the foregoing to the contrary, for purposes of determining when the Premises are ready for occupancy for purposes of determining the Term Commencement Date, the Premises shall not be deemed ready for occupancy until Tenant has completed its Tenant improvement work and obtained a certificate of occupancy therefor. Tenant further acknowledges that if Landlord has completed its work on Schedule A-2 on or before January 1, 2000 and made the Premises available to Tenant, Tenant assumes the risk of delay for Tenant improvement work and acknowledges that (subject to Landlord's obligations as to substantial completion of Landlord's Work) the Term will commence on March 1, 2001 whether or not Tenant has completed its work and obtained such a certificate of occupancy.

3.3 Option to Extend. Provided Tenant is not in default of the terms and covenants of this Lease beyond applicable notice and grace periods, and provided Tenant has not assigned this lease or subleased all or any portion of the Premises, it shall have the option to extend the Term for five (5) years, exercisable by written notice given to Landlord no later than twelve (12) months before the expiration of the original Term. All of the terms, conditions and covenants of this Lease shall apply to the option term, except that there shall be no further extension beyond that permitted above and that yearly Fixed Rent for the option term shall be computed as set forth in Section 6 herein.

4. PREPARATION OF PREMISES; TENANT'S ACCESS

4.1 Plans and Specifications. Landlord shall construct the Demised Premises in accordance with the plans and specifications (the "Plans") referenced in Exhibit A-l attached hereto and made a part hereof ("Landlord's Work"). Tenant

acknowledges that Landlord's Work will produce a so-called "cold shell" that will not be ready for Tenant's occupancy.

4.2 When Landlord's Work is Done. Landlord's Work shall be conclusively deemed finished after Landlord gives notice to Tenant that Landlord's Work has been substantially completed by Landlord. Notwithstanding anything to the contrary in this Lease, the Landlord's Work shall not be deemed "substantially completed" prior to the date on which: (a) construction and installation of the improvements listed on Exhibit A-1, attached hereto, have been substantially completed; (b) Tenant has direct access from the street to the elevator lobby on the first floor; and (c) utility services are ready to be furnished to the Premises consistent with the work set forth on Exhibit A-l. Such work shall not be deemed incomplete if only minor or insubstantial details of construction or mechanical adjustments remain to be done, or if a delay is caused in whole or in part by Tenant. Landlord's Architect's certificate of substantial completion, as hereinabove stated, given in good faith, or of any other facts pertinent to such work, shall be deemed conclusive of the statements therein contained and binding upon Tenant.

4.3 Conclusiveness of Landlord's Performance. Tenant shall be conclusively deemed to have agreed that Landlord has performed all of its obligations under this Article 4 unless not later than the end of the second calendar month next beginning after the Landlord's notice of substantial completion under Section 4.2 unless Tenant shall give Landlord written notice specifying the respects in which Landlord has not performed such obligations.

4.4 Entry by Tenant; Interference With Construction; Applicability of Lease Terms. The Demised Premises shall be made available by Landlord to Tenant on or before January 1, 2001 (the "Estimated Tenant Improvement Commencement Date") to undertake such work as is to be performed by Tenant pursuant and subject to this Lease in order to prepare the Demised Premises for Tenant's occupancy. Such entry shall be deemed to be pursuant to a license from Landlord to Tenant and shall be at the risk of Tenant. In no event shall Tenant interfere with any construction being performed by or on behalf of Landlord in or around the Building or with the use of the Building by Landlord or any other occupants; without limiting the generality of the foregoing, Tenant shall comply with all instructions issued by Landlord's contractors relative to the moving of Tenant's equipment and other property into the Demised Premises and shall pay any fees or costs imposed in connection therewith. Once Tenant makes such entry, Tenant will be bound by all terms and conditions of this Lease as if the Term had commenced, excepting payment of Rent. Landlord agrees to use its good faith and reasonable efforts to coordinate with Tenant the build-out of the Building shell and the tenant improvements.

4.5 Tenant Plans. Tenant shall perform no construction work in the Building unless and until Landlord has approved all plans, specifications and the

identity of contractors and major subcontractors therefor and such plans have been consented to by Landlord's mortgagee. Landlord agrees that unless it has disapproved any Tenant plans within ten (10) business days after receipt thereof, the plans shall be deemed approved. Tenant shall, upon Landlord's request, provide payment performance and lien bonds in commercially reasonable amounts and terms. All of the provisions of Articles 9, 10 and 11 shall apply to Tenant's work hereunder.

4.6 Tenant Improvement Allowance. Provided Tenant is not in default hereunder, Landlord will provide Tenant with a Tenant Improvement Allowance of $25.00 per rentable square foot. There shall be deducted from said Tenant Improvement Allowance the following: (i) 50% of the cost of purchase and installation of the emergency generator for the Building, (ii) 50% of all costs of upgrading the power capacity of the Building from 3500 amps to 4000 amps, including, without limitation, any delay costs (not to exceed $5,000.00) imposed upon Landlord under its construction contract with Opus attributable to said power capacity upgrades, (iii) all costs to Landlord associated with using the roofer under contract with Opus, Tenant acknowledging and understanding that use of said roofer in connection with the installation of Tenant's rooftop equipment and screens is required in order to maintain the roof warranty on the Building, and (iv) the cost of supporting, extending and connecting all screens on the roof, including, without limitation, all new screens, vertical steel beams, secondary structural support and all related costs. Landlord shall fund the Tenant Improvement Allowance on a pro rata basis as Tenant pays its contractor for Tenant's work. Landlord's contribution shall be funded based on the fraction of each construction draw, the numerator of which is $25.00 per rentable square foot and the denominator of which is the total cost of all work by Tenant to prepare the Demised Premises for Tenant's occupancy. Landlord shall have the right to reasonably approve Tenant's schedule of estimated construction disbursements. Landlord shall require Tenant to provide appropriate lien waivers and other evidence of payment contractors, subcontractors and material suppliers prior to funding any of the Tenant Improvement Allowance.

4.7 Inspections and Scheduling. Tenant may inspect the Building and the Premises during the construction of the Landlord's Work as it progresses. Landlord agrees to be available to Tenant from time to time, on reasonable prior notice, as necessary or desirable to review the Landlord's Work.

4.8 Permits and Approvals. Landlord, at its sole cost and expense, shall obtain all approvals, permits and other consents required to commence, perform and complete the Landlord's Work. Landlord agrees that the Landlord's Work will comply with all applicable laws and other governmental regulations as of the date of substantial completion including, but not limited to, the Americans With Disabilities Act of 1990 (42 U.S.C. §12101 et seq.) and the City of South San Francisco and State of California Building and fire codes, as the same may be amended from time to time.

4.9 Construction Guaranty. Landlord guaranties the Landlord's Work against defective workmanship and/or materials for a period of 11 months from the date of substantial completion of the Landlord's Work, and Landlord agrees, at its sole cost and expense, to repair or replace any defective item occasioned by poor workmanship and/or materials during said 11 month period. Nothing in this Section 4.9 shall limit Landlord's other repair obligations under this Lease.

4.10 Walkthrough and Punch List. Tenant shall be entitled to a walkthrough and punch list with Landlord's architect with respect to Landlord's Work. The determination of the punch list shall be at the sole and exclusive approval of Landlord's architect. Landlord shall remedy all punch list items within a commercially reasonable time.

5. USE OF PREMISES

5.1 Permitted Use. Tenant shall occupy and use the Demised Premises for the Permitted Use set forth in Article 1 and for no other purpose. Service and utility areas (whether or not a part of the Demised Premises) shall be used only for the particular purpose for which they are designated. Tenant shall have access to the Demised Premises 24 hours per day, 7 days per week.

5.2 Prohibited Uses. Tenant shall not use, or suffer or permit the use of, or suffer or permit anything to be done in or anything to be brought into or kept in, the Demised Premises or any part thereof (i) which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease, (ii) for any unlawful purposes or in any unlawful manner, or (iii) which, in the reasonable judgment of Landlord shall in any way (a) impair or tend to impair the appearance or reputation of the Building, (b) impair or interfere with or tend to impair or interfere with any of the Building services or the proper and economic heating, cleaning, air conditioning or other servicing of the Building or with the use of any of the other areas of the Building, or (c) occasion discomfort, inconvenience or annoyance to any of the other tenants or occupants of the Building, whether through the transmission of noise or odors or vibrations or dust or otherwise. Without limiting the generality of the foregoing, no food shall be prepared or served for consumption by the general public on or about the Demised Premises; no intoxicating liquors or alcoholic beverages shall be sold or otherwise served for consumption by the general public on or about the Demised Premises; no lottery tickets (even where the sale of such tickets is not illegal) shall be sold and no gambling, betting or wagering shall otherwise be permitted on or about the Demised Premises; no loitering shall be permitted on or about the Demised Premises; and no loading or unloading of supplies or other material to or from the Demised Premises shall be permitted on the Land except at times (excluding Business Days from 7:00 to 9:30 a.m. and from 4:00 to 6:00 p.m.) and in locations to be reasonably designated by Landlord, except for the freight elevator described in Section 7.4, which Tenant may use at any time. The Demised Premises shall be

maintained in a sanitary condition. Tenant shall suitably store all trash and rubbish in the Demised Premises or other locations designated by Landlord from time to time. All laboratory waste, Hazardous Materials and medical waste must be disposed of in compliance with Section 5.3. Tenant specifically agrees that its indemnification obligations pursuant to Section 13.2 shall extend to any claim arising from the consumption of intoxicating liquors or alcoholic beverages on or about the Demised Premises.

5.3 Hazardous Materials.

(a) Definitions.

(1) Environmental Law means any governmental statute, code ordinance, regulation, rule or order and any amendment thereto governing or regulating materials that are toxic, explosive, corrosive, flammable, radioactive, carcinogenic, dangerous or otherwise hazardous. Environmental Laws include, without limitation, the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. §9601 *et seq.*, the Resource Conservation and Recovery Act, 42 U.S.C. §6901 *et seq.*, the California Hazardous Substances Act at California Health and Safety Code Section l08100 *et seq.*, the provisions regarding hazardous waste control at California Health and Safety Code Sections 25100 through 25250.25 and the California Medical Waste Management Act at California Health and Safety Code §117600 *et seq.*

(2) Hazardous Materials shall mean any substance: (A) that now or in the future is regulated or governed by, requires investigation or remediation under, or is defined as a hazardous waste, medical waste, hazardous substance, pollutant or contaminant under any Environmental Law or (B) that is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, dangerous or otherwise hazardous, including gasoline, diesel fuel, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), asbestos, radon and urea formaldehyde foam insulation.

(b) Tenant's Covenants. No Hazardous Materials shall be stored, placed, handled, used or released by Tenant or its employees, contractors, sublessees, guests or visitors at or about the Demised Premises or Property without Landlord's prior written consent, which consent shall not be withheld provided the Hazardous Materials comply with the criteria set forth in 5.3(c) for Permitted Materials. Landlord shall, within five (5) business days after receipt of the proposed HMIS, either approve the same or provide Tenant written notice of the reasons for its disapproval. Tenant shall submit to Landlord for prior approval as above any HMIS (defined in Section 5.3(c))

prior to submission to applicable governmental authority. Notwithstanding the foregoing, storage and use of routine office and janitorial supplies in usual and customary quantities and the Permitted Materials as defined in subsection (c) below are permitted without Landlord's prior written consent, provided that Tenant's activities at or about the Demised Premises and Property shall comply at all times with the laws all Environmental Laws. Tenant shall keep Landlord fully and promptly informed of all storage, placement, handling, use or release by Tenant or its employees, contractors , sublessees, guests or visitors of all Hazardous Materials. At the expiration or termination of the Lease, Tenant shall remove from the Demised Premises all Hazardous Materials brought or released in or on the Building as a result of the activities of Tenant or its employees, agents, servants, invitees, visitors, customers, contractors, sublessees, and those other persons for whom Tenant is legally responsible (collectively "Tenant Parties"). Landlord shall have the right to perform an environmental assessment of the Demised Premises after such removal, which assessment shall be conducted at Landlord's expense, unless it reveals that Tenant has not complied with the requirements set forth in this Section 5.3, in which case Tenant shall reimburse Landlord for the reasonable cost thereof within ten days after Landlord's request therefor. Nothing in this Section 5.3 shall require Tenant to indemnify Landlord for any matters arising out of or caused by the actions or omissions of Landlord, its employees, agents, contractors, licensees, or invitees.. Tenant shall be responsible and liable for the compliance with all of the provisions of this Section by all of Tenant Parties and all of Tenant's obligations under this Section (including its indemnification obligations under subsection (e) below) shall survive the expiration or termination of this Lease.

(c) Landlord hereby authorizes Tenant to use and store, in connection with its Permitted Use, those materials and medical supplies listed on the Hazardous Material Inventory Statement ("HMIS") to be provided to the City of South San Francisco by Tenant with regard to the Demised Premises (the "Permitted Materials"), provided the classes and quantities of Permitted Materials comply with all applicable laws and do not alter the legal classification of the laboratories and storage room, and storage tanks, under the Allowable Class Facilities (defined below). Tenant will operate under all applicable Federal, State and Local laws governing the use, storage and management of hazardous materials for building Occupancy Groups A3, B and H Divisions 2, 3 and 7, as allowable, including Title 22 of the CFR as defined under the Uniform Building Code and Uniform Fire Code developed by the International Fire Code Institute (the "Allowable Class Facilities"). Landlord shall have the right to approve in writing Tenant's construction and operation of said storage facilities, including, without limitation, fire suppression, seismic restraint, enclosure and landscaping features. In addition, Tenant may construct an outside storage facility for storage of up to a total of 2,000 gallons of waste materials, provided no single

tank shall exceed 1,000 gallons, such outside storage is in compliance with all applicable laws and regulations and does not cover a footprint of greater than 250 square feet. Landlord shall have the right to approve all fire, safety, and seismic restraints, as well as all other plans and specifications for said outside storage. Additional rent for said outside storage area shall be $5,000.00 per year. Any consent or approval by Landlord of Tenant's proposed use, handling and storage of the Permitted Materials and/or the installation and operation or maintenance of said tank shall not constitute an assumption of risk by Landlord respecting the same nor warranty or certification by Landlord that Tenant's proposed use, handling and storage of the Permitted Materials and/or the installation, operation or maintenance of the tanks is safe, reasonable or in compliance with Environmental Laws. All references to Hazardous Materials in this Lease shall include the Permitted Materials.

(d) Compliance. Tenant shall at Tenant's expense promptly take all actions required by any governmental agency or entity in connection with or as a result of the storage, placement, handling, use or release by Tenant Parties of Hazardous Materials at or about the Demised Premises or Property, including inspection and testing, performing all cleanup, removal and remediation work required with respect to those Hazardous Materials, complying with all closure Laws and postclosure monitoring, and filing all required reports or plans. All medical waste regulated by any Environmental Laws that is brought to the Demised Premises shall be stored in leak-proof, closeable containers, which containers shall be stored in a specified "dirty storage area" of the Demised Premises that shall be protected from leaks or any other type of contamination of the Demised Premises. Tenant shall never use any of the Landlord's trash receptacles for disposing of any medical waste. All of the foregoing work shall be performed in a good, safe and workmanlike manner by consultants qualified and licensed to undertake such work and in a manner that will not interfere with any other tenant's quiet enjoyment of the Property or Landlord's use, operation, leasing and sale of the Property. Tenant shall deliver to Landlord prior to delivery to any governmental agency, or promptly after receipt from any such agency, copies of all permits, manifests, closure or remedial action plans, notices, and all other documents relating to the storage, placement, handling, use or release by Tenant Parties of Hazardous Materials at or about the Demised Premises or Property. Upon prior written notice from Landlord, Tenant shall make available to Landlord for Landlord's inspection and copying all of Tenant's documents, materials, data, inventories and other documentation (including, without limitation, Material Safety Data Sheets relating to Hazardous Materials as may be present or suspected to be present in, on or about the Demised Premises. If any lien attaches to the Demised Premises or the Property in connection with or as a result of the storage, placement, handling, use or release by Tenant Parties of Hazardous Materials; and

Tenant does not cause the same to be released, by payment, bonding or otherwise, within ten (10) days after the attachment thereof, Landlord shall have the right but not the obligation to cause the same to be released and any sums expended by Landlord in connection therewith shall be payable by Tenant on demand. Notwithstanding anything in the foregoing to the contrary, Tenant shall not be responsible for Hazardous Materials not introduced to the Premises, the Building or the Land by Tenant Parties.

(e) Tenant shall give Landlord immediate telephone notice and prompt written notice (which means as soon as practicable and, in no event, more than one (1) day following the applicable event) of any (i) spill, discharge, dumping, or other release of any Hazardous Materials (including, without limitation, the Permitted Materials) on, in, under or from the Demised Premises, the Building, or any portion of the Project, or the groundwater thereof, (ii) any oral or written notice from any governmental agency received by Tenant of any such spill, discharge, dumping, or other release of any Hazardous Materials, and (iii) any oral or written notice of any violation, warning, deficiency, non-compliance, or other alleged or actual failure by Tenant to comply strictly with any Environmental Law and/or any requirement, provision, or stipulation of any governmental permit, license, registrations, or approval.

(f) Landlord's Rights. Subject to the provisions of Section 15.2, Landlord shall have the right, but not the obligation, to enter the Demised Premises at any reasonable time upon 24 hours notice except in case of emergency (i) to confirm Tenant's compliance with the provisions of this Section, and (ii) to perform Tenant's obligations under this Section if Tenant has failed to do so after reasonable notice to Tenant. Landlord shall also have the right to engage qualified Hazardous Materials consultants to inspect the Demised Premises and review the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials, including review of all permits, reports, plans, and other documents regarding same. Tenant shall pay to Landlord on demand the reasonable costs of Landlord's consultant's fees if Tenant is found to have violated the terms of this Section 5.3 any and all reasonable costs incurred by Landlord in performing Tenant's obligations under this section. Landlord shall use reasonable efforts to minimize any interference with Tenant's business caused by Landlord's entry into the Demised Premises, but Landlord shall not be responsible for any interference caused thereby, unless such interference arises out of or is caused by the gross negligence or willful misconduct of Landlord, its employees, agents, contractors, licensees, or invitees.

(g) Tenant's Indemnification. Tenant agrees to indemnify, defend and hold harmless Landlord and its members, managers, directors, officers,

agents and employees and their partners, members, managers, directors, officers, shareholders, employees and agents from all shall mean all costs and expenses of any kind, damages, including foreseeable and unforeseeable consequential damages, fines and penalties incurred in connection with any violation of and compliance with the Environmental Laws by Tenant Parties and all losses of any kind attributable to the diminution of value, loss of use or adverse effects on marketability or use of any portion of the Demised Premises or Property by Tenant Parties and all other claims, actions, losses, damages, liabilities, costs and expenses of every kind, including reasonable attorneys', experts' and consultants' fees and costs, incurred at any time and arising from or connection with the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials at or about the Property or Tenant's failure to comply in full with all Environmental Laws with respect to the Demised Premises and the Property.

(h) Landlord shall be responsible (at Landlord's cost and expense) for any remediation (to the extent required by law) of any Hazardous Materials placed on the Premises by Landlord or Landlord's agents or contractors and existing contamination disclosed in the environmental assessments set forth on Exhibit F attached hereto.

5.4 Licenses and Permits. If any governmental license or permit shall be required for the property and lawful conduct of Tenant's business, and if the failure to secure such license or permit would in any way affect Landlord, Tenant, at Tenant's expense, shall duly procure and thereafter maintain such license or permit and submit the same to inspection by Landlord. Tenant, at Tenant's expense, shall at all times comply with the terms and conditions of each such license or permit.

6. RENT

6.1 Yearly Fixed Rent. Tenant shall pay to Landlord, without any set-off or deduction, at Landlord's office, or to such other person or at such other place as Landlord may designate by notice to Tenant, the Yearly Fixed Rent set forth in Article 1. The Yearly Fixed Rent shall be paid in equal monthly installments in advance on or before the first Business Day of each calendar month during the Term of this Lease and shall be apportioned for any fraction of a month in which the Term Commencement Date or the last day of the Term of this Lease may fall.

6.2 Rent During Option Term. Yearly Fixed Rent for the five (5) year option term shall be an amount equal to the greater of (i) 95% of the fair-market rent for the first year of the option term, or (ii) 103.5% of the Yearly Fixed Rent payable (without abatement) for the last year of the original term. If the parties are unable to agree upon a fair market rent prior to ten (10) months before the commencement of the applicable option term, the matter shall be referred to

appraisal as set forth in the following sections. Yearly Fixed Rent during the option term shall increase annually commencing with the second year of the option term by three and one-half percent (3.5%) compounded annually. The term fair market rent, for purposes of this Section 6.2, shall be deemed to be the fair market rent for the Demised Premises finished to a level of completion for ready to occupy first class office space.

6.3 Appraisal. Whenever the issue of fair market rent shall be referred to appraisal, such appraisal shall be by three disinterested appraisers, one to be appointed by the Landlord, one to be appointed by the Tenant and the third to be appointed by the two appraisers so named. Within thirty (30) days after the selection of the third appraiser, the three appraisals shall be added together and their total divided by three; the resulting quotient shall be the fair market rent for the Premises. If, however, the low appraisal and/or the high appraisal are more than ten (10%) percent lower and/or higher than the middle appraisal, the low appraisal and/or high appraisal shall be disregarded, as applicable. If only one appraisal is disregarded, the remaining two appraisals shall be added together and their total divided by two; the resulting quotient shall be the fair market rent for the Premises. If both the low appraisal and the high appraisal are disregarded as stated in this paragraph, the middle appraisal shall be the fair market rent of the Premises. Each party shall pay the costs of the appraiser selected by such party, and the parties shall share equally the cost of the third appraiser. Each individual appraiser shall have at least ten years of experience in appraising fair market rents of comparable properties and shall hold one or more of the following designations: MAI of the American Institute of Real Estate Appraisers, SREA from the Society of Real Estate Appraisers or ASA from the American Society of Appraisers.

6.4 Interim Rent. If the fair market rental value per year is not determined prior to the commencement of the five year option term, the Tenant shall pay Fixed Rent as though the Fixed Rent was that Fixed Rent in effect (without abatement) during the last year of said preceding lease year period until such determination has been made. Following such determination, the Tenant shall promptly pay the Landlord the difference, if any, between the aggregate rent which would have been paid during said period and the aggregate rent actually paid. Thereafter, all rent shall be computed and paid in accordance with Section 6.2.

6.5 Taxes. Tenant shall timely file business property statements with respect to Tenant’s personal property and trade fixtures and pay when due all taxes imposed on such personal property and trade fixtures. Tenant shall also pay all real estate taxes attributable to the Demised Premises being improved to a standard in excess of first class office space.

6.6 Obligations Survive Termination. All obligations and liabilities of Tenant relating to any period prior to the termination of the Term of this Lease,

including without limitation the obligation to pay any Additional Rent due pursuant to the provisions of this Article, shall survive such termination.

6.7 Payment to Mortgagee. Landlord reserves the right to provide in any Mortgage given by it or by Prime Landlord of the Property that some or all rents, issues, and profits and all other amounts of every kind payable to the Landlord under this Lease shall be paid directly to the Mortgagee for Landlord's account and Tenant covenants and agrees that it will, after receipt by it of notice from Landlord or Mortgagee designating such Mortgagee to whom payments are to be made by Tenant, pay such amounts thereafter becoming due directly to such Mortgagee until excused therefrom by notice from such Mortgagee.

6.8 Additional Rent. Tenant shall also pay as additional rent without notice, except as required under this Lease, and without any abatement, deduction or setoff except as provided herein, all sums, impositions, costs, expenses and other payments which Tenant in any of the provisions of this Lease assumes or agrees to pay, and, in case of any nonpayment thereof, Landlord shall have in addition to any other rights and remedies, all of the rights and remedies provided by law or provided for in the Lease for the nonpayment of Yearly Fixed Rent.

6.9 Place of Payment of Rent. All payments of Rent shall be made by Tenant to Landlord without notice or demand at such place as Landlord may from time to time designate in writing. The initial place for payment of rent shall be 384 Oyster Point Blvd, So. San Francisco, CA 94080. Any extension of time for the payment of any installment of rent, or the acceptance of rent after the time at which it is due and payable shall not be a waiver of the rights of Landlord to insist on having all other payments made in the manner and at the times herein specified.

6.10 Cleaning and Utilities. Tenant shall pay for all utilities used or consumed in the Demised Premises, including without limitation water, gas, electricity, sewer, telephone, and all electricity used in heating, ventilating and air conditioning the Demised Premises. In the event such utilities are not separately billed by the applicable utility supplier, Tenant shall pay its share of the amount of such bill for the entire Building as measured by submeters or check meters measuring consumption of such utilities in the Demised Premises. In addition, Tenant shall arrange for cleaning of the Tenant space in accordance with the cleaning schedule attached hereto as Exhibit B with a cleaning contractor subject to Landlord's approval, which approval shall not be unreasonably withheld. Tenant shall pay all such costs of cleaning.

7. UTILITIES AND LANDLORD'S SERVICES

7.1 Electricity. Tenant shall purchase directly from the public utility serving the Building all electrical energy that Tenant requires for operation of the lighting fixtures, appliances and equipment servicing the Demised Premises. The

costs of initially installing any required meter, submeter or check meter and related installation equipment shall be paid by Landlord. Landlord shall not be liable in any way to Tenant for any failure or defect in the supply or character of electrical energy furnished to the Demised Premises by reason of any requirement, act or omission of the public utility serving the Building. Notwithstanding the foregoing, the design electrical capacity for the Building is 4000 amperes of electricity, and Tenant shall be entitled to the use of half of the electricity available for Tenant spaces, i.e., a minimum and a maximum of 2000 amperes. Tenant's use of electrical energy in the Demised Premises shall not at any time exceed the capacity of any of the electrical conductors and equipment in or otherwise serving the Demised Premises. In order to insure that such capacity is not exceeded and to avert possible adverse effect upon the Building electrical services Tenant shall give notice to Landlord and obtain Landlord's prior written consent whenever Tenant shall connect to the Building electrical distribution system any fixtures, appliances or equipment other than lamps, typewriters, personal computers and similar small machines. Landlord's consent to the plans for Tenant's initial improvements shall, to the extent that Tenant's electrical system and loads are shown on said plans, suffice as consent for the purposes of this Section 7.1. Any feeders or risers to supply Tenant's electrical requirements, shall be installed by Landlord upon Tenant's request, at the sole cost and expense of Tenant, provided that such feeders and risers are permissible under applicable laws and insurance regulations and the installation of such feeders or risers will not cause permanent damage or injury to the Building or cause or create a dangerous condition or unreasonably interfere with other tenants of the Building. Tenant agrees that it will not make any alteration or addition to the electrical equipment in the Demised Premises without the prior written consent of Landlord in each instance first obtained, which consent will not be unreasonably withheld. Landlord, at Tenant's expense, shall purchase, install and replace all light fixtures, bulbs, tubes, lamps, lenses, globes, ballasts and switches used in the Demised Premises.

7.2 Water Charges. Landlord shall furnish cold water for ordinary cleaning, toilet, drinking purposes in accordance with Exhibit A-l and hot and cold water for lavatory purposes. Tenant shall pay for its share of water and related sewer charges in accordance with Section 6.10.

7.3 Heat and Air Conditioning. Landlord shall furnish to and distribute in the common areas of the Building heat and air conditioning as normal seasonal changes may require on Business Days from 8:00 a.m. to 6:00 p.m. and on Saturdays from 9:00 a.m. to 1:00 p.m., provided Landlord may run common area HVAC on an economy mode on Saturdays. Tenant agrees to lower and close the blinds or drapes when necessary because of the sun's position whenever the air conditioning system is in operation, and to cooperate fully with Landlord with regard to, and to abide by all the regulations and requirements which Landlord may prescribe for the proper functioning and protection of, the heating and air conditioning system. Without limiting the generality of the foregoing, all windows

in the Demised Premises must remain closed at all times notwithstanding the fact that such windows may be operable. The air conditioning system servicing the Building is designed to provide cooling based upon an occupancy of not more than one person per one hundred (100) square feet of floor area, and upon a combined lighting and standard electrical load not to exceed 3.0 watts per square foot or 2,000 amperes for the entire Demised Premises. In the event Tenant exceeds such condition or introduces into the Demised Premises equipment which overloads such system, or in any other way causes such system not to adequately perform its proper functions, supplementary systems may at Landlord's option be provided by Landlord at Tenant's expense. Tenant shall be responsible for furnishing heat and air conditioning to the Demised Premises.

7.4 Elevator Service. Landlord shall provide non exclusive passenger elevator service consisting of two (2) elevators to the Demised Premises on Business Days from 8:00 a.m. to 6:00 p.m. and on a reduced basis at all other times. Freight elevator service shall be available in common with other tenants on Business Days from 9:30 a.m. to 4:00 p.m. and at other times at reasonable charge. Tenant shall be responsible for constructing a freight elevator exclusively to serve the Demised Premises.

7.5 Cleaning. Landlord shall furnish cleaning services to the common areas of the Building substantially in accordance with the specifications attached hereto as Exhibit B and made a part hereof.

7.6 Repairs and Other Services. Except as otherwise provided in Articles 8 and 16, and subject to Tenant's obligations in Article 12 and elsewhere in this Lease, Landlord shall at Landlord's expense (a) keep and maintain the roof, exterior walls, structural floor slabs and columns of the Building in as good condition and repair as they are in on the Term Commencement Date, reasonable use and wear excepted, (b) keep and maintain in workable condition the Building's sanitary, electrical, heating, air conditioning and other systems, (c) keep all walkways on the Property clean and remove all snow and ice therefrom, (d) provide grounds maintenance to all landscaped areas, (e) arrange for the extermination of rodents and vermin in the Building (other than rodents arising out of Tenant's small animal facility), and (f) keep and maintain the parking lot adjacent to the Building in good condition and repair.

7.7 Landlord's Further Responsibilities.

(a) Landlord shall be responsible at its sole cost and expense for the removal of all trash and garbage (excluding Hazardous Materials, laboratory, biological and animal waste) from the designated containers outside of the Building.

(b) Landlord shall allow Tenant to have full access to and use of the largest conference room on the third floor of the Building up to eight (8) days per year, as reasonably agreed to in advance by Landlord and Tenant and upon payment of a reasonable fee for each such use.

(c) Landlord shall comply with all obligations imposed on it in the CCR's (defined in Section 27.12) and shall pay its share of any future costs of providing BART shuttle service.

7.8 Interruption or Curtailment of Services. Landlord reserves the right to interrupt, curtail, stop or suspend the furnishing of services and the operation of any Building system, when necessary by reason of accident or emergency, or of repairs, alterations, replacements or improvements in the reasonable judgment of Landlord desirable or necessary to be made, or of difficulty or inability in securing supplies or labor, or of strikes, or of any other cause beyond the reasonable control of Landlord, whether such other cause be similar or dissimilar to those hereinabove specifically mentioned, until said cause has been removed. Landlord shall use reasonable efforts to minimize interruption to Tenant by any such interruption or curtailment of services. Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems, except that Landlord shall exercise reasonable diligence to eliminate the cause of same. Notwithstanding the foregoing, if utilities or Building services are interrupted due to the fault of Landlord (Tenant acknowledging that Landlord shall have no responsibility for failure of municipal or public utility suppliers to supply utilities to the Building), and such disruption continues for more than seven (7) days, rent shall abate if the Demised Premises are unusable and Tenant in fact vacates the Demised Premises.

8. CHANGES OR ALTERATIONS BY LANDLORD

Landlord reserves the right, exercisable by itself or its nominee, including without limitation Prime Landlord, at any time and from time to time without the same constituting an actual or constructive eviction and without incurring any liability to Tenant therefor or otherwise affecting Tenant's obligations under this Lease, to make such changes, alterations, additions, improvements, repairs or replacements in or to the Building and the fixtures and equipment thereof, as well as in or to the street entrances, halls, passages, elevators, and stairways thereof, as it may deem necessary or desirable, and to change the arrangement and/or location of entrances or passageways, doors and doorways, and corridors, elevators, stairs, toilets, or other public parts of the Building, provided, however, that there be no unreasonable obstruction of the right of access to, or unreasonable interference with the use and enjoyment of, the Demised Premises by Tenant, except that Landlord shall not be obligated to employ labor at so-called "over-time" or other premium pay rates. Nothing contained in this Article shall be deemed to relieve Tenant of any duty, obligation or liability of Tenant with respect to making or causing to be made

any repair, replacement or improvement or complying with any law, order or requirement of any governmental or other authority. Landlord reserves the right to prior to the Commencement Date create two (2) addresses for the Building. Neither this Lease nor any use by Tenant shall give Tenant any right or easement or the use of any door or any passage or any concourse connecting with any other building or to any public convenience, and the use of such doors, passages and concourses and of such conveniences may be regulated or discontinued at any time and from time to time by Landlord without notice to Tenant and without affecting the obligations of Tenant hereunder or incurring any liability to Tenant therefor.

9. FIXTURES, EQUIPMENT AND IMPROVEMENTS — REMOVAL BY TENANT

All fixtures, equipment, leasehold improvements and appurtenances attached to or built into the Demised Premises prior to or during the Term, whether by Landlord at its expense or at the expense of Tenant (either or both) or by Tenant shall be and remain part of the Demised Premises and shall not be removed by Tenant at the end of the Term unless otherwise expressly provided by notice from Landlord to Tenant. Upon the request of Landlord, Tenant will remove such fixtures, equipment, leasehold improvements and appurtenances as are directed by Landlord and shall restore any damage caused by such removal. Notwithstanding the foregoing to the contrary, Tenant may, in connection with the initial Tenant improvements or any other fixtures, alterations or additions to the Demised Premises, upon presentation of detailed plans and specifications therefor, request in writing that Landlord advise Tenant which of said improvements, alterations or additions Landlord will require Tenant to remove at the end of the Term. Landlord shall advise Tenant in writing within thirty (30) days after receipt of such written request and the accompanying plans and specifications. If Landlord shall, in said written notice, require Tenant to remove an item at the end of the Term, Landlord shall have the right to rescind that decision and require Tenant to leave said item in place at the end of the Term by subsequent written notice to Tenant. Tenant shall remove the fixtures and equipment on Exhibit H and shall remediate all environmental contamination and Hazardous Materials associated with said items. All such removal shall be done in a good and workmanlike manner, and Tenant shall repair and restore any damage to the Building caused by such removal. In addition, any duct work, controls and rooftop exhaust equipment associated with the exhaust hoods must also be removed. Tenant shall structurally in-fill patch, flash and cap the roof to a weather-tight condition consistent with the four-ply built-up construction so as not to void the roof warranty. The in-wall and above ceiling copper and plastic piping associated with the vacuum compressed air or DI system and any specialty gas piping must be removed and remediated if any of the same is shown to be contaminated as provided in the environmental inspection of the Demised Premises made pursuant to Section 5.3(b). Any contaminated rooftop HVAC units and associated duct work shall also require removal at the Landlord’s discretion. Also, office workstations must be removed and remediated.

10. ALTERATIONS AND IMPROVEMENTS BY TENANT

Tenant shall make no alterations, decorations, installations, removals, additions or improvements in or to the Demised Premises without Landlord's prior written consent and then only by contractors or mechanics approved by Landlord. No such installations or other work shall be undertaken or begun by Tenant until Landlord has approved written plans and specifications therefor; and no amendments or additions to such plans and specifications shall be made without prior written consent of Landlord. Such approval shall not be unreasonably withheld provided such installations or work are non-structural, do not affect the exterior of the Building, and do not interfere with or impair utilities and systems in the Building. Notwithstanding the foregoing, Landlord's consent shall not be required for any alteration, addition or improvement that either (a) costs leas than Twenty-Five Thousand Dollars ($25,000.00) or (b) satisfies all of the following criteria: (i) is of a cosmetic nature such as painting, wallpapering, hanging pictures and installing carpeting, (ii) is not visible from the exterior of the Premises or Building, and (iii) will not affect the systems or structure of the Building, provided, however, in any such instance Tenant provides plans and specifications for such work not less than ten (10) days before commencing such work. Any such alterations, decorations, installations, removals, additions and improvements shall be done at the sole expense of Tenant and at such times and in such manner as Landlord may from time to time reasonably designate. Subject to the terms of Section 9 herein, if Tenant shall make any alterations, decorations, installations, removals, additions or improvements, then Landlord may elect to require Tenant at the expiration of this Lease to restore the Demised Premises to substantially the same condition as existed at the Term Commencement Date.

11. TENANT'S CONTRACTORS — MECHANICS' AND OTHER LIENS — STANDARD OF TENANT'S PERFORMANCE — COMPLIANCE WITH LAWS

Whenever Tenant shall make any alterations, decorations, installations, removals, additions or improvements or do any other work in or to the Demised Premises, Tenant will strictly observe the following covenants and agreements:

(a) In no event shall any material or equipment be incorporated in or added to the Demised Premises in connection with any such alteration, decoration, installation, addition or improvement which is subject to any lien, charge, mortgage or other encumbrance of any kind whatsoever or is subject to any security interest or any form of title retention agreement. Any mechanic's lien filed against the Demised Premises or the Building for work claimed to have been done for, or materials claimed to have been furnished to Tenant shall be discharged by Tenant within twenty (20) days thereafter, at the expense of Tenant, by filing the bond required by law or otherwise. If

Tenant fails so to discharge any lien, Landlord may do so at Tenant's expense and Tenant shall reimburse Landlord for any expense or cost incurred by Landlord in so doing within fifteen (15) days after rendition of a bill therefor.

(b) All installations or work done by Tenant under this or any other Article of this Lease shall be at its own expense (unless expressly otherwise provided) and shall at all times comply with (i) laws, rules, orders and regulations of governmental authorities having jurisdiction thereof and (ii) plans and specifications prepared by and at the expense of Tenant theretofore submitted to Landlord for its prior written approval.

(c) Tenant shall procure all necessary permits before undertaking any work in the Demised Premises; do all such work in a good and workmanlike manner, employing materials of good quality and complying with all governmental requirements, and defend, save harmless, exonerate and indemnify Landlord from all injury, loss or damage to any person or property occasioned by or growing out of such work.

(d) Tenant shall notify Landlord no later than ten (10) days prior to starting work on any alterations so that Landlord shall have the opportunity to post a "Notice of nonresponsibility" at the Demised Premises and record said notice in the county in which, the Property is located pursuant to California Civil Code Section 3094.

(e) all contractors and subcontractors shall be approved by Landlord, which approval shall not be unreasonably withheld, and all work by Tenant shall be performed by such contractors and subcontractors and in such manner as to maintain harmonious labor relations.

12. REPAIRS BY TENANT

Tenant, at its expense, shall keep or cause to be kept, all and singular, the Demised Premises in good repair, order and condition, reasonable use and wear thereof and damage by fire or by unavoidable casualty excepted. Without limiting the generality of the foregoing, Tenant shall keep all interior windows and other glass whole, and shall replace the same whenever broken with glass of the same quality and shall repair or replace all exterior windows if damaged by neglect or wrongdoing of Tenant. Tenant hereby waives the benefits of California Civil Code Section 1932(1).

13. INSURANCE, INDEMNIFICATION, EXONERATION AND EXCULPATION

13.1 Tenant's Insurance

(a) Liability Insurance. Tenant shall maintain in full force throughout the Term commercial general liability and property damage

insurance providing coverage on an occurrence form basis with limits of not less than Five Million Dollars ($5,000,000.00) each occurrence for bodily injury and property damage combined, Five Million Dollars ($5,000,000.00) annual general aggregate, and Five Million Dollars ($5,000,000.00) products and completed operations (if applicable) annual aggregate. Tenant's liability insurance policy or policies shall: (i) include premises and operations liability coverage, automobile, products and completed operations liability coverage (if applicable), broad form property damage coverage including completed operations (if applicable), blanket contractual liability coverage with, to the maximum extent possible, coverage for the indemnification obligations of Tenant under this Lease, and personal and advertising injury coverage; (ii) provide that the insurance company has the duty to defend all insureds under the policy; (iii) provide that defense costs are paid in addition to and do not deplete any of the policy limits; (iv) cover liabilities arising out of or incurred in connection with Tenant's use or occupancy of the Premises or the Property; and (v) extend coverage to cover liability for the actions of Tenant's employees, contractors, sublessees, guests and visitors. Tenant's required insurance may be maintained by a combination of underlying and "umbrella" coverage.

(b) Leasehold Improvements Personal Property Insurance. Tenant shall at all times maintain in effect with respect to Tenant's leasehold improvements and fixtures, equipment and personal property located at or within the Demised Premises, builder's risk and commercial property insurance providing coverage, at a minimum, for "broad form" perils, to the extent of 100% of the full replacement cost of covered property. Tenant may carry such insurance under a blanket policy, provided that such policy provides equivalent coverage to a separate policy. During the Term, the proceeds from any such policies of insurance shall be used for the repair or replacement of such leasehold improvements, fixtures, equipment and personal property so insured. Landlord shall be provided coverage under such insurance to the extent of its insurable interest and, if requested by Landlord, both Landlord and Tenant shall sign all documents reasonably necessary or proper in connection with the settlement of any claim or loss under such insurance. Landlord shall have no obligation to carry insurance on any such Tenant's leasehold improvements or on Tenant's fixtures, equipment or personal property.

(c) Workmen's Compensation Insurance. Tenant shall maintain worker's compensation insurance as required by law and employer's liability insurance in an amount not less than Five Hundred Thousand Dollars ($500,000).

(d) Business Interruption/Extra Expense Insurance. Tenant shall maintain loss of income, business interruption and extra expense insurance

in such amounts as will reimburse Tenant for direct or indirect loss of earnings and incurred costs attributable to the perils commonly covered by Tenant's property insurance described above but in no event less than One Million Five Hundred Thousand Dollars ($1,500,000.00). Such insurance shall be carried with the same insurer that issues the insurance for the personal property.

(e) Other Coverage. Tenant, at its cost, shall maintain such other insurance as Landlord may reasonably require from time to time, but in no event may Landlord require any other insurance which is (i) not then being required of comparable tenants leasing comparable amounts of space in comparable buildings in the vicinity of the Building or (ii) not then available at commercially reasonable rates.

(f) Insurance Criteria. Each policy of insurance required under this Section shall: (i) be in a form, and written by an insurer, reasonably acceptable to Landlord, (ii) be maintained at Tenant's sole cost and expense, and (iii) require at least thirty (30) days' written notice to Landlord prior to any cancellation, nonrenewal or modification of insurance coverage. Insurance companies issuing such policies shall have rating classifications of "A" or better and financial size category ratings of "XIII" or better according to the latest edition of the A.M. Best Key Rating Guide. All insurance companies issuing such policies shall be licensed to do business in the State of California. Any deductible amount under such insurance shall not exceed maximum deductible amounts currently required under similar leases for buildings in the vicinity of the Building, with Tenant having the burden of proof. Tenant shall provide to Landlord, upon request, evidence that the insurance required to be carried by Tenant pursuant to this Section, including any endorsement affecting the additional insured status, is in full force and effect and that premiums therefore have been paid.

(g) Increase in Amount of Insurance. Tenant shall increase the amounts of insurance as required by any Mortgagee, and, not more frequently than once every three (3) years, as recommended by Landlord's insurance broker, if, in the reasonable opinion of either of them, the amount of insurance then required under this Lease is not adequate. Any limits set forth in this Lease on the amount or type of coverage required by Tenant's insurance shall not limit the liability of Tenant under this Lease.

(h) Insurance Provisions. Each policy of liability insurance required by this Section shall: (i) contain a cross liability endorsement or separation of insureds clause; (ii) provide that it is primary to and not contributing with, any policy of insurance carried by Landlord or Prime Landlord covering the same loss; (iii) provide that any failure to comply with the reporting provisions shall not affect coverage provided to Landlord, Prime Landlord,

their officers, directors, shareholders, members, property managers and mortgagees; and (iv) name Prime Landlord, Mortgagees, Landlord, their officers, directors, employees, shareholders, members, property managers and such other parties in interest as Landlord may from time to time reasonably designate to Tenant in writing, as additional insureds. Such additional insureds shall be provided the same extent of coverage as provided to Tenant under such policies. All endorsements affecting such additional insured status shall be acceptable to Landlord and shall be at least as broad as additional insured endorsement form number CG 20 11 11 85 promulgated by the Insurance Services Office.

(i) Evidence of Coverage. Prior to occupancy of the Premises by Tenant, and not less than thirty (30) days prior to the expiration of any policy thereafter, Tenant shall furnish to Landlord a certificate of insurance reflecting that the insurance required by this Section is in force accompanied by an endorsement showing the required additional insureds satisfactory to Landlord in substance and form. Notwithstanding the requirements of this paragraph, Tenant shall, at Landlord's request, provide to Landlord within a commercially reasonable time a certified copy of each insurance policy required to be in force at any time pursuant to the requirements of this Lease or its Exhibits. Tenant's failure to furnish Landlord with such certificates of insurance within a reasonable time (not to exceed ten (10) days) after Landlord's request shall be deemed a material default under this Lease.

13.2 General. Tenant will save Landlord harmless, and will exonerate and indemnify Landlord and Prime Landlord, from and against any and all claims, liabilities, penalties, damages or expenses (including without limitation reasonable attorneys' fees) asserted against or incurred by Landlord or Prime Landlord:

(a) on account of or based upon any injury to person, or loss of or damage to property sustained or occurring on the Demised Premises on account of or based upon the act, omission, fault, negligence or misconduct of any person whomsoever (other than Landlord, Prime Landlord or their agents, contractors or employees);

(b) on account of or based upon any injury to person or loss of or damage to property, sustained or occurring elsewhere (other than on the Demised Premises) in or about the Building (and, in particular, without limiting the generality of the foregoing on or about the elevators, stairways, public corridors, sidewalks, roof, or other appurtenances and facilities used in connection with the Building or Demised Premises) arising out of the use or occupancy of the Building or Demised Premises by Tenant, or any person claiming by, through or under Tenant;

(c) on account of or based upon (including moneys due on account of) any work or thing whatsoever done (other than by Landlord, Prime Landlord or their contractors, or agents or employees of any such party) in the Demised Premises during the Term of this Lease and during the period of time, if any, prior to the Term Commencement Date that Tenant may have been given access to the Demised Premises; and

(d) on account of or resulting from the failure of Tenant to perform and discharge any of its covenants and obligations under this Lease;

and, in case any action or proceeding be brought against Landlord or Prime Landlord by reason of any of the foregoing, Tenant upon notice from Landlord shall at Tenant's expense resist or defend such action or proceeding and employ counsel therefor reasonably satisfactory to Landlord, it being agreed that such counsel as may act for insurance underwriters of Tenant engaged in such defense shall be deemed satisfactory.

13.3 Property of Tenant. In addition to and not in limitation of the foregoing, and subject only to provisions of applicable law, Tenant covenants and agrees that all merchandise, furniture, fixtures and property of every kind, nature and description which may be in or upon the Demised Premises or elsewhere on the Property during the Term of this Lease, shall be at the sole risk and hazard of Tenant, and that if the whole or any part thereof shall be damaged, destroyed, stolen or removed from any cause or reason whatsoever other than the negligence or misconduct of Landlord or Prime Landlord or their contractors, or agents or employees of any such party, no part of said damage or loss shall be charged to, or borne by Landlord or Prime Landlord.

13.4 Bursting of Pipes, etc. Landlord shall not be liable for any injury or damage to persons or property resulting from fire, explosion, seismic events, earthquakes, falling plaster or tiles, steam, gas, electricity, electrical disturbance, water, rain or snow or leaks from any part of the Building or from the pipes, appliances or plumbing works or from the roof, street or sub-surface or from any other place or caused by any other cause of whatever nature, unless caused by or due to the negligence of Landlord, its agents, servants or employees; nor shall Landlord or its agents be liable for any such damage caused by other tenants or persons in the Building or caused by operations in construction of any private, public or quasi-public work; nor shall Landlord be liable for any latent defect in the Demised Premises or elsewhere in the Building.

13.5 Landlord's Insurance. Landlord shall, at its sole expense, carry so-called "all risk" full replacement cost casualty insurance on the Building (exclusive of Tenant's leasehold improvements, fixtures and equipment).

14. ASSIGNMENT, MORTGAGING, SUBLETTING, ETC.

14.1 Generally. Tenant shall not voluntarily, involuntarily or by operation of law assign, transfer, mortgage or otherwise encumber this Lease or any interest of Tenant therein, in the whole or in part of the Premises or permit the Premises or any part thereof to be used or occupied by others, without the prior written consent of Landlord and Landlord's mortgagee. Except in connection with a public stock offering, a transfer of any of Tenant's stock or a transfer or change of control of Tenant (if Tenant is a corporation), or a change in the composition of persons or entities owning any interest in Tenant (if Tenant is not a corporation), or any transfer of Tenant's interest in the Lease by operation of law or by merger or consolidation of Tenant with or into any other entity, firm or corporation, shall be deemed an assignment for purposes of this Article 14. Notwithstanding anything to the contrary in this Lease, except with respect to Corporate Transfers (hereinafter defined) to a Competitor (as defined in Section 14.2), Tenant shall not be required to obtain Landlord's consent, and the terms of Sections 14.2 and 14.3 of this Lease shall not apply, to any transfer of Tenant's stock or a transfer or change of control of Tenant or other transfer to an entity which controls, is controlled by or is under common control with Tenant or any successor to Tenant or which succeeds to substantially all of Tenant's assets and business by merger, consolidation, reorganization or purchase or in connection with an initial public offering (collectively referred to as "Corporate Transfers"). Tenant shall give Landlord written notice at least thirty (30) days prior to the effective date of such Corporate Transfer. As used herein, the terms "controlled" or "controls" or "control" shall mean ownership of at least fifty-one percent (51%) of voting control of the relevant entity.

14.2 Landlord's Options. In connection with any request by Tenant for Landlord's consent to assignment or subletting, Tenant shall submit to Landlord in writing ("Tenant's Sublease Notice") (i) the name of the proposed assignee or subtenant, (ii) such information as to its financial responsibility and standing as Landlord may reasonably require, and (iii) all of the terms and provisions upon which the proposed assignment or subletting is to be made. Within ten (10) business days after receipt from Tenant of Tenant's Sublease Notice and receipt of the information required hereunder, Landlord shall have the following options: (a) reasonably withholding its consent if the proposed sublease is at least 10,000 rentable square feet, or if the proposed sublease is less than 10,000 rentable square feet, withholding consent in its sole and absolute discretion; (b) withholding consent if the proposed assignee or sublessee is a "Competitor" (as that term is hereinafter defined); (c) if the request is made after the third (3rd) anniversary of the commencement of the Term and is to sublet a portion of the Premises, to elect to match said offer and sublease the Demised Premises or relevant portion thereof on the same terms and conditions as set forth in Tenant's Sublease Notice; (d) if the request is made after the third (3rd) anniversary of the commencement of the Term and is to assign this Lease or sublet all of the Premises, elect to match said offer

and accept an assignment of this Lease on the same terms and conditions set forth in Tenant's Sublease Notice, or (e) consenting to the proposed assignment or such leasing. The term "Competitor," as used herein shall mean any person or entity engaged in the manufacture or sale of instruments for DNA sequencing or amplification, including, without limitation, the following businesses and any affiliates, subsidiaries, parents or successors thereto: PE Corp., Applera Corporation, PE Biosystems, Inc., Applied Biosystems, Inc., Celera Genomics, Inc., Celera Genomics Group, F. Hoffmann-LaRoche Ltd., Hoffmann-LaRoche, Inc., Roche Diagnostics Corporation, Roche Molecular Systems, Inc., Amersham Pharmacia Biotech, Ltd., Molecular Dynamics, Inc., Perkin Elmer Corporation, Strategene, Hybade Ltd., Ericomp, Techne Corporation, MWG Biotech AG, Whatman Biometra, Labreco, Inc., Bio-Rad Laboratories, Inc., and Cepheid. In the event Landlord shall exercise either option (c) or (d) above, Tenant shall sublease the Demised Premises or relevant portion thereof or assign this Lease to Tenant upon the terms and conditions set forth in said Tenant's Sublease Notice. In the event Landlord elects to match this offer in Tenant's Sublease Notice as set forth in clause (d) above, Tenant shall remain responsible for removal of leasehold improvements and equipment as required in Sections 9 and 10 at the end of the Term or earlier termination of this Lease.

14.3 Conditions. Any subletting or assignment pursuant to this Article shall be subject to and conditioned upon the following:

(a) at the time of any proposed subletting or assignment, Tenant shall not be in default under any of the terms, covenants, or conditions of this Lease beyond applicable grace periods;

(b) the sublessee or assignee shall conduct its business in accordance with the Permitted Use;

(c) prior to occupancy, Tenant and its assignee or sublessee shall execute, acknowledge and deliver to Landlord a fully executed counterpart of a written assignment of lease or a written sublease, as the case may be, by the terms of which:

(1) in case of an assignment of this Lease in its entirety, Tenant shall assign to such assignee Tenant's entire interest in this Lease, together with all prepaid rents hereunder, and the assignee shall accept said assignment and assume and agree to perform directly for the benefit of Landlord, all of the terms, covenants and conditions of this Lease on Tenant's part to be performed; or

(2) in case of a subletting, the sublessee thereunder shall agree to be bound by and to perform all of the terms, covenants and conditions of this Lease on the Tenant's part to be performed, except

the payments of rents, charges and other sums reserved hereunder, which Tenant shall continue to be obligated to pay and shall pay to Landlord;

(d) Tenant shall pay to Landlord monthly one-half of the excess of the rents and other charges received by Tenant pursuant to the assignment or sublease over the rents and other charges reserved to Landlord under this Lease attributable to the space assigned or sublet, less the reasonable costs and expenses of subleasing and less the unamortized cost of Tenant's leasehold improvements (but not trade fixtures or equipment) paid for by Tenant, which cost shall be amortized over a ten year basis commencing on the Term Commencement Date;

(e) Tenant and any guarantor of Tenant's obligations hereunder (hereinafter "Guarantor") shall acknowledge that, notwithstanding such assignment or sublease and consent of Landlord thereto, Tenant and Guarantor shall not be released or discharged from any liability whatsoever under this Lease and will continue to be liable with the same force and effect as though no assignment or sublease had been made; and

(f) Tenant shall pay Landlord's reasonable costs including but not limited to attorney's fees and Landlord's administrative and overhead costs, incurred in connection with each such assignment or subletting.

14.4 Landlord's Consent. Landlord shall not unreasonably withhold its consent to a sublease of at least 10,000 rentable square feet or assignment pursuant to the preceding Section 14.1, subject to Landlord's options in subclauses (c) and (d) of Section 14.2. If Landlord elects to pursue its option under Section 14.2 to match the terms of Tenant's Sublease Notice, this Section 14.4 is not relevant. Landlord's failure to consent shall be deemed unreasonable if the conditions set forth in Subsections 14.3(a)-(f) are met, Landlord's Mortgagee has consented thereto and if:

(a) The proposed assignment or subletting is made to a party other than a Competitor; or

(b) The proposed assignee or subtenant has a good credit rating, which shall be at least equal to that of Tenant as of the Term Commencement Date, and demonstrable ability to comply with the terms and conditions of this Lease, a good reputation in the community, and the proposed use by such subtenant or assignee (even though Permitted Use) could not in Landlord's reasonable opinion be expected to detract from the character of the Building at the time of the proposed assignment or sublease.

14.5 No Waiver. The consent by Landlord to an assignment or subletting shall not in any way be construed to relieve Tenant from obtaining the express consent of Landlord to any further assignment or subletting for the use of all or any

part of the Premises, nor shall the collection of rent by Landlord from any assignee, sublessee or other occupant after default by Tenant be deemed a waiver of this covenant or the acceptance of such assignee, sublessee or occupant as tenant or a release of Tenant from the further performance by Tenant of the obligations in this Lease on Tenant's part to be performed.

15. MISCELLANEOUS COVENANTS

15.1 Rules and Regulations. Tenant and Tenant's servants, employees, agents, visitors and licensees will faithfully observe such Rules and Regulations as are attached hereto as Exhibit C and made a part hereof or as Landlord hereafter at any time or from time to time may make and may communicate in writing to Tenant and which in the reasonable judgment of Landlord shall be necessary for the reputation, safety, care or appearance of the Property, or the preservation of good order therein, or the operation or maintenance of the Property, or the equipment thereof, or the comfort of tenants or others in the Building, provided, however, that in the case of any conflict between the provisions of this Lease and any such Rules and Regulations, the provisions of this Lease shall control, and provided further that nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce such Rules and Regulations or the terms, covenants or conditions in any other lease as against any other tenant and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its servants, employees, agents, visitors, invitees or licensees.

15.2 Access to Premises. Tenant shall: (i) permit Landlord to erect, use and maintain pipes, ducts and conduits in and through the Demised Premises, provided the same do not materially reduce the floor area or materially adversely affect the appearance thereof; (ii) permit the Landlord and any Mortgagee to have free and unrestricted access to and to enter upon the Demised Premises at all reasonable hours (upon 24 hours prior notice except in case of emergency) for the purposes of inspection or of making repairs, replacements or improvements in or to the Demised Premises or the Building or equipment (including, without limitation, sanitary, electrical, heating, air conditioning or other systems) or of complying with all laws, orders and requirements of governmental or other authority or of exercising any right reserved to Landlord by this Lease (including the right during the progress of any such repairs, replacements or improvements or while performing work and furnishing materials in connection with compliance with any such laws, orders or requirements to take upon or through, or to keep and store within, the Demised Premises all necessary materials, tools and equipment); and (iii) permit Landlord, at reasonable times and upon 24 hours prior notice, to show the Demised Premises during ordinary business hours to any Mortgagee, prospective purchaser of any interest of Landlord in the Property, prospective Mortgagee, or prospective assignee of any Mortgage, and during the period of twelve months next preceding the Termination Date to any person contemplating the leasing of the Demised Premises or any part thereof. If Tenant shall not be

personally present to open and permit any entry into the Demised Premises at any time when for any reason an entry therein shall be necessary or permissible pursuant to the terms of this Lease or by law, Landlord or Landlord's agents must nevertheless be able to gain such entry by contacting a responsible representative of Tenant, whose name, address and telephone number shall be furnished by Tenant. Provided that Landlord shall not be obligated to employ labor at so-called "over-time" or other premium pay rates, Landlord shall exercise its rights of access to the Demised Premises permitted under any of the terms and provisions of this Lease in such manner as to minimize to the extent practicable interference with Tenant's use and occupation of the Demised Premises. Notwithstanding the foregoing, any entry (other than in case of emergency) by Landlord, any Mortgagee or any of their agents or representatives shall be subject to Tenant's reasonable security requirements, including but not limited to the requirement that a representative of Tenant accompany such parties when in certain parts of the Demised Premises.

15.3 Accidents to Sanitary and other Systems. Tenant shall give to Landlord prompt notice of any fire or accident in the Demised Premises or in the Building and of any damage to, or defective condition in, any part or appurtenance of the Building's sanitary, electrical, heating and air conditioning or other systems located in, or passing through, the Demised Premises.

15.4 Signs, Blinds and Drapes. Tenant shall not place any signs on the exterior of the Building (except as provided in Section 27.11) or on or in any window, public corridor or door visible from the exterior of the Demised Premises. No drapes or blinds may be put on or in any exterior window nor may any Building drapes or blinds be removed by Tenant.

15.5 Estoppel Certificate. Tenant shall at any time and from time to time upon not less than ten business (10) days' prior notice by Landlord, Prime Landlord or by a Mortgagee to Tenant, execute, acknowledge and deliver to the party making such request a statement in writing certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), and the dates to which Rent has been paid in advance, if any, and stating whether or not to the actual knowledge and belief of the signer of such certificate Landlord is in default in performance of any covenant, agreement, term, provisions or condition contained in this Lease and, if so, specifying each such default of which the signer may have knowledge, it being intended that any such statement delivered pursuant hereto may be relied upon by any prospective purchaser of any interest in the Property, any Mortgagee or prospective Mortgagee, any lessee or prospective lessee thereof, any prospective assignee of any Mortgage, or any other party designated by Landlord. The form of any such estoppel certificate requested by a Mortgagee shall be reasonably satisfactory to such Mortgagee.

15.6 Requirements of Law — Fines and Penalties. Tenant at its sole expense shall comply with all laws, rules, orders and regulations of Federal, State, County and Municipal Authorities and with any direction of any public officer or officers, pursuant to law, which shall impose any duty upon Landlord or Tenant with respect to and arising out of Tenant's use or occupancy of the Demised Premises. If Tenant receives notice of any violation of law, ordinance, order or regulation applicable to the Demised Premises, it shall give prompt notice thereof to Landlord. Without limiting the generality of the foregoing, Tenant shall be responsible for compliance with requirements imposed by the Americans with Disabilities Act relative to the Demised Premises, including without limitation all such requirements applicable to removing barriers, furnishing auxiliary aids and ensuring that, whenever alterations are made, the affected portions of the Demised Premises are readily accessible to and usable by individuals with disabilities. Notwithstanding anything in the foregoing to the contrary, if the requirement of additional work in the Demised Premises is caused by governmental action solely as result of work being done by Landlord in parts of the Building other than the Demised Premises, then Landlord shall be responsible for the cost of such ADA work. Conversely, if additional ADA work in the Building is caused by governmental action solely as a result of work in the Demised Premises by Tenant, then Tenant shall be responsible for the cost of such ADA work.

15.7 Tenant's Acts — Effect on Insurance. Tenant shall not do or permit to be done any act or thing upon the Demised Premises or elsewhere in the Building which will invalidate or be in conflict with any insurance policies covering the Building and the fixtures and property therein and shall not do, or permit to be done, any act or thing upon the Demised Premises which shall subject Landlord to any liability or responsibility for injury to any person or persons or to property by reason of any business or operation being conducted on the Demised Premises or for any other reason. Subject to the terms of this Lease and except as otherwise specifically set forth to the contrary herein, Tenant at its own expense shall comply with all applicable provisions of the California Health and Safety Code and all regulations promulgated thereunder and with all rules, orders, regulations or requirements of the underwriter(s) of the fire and other hazard insurance for the Property and the Demised Premises and shall not do, or permit anything to be done, in or upon the Demised Premises, or bring or keep anything therein, that is not permitted by the City of South San Francisco Fire Department, or other authority having jurisdiction, and then only in such quantity and manner of storage as will not increase the rate for any insurance applicable to the Building. If by reason of failure of Tenant to comply with the provisions hereof the insurance rate applicable to any policy of insurance shall at any time thereafter be higher than it otherwise would be, then Tenant shall reimburse Landlord for that part of any insurance premiums thereafter paid by Landlord, which shall have been charged because of such failure by Tenant.

15.8 Miscellaneous. Tenant shall not suffer or permit the Demised Premises or any fixtures, equipment or utilities therein or serving the same, to be overloaded, damaged or defaced.

16. DAMAGE BY FIRE, ETC.

In the event of loss of, or damage to, the Demised Premises or the Building by fire or other casualty, the rights and obligations of the parties hereto shall be as follows:

(a) If the Demised Premises, or any part thereof, shall be damaged by fire or other casualty, Tenant shall give prompt notice thereof to Landlord, and Landlord, upon receiving such notice and the insurance proceeds for such casualty, shall proceed in a commercially reasonable manner, subject to unavoidable delays, to repair, or cause to be repaired, such damage to the extent hereinafter provided. Landlord shall be responsible to restore only to the "cold shell" condition as set forth on Exhibit A-l, and Tenant shall be responsible for restoration of all leasehold improvements beyond such cold shell. If the Demised Premises or any part thereof shall be rendered untenantable by reason of such damage, whether to the Demised Premises or to the Building, Yearly Fixed Rent shall proportionately abate for the period from the date of such damage to the date when such damage shall have been repaired by Landlord to the condition set forth on Exhibit A-l.

(b) If, as a result of fire or other casualty, the whole or a substantial portion of the Building is rendered untenantable and the nature and extent of the damage is such that in Landlord's opinion, taking into account a reasonable time for adjusting loss and obtaining plans and permits for restoration, the Demised Premises cannot be made tenantable within 180 days after such event, Landlord, within ninety (90) days from the date of such fire or casualty, may terminate this Lease by notice to Tenant, specifying a date not less than thirty (30) nor more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. If Landlord does not so elect to terminate this Lease, then Landlord shall (to the extent that proceeds of insurance required to be carried by Landlord, net of any portion thereof retained by a Mortgagee, are made available for such purpose) proceed with diligence to repair the damage to the Demised Premises and all facilities serving the same, if any, which shall have occurred, and the Yearly Fixed Rent shall meanwhile proportionately abate, all as provided in Paragraph (a) of this Section. However, if such damage is not repaired and the Demised Premises restored to substantially the same condition as they were prior to such damage within one (1) year from the date of such damage, Tenant within thirty (30) days from the expiration of such one (1) year period or from the expiration of any extension thereof by reason of unavoidable delays as hereinafter provided, may terminate this Lease by

notice to Landlord, specifying a date not more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. The period within which the required repairs may be accomplished shall be extended by the number of days, lost as a result of unavoidable delays, which term shall be defined to include all delays referred to in Article 24.

(c) If the Demised Premises shall be rendered untenantable by fire or other casualty during the last two (2) years of the Term of this Lease, Landlord may terminate this Lease effective as of the date of such fire or other casualty upon notice to Tenant given within ninety (90) days after such fire or other casualty. Notwithstanding the foregoing to the contrary, in the event Landlord exercises the foregoing termination right, if Tenant has available to it the option to extend and validly exercises said option, Tenant may defeat said termination notice by the valid exercise of said option term so as to add an additional five years on to the Term of this Lease.

(d) Landlord shall not be required to repair or replace any of Tenant's leasehold improvements, fixtures, business machinery, equipment, cabinet work, furniture, personal property or other installations (all of which shall, however, be restored by Tenant within a reasonable time after Landlord shall have completed any repair or restoration required under the terms of this Article), and no damages, compensation or claim shall be payable by Landlord for inconvenience, loss of business or annoyance arising from any repair or restoration of any portion of the Demised Premises or of the Building.

(e) The provisions of this Article shall be considered an express agreement governing any instance of damage or destruction of the Building or the Demised Premises by fire or other casualty, and any law now or hereafter in force providing for such a contingency in the absence of express agreement shall have no application.

(f) In the event of any termination of this Lease pursuant to this Article, the Term of this Lease shall expire as of the effective termination date as fully and completely as if such date were the date originally fixed herein for the end of the Term of this Lease. Tenant shall have access to the Demised Premises for a period of fifteen (15) days after the date of termination in order to remove Tenant's personal property.

(g) Landlord's Architect's certificate, given in good faith, shall be deemed conclusive of the statements therein contained and binding upon Tenant with respect to the performance and completion of any repair or restoration work undertaken by Landlord pursuant to this Article or Article 18.

17. WAIVER OF SUBROGATION

In any case in which Tenant shall be obligated under any provision of this Lease to pay to Landlord or Prime Landlord any loss, cost, damage, liability, or expense suffered or incurred by Landlord or Prime Landlord, Landlord shall allow to Tenant as an offset against the amount thereof (i) the net proceeds of any insurance collected by Landlord for or on account of such loss, cost, damage, liability, or expense, provided that the allowance of such offset does not invalidate the policy or policies under which such proceeds were payable and (ii) if such loss, cost, damage, liability or expense shall have been caused by a peril against which Landlord has agreed to procure insurance coverage under the terms of this Lease, the amount of such insurance coverage, if not actually procured by Landlord.

In any case in which Landlord or Prime Landlord shall be obligated under any provision of this Lease to pay to Tenant any loss, cost, damage, liability or expense suffered or incurred by Tenant, Tenant shall allow to Landlord as an offset against the amount thereof (i) the net proceeds of any insurance collected by Tenant for or on account of such loss, cost, damage, liability, or expense, provided that the allowance of such offset does not invalidate the policy or policies under which such proceeds were payable and (ii) if such loss, cost, damage, liability or expense shall have been caused by a peril against which Tenant has agreed to procure insurance coverage under the terms of this Lease, the amount of such insurance coverage, if not actually procured by Tenant.

The parties hereto shall each endeavor to procure an appropriate clause in, or endorsement on, any fire or extended coverage insurance policy covering the Demised Premises and the Building and personal property, fixtures and equipment located thereon or therein, pursuant to which the insurance companies waive subrogation or consent to a waiver of right of recovery, and having obtained such clauses and/or endorsements of waiver of subrogation or consent to a waiver of right of recovery each party hereby agrees that it will not make any claim against or seek to recover from the other for any loss or damage to its property or the property of others resulting from fire or other perils covered by such fire and extended coverage insurance; provided, however, that the release, discharge, exoneration and covenant not to sue herein contained shall be limited by the terms and provisions of the waiver of subrogation clauses and/or endorsements or clauses and/or endorsements consenting to a waiver of right of recovery and shall be co-extensive therewith. If either party may obtain such clause or endorsement only upon payment of an additional premium, such party shall promptly so advise the other party and shall be under no obligation to obtain such clause or endorsement unless such other party pays the premium.

18. CONDEMNATION — EMINENT DOMAIN

In the event that the whole or more than 40% of the Building shall be taken or appropriated by eminent domain or shall be condemned for any public or quasi-public use, or (by virtue of any such taking, appropriation or condemnation) shall suffer any damage (direct, indirect or consequential) for which Landlord or Tenant shall be entitled to compensation then (and in any such event) this Lease and the Term hereof may be terminated at the election of Landlord by a notice in writing of its election so to terminate which shall be given by Landlord to Tenant within sixty (60) days following the date on which Landlord shall have received notice of such taking, appropriation or condemnation. In the event that more than fifty percent (50%) of the floor area of the Demised Premises or a substantial part of the means of access thereto within the perimeter of the Property so as to substantially interfere with the use of the Demised Premises shall be so taken, appropriated or condemned, then (and in any such event) this Lease and the Term hereof may be terminated at the election of Tenant by a notice in writing of its election so to terminate which shall be given by Tenant to Landlord within sixty (60) days following the date on which Tenant shall have received notice of such taking, appropriation or condemnation. Tenant hereby waives the benefits of California Code of Civil Procedure Section 12165.130.

Upon the giving of any such notice of termination (either by Landlord or Tenant) this Lease and the Term hereof shall terminate on or retroactively as of the date on which Tenant shall be required to vacate any part of the Demised Premises or shall be deprived of a substantial part of the means of access thereto, provided, however, that Landlord may in Landlord's notice elect to terminate this Lease and the Term hereof retroactively as of the date on which such taking, appropriation or condemnation became legally effective. In the event of any such termination, this Lease and the Term hereof shall expire as of the effective termination date as fully and completely as if such date were the date originally fixed herein for the end of the Term of this Lease. If neither party (having the right so to do) elects to terminate Landlord will, with reasonable diligence and at Landlord's expense, restore the remainder of the Demised Premises, or the remainder of the means of access thereto, as nearly as practicably may be to the same condition as obtained prior to such taking, appropriation or condemnation in which event (i) a just proportion of the Yearly Fixed Rent, according to the nature and extent of the taking, appropriation or condemnation and the resulting permanent injury to the Demised Premises and the means of access thereto, shall be permanently abated, and (ii) a just proportion of the remainder of the Yearly Fixed Rent, according to the nature and extent of the taking, appropriation or condemnation and the resultant injury sustained by the Demised Premises and the means of access thereto, shall be abated until what remains of the Demised Premises and the means of access thereto shall have been restored as fully as may be possible for permanent use and occupation by Tenant hereunder. Except for any award specifically reimbursing Tenant for moving or relocation expenses and Tenant's moveable personal property

(but not leasehold improvements), there are expressly reserved to Landlord all rights to compensation and damages created, accrued or accruing by reason of any such taking, appropriation or condemnation, in implementation and in confirmation of which Tenant does hereby acknowledge that Landlord shall be entitled to receive and retain all such compensation and damages, grants to Landlord all and whatever rights (if any) Tenant may have to such compensation and damages, and agrees to execute and deliver all and whatever further instruments of assignment as Landlord may from time to time request. In the event of any taking of the Demised Premises or any part thereof for temporary use, (i) this Lease shall be and remain unaffected thereby, and (ii) Tenant shall be entitled to receive for itself any award made for such use, provided, that if any taking is for a period extending beyond the Term of this Lease, such award shall be apportioned between Landlord and Tenant as of the Termination Date.

19. DEFAULT

19.1 Events of Default. Occurrence of any of the following events shall constitute an Event of Default under this Lease: (a) Tenant shall neglect or fail to perform or observe any of the Tenant's covenants herein, including (without limitation) the covenants with regard to the payment when due of Rent, which default continues, in the case of payment of Rent, for thirty (30) days after notice of default or, in the case of defaults other then payment of Rent, for twenty (20) days after such notice of default (provided that if more time, but not more than 30 additional days) is required to complete such performance, Tenant shall not be in default if Tenant commences such performance within the thirty (30) day period and thereafter diligently pursues its completion); or (b) Tenant shall default in payment of Rent more than two (2) times in any consecutive twelve (12) month period; or (c) Tenant shall be involved in financial difficulties as evidenced by an admission in writing by Tenant of Tenant's inability to pay its debts generally as they become due, or by the making or offering to make a composition of its debts with its creditors; or (d) Tenant shall make an assignment or trust mortgage, or other conveyance or transfer of like nature, of all or a substantial part of its property for the benefit of its creditors; or (e) the leasehold hereby created shall be taken on execution or by other process of law and shall not be revested in Tenant within sixty (60) days thereafter; or (f) a receiver, sequester, trustee or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or a substantial part of Tenant's property and such appointment shall not be vacated within sixty (60) days; or (g) any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganization, arrangements, compositions or other relief from creditors, and, in the case of any such proceeding instituted against it, if Tenant shall fail to have such proceeding dismissed within thirty (30) days or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding; or (h) any event shall occur or any contingency shall arise whereby this Lease, or the term and estate thereby created, would (by operation of law or otherwise) devolve upon or

pass to any person, firm or corporation other than Tenant, except as expressly permitted under Article 14 hereof.

19.2 Remedies Available upon Default. Upon the occurrence of an Event of Default, Landlord shall have the following remedies, which shall not be exclusive but shall be cumulative and shall be in addition to any other remedies now or hereafter allowed by law:

(a) Landlord may terminate Tenant's right to possession of the Premises at any time by written notice to Tenant. Tenant expressly acknowledges that in the absence of such written notice from Landlord, no other act of Landlord, including re-entry into the Premises, efforts to relet the Premises, reletting of the Premises for Tenant's account, storage of Tenant's personal property and trade fixtures, acceptance of keys to the Premises from Tenant or exercise of any other rights and remedies under this Section, shall constitute an acceptance of Tenant's surrender of the Premises or constitute a termination of this Lease or of Tenant's right to possession of the Premises. Upon such termination in writing of Tenant's right to possession of the Premises, as herein provided, this Lease shall terminate and Landlord shall be entitled to recover damages from Tenant as provided in California Civil Code Section 1951.2 and any other applicable existing or future Law providing for recovery of damages for such breach, including the worth at the time of award of the amount by which the rent which would be payable by Tenant hereunder for the remainder of the Term after the date of the award of damages, including Additional Rent as reasonably estimated by Landlord, exceeds the amount of such rental loss as Tenant proves could have been reasonably avoided, discounted at the discount rate published by the Federal Reserve Bank of San Francisco for member banks at the time of the award plus one percent (1%).

(b) Landlord shall have the remedy described in California Civil Code Section 1951.4 (Landlord may continue this Lease in effect after Tenant's breach and abandonment and recover rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations).

(c) Landlord may immediately, or at any time thereafter, without notice, cure said Event of Default for the account of Tenant. If Landlord at any time is compelled to pay or elects to pay any sum of money, or do any act which will require the payment of any sum of money, by reason of the failure of Tenant to comply with any provision hereof, or if Landlord is compelled to or does incur any expense, including without limitation reasonable attorneys' fees, in instituting, prosecuting and/or defending any action or proceeding arising by reason of any default of Tenant hereunder, Tenant shall on demand pay to Landlord by way of reimbursement the sum or sums so paid

by Landlord with all interest, costs and damages together with interest at the Interest Rate for the period such sums remain outstanding.

(d) Landlord may remove all of Tenant's property from the Premises, and such property may be stored by Landlord in a public warehouse or elsewhere at the sole cost and for the account of Tenant. If Landlord does not elect to store any or all of Tenant's property left in the Premises, Landlord may consider such property to be abandoned by Tenant, and Landlord may thereupon dispose of such property in the manner and as prescribed by California Civil Code Section 1980 et seq. Any proceeds realized by Landlord on the disposal of any such property shall be applied first to offset all expenses of storage and sale, then credited against Tenant's outstanding obligations to Landlord under this Lease, and any balance remaining after satisfaction of all obligations of Tenant under this Lease shall be delivered to Tenant.

(e) The damages recoverable by Landlord pursuant to this Section shall in all events include reimbursement of any concessions made by Landlord in connection with the leasing of the Demised Premises to Tenant, including without limitation (a) abated Rent, (b) allowances or improvements in excess of any Building standard work, (c) sums paid to any former landlord of Tenant under a so-called "take-over", lease assumption or similar agreement and (d) signing bonuses and other incentive payments. Any allowances, abated rent, signing bonuses, incentive payments or takeover payments shall be deemed commercially reasonable if recommended to Landlord by a reputable commercial real estate broker as being appropriate and necessary for the leasing of said Premises to a creditworthy tenant.

19.3 Grace Period. Notwithstanding anything to the contrary in this Article contained, Landlord agrees not to take any action to terminate this Lease (a) for default by Tenant in the payment when due of Rent, if Tenant shall cure such default within five (5) days after written notice thereof given by Landlord to Tenant, unless there has been two (2) or more defaults in any 12-month period as set forth in Section 19.1(b), or (b) for default by Tenant in the performance of any other covenant, if Tenant shall cure such default within a period of thirty (30) days after written notice thereof given by Landlord to Tenant (except where the nature of the default is such that remedial action should appropriately take place sooner, as indicated in such written notice), or with respect to covenants other than to pay a sum of money within such additional period as may reasonably be required to cure such default if (because of governmental restrictions or any other cause beyond the reasonable control of Tenant) the default is of such a nature that it cannot be cured within such thirty (30)-day period, provided, however, (1) that there shall be no extension of time beyond such thirty (30)-day period for the curing of any such default unless, not more than ten (10) days after the receipt of the notice of default, Tenant in writing (i) shall specify the cause on account of which the default cannot

be cured during such period and shall advise Landlord of its intention duly to institute all steps necessary to cure the default and (ii) shall as soon as may be reasonable duly institute and thereafter diligently prosecute to completion all steps necessary to cure such default and, (2) that no notice of the opportunity to cure a default need be given, and no grace period whatsoever shall be allowed to Tenant, if the default is incurable or if the covenant or condition the breach of which gave rise to the default had, by reason of a breach on a prior occasion, been the subject of a notice hereunder to cure such default.

20. END OF TERM — ABANDONED PROPERTY

Upon the expiration or other termination of the Term of this Lease, Tenant shall peaceably quit and surrender to Landlord the Demised Premises and all alterations and additions thereto which Tenant is not entitled or required to remove under the provisions of this Lease, broom clean in good order, repair and condition excepting only reasonable use and wear and damage by fire or other casualty for which, under other provisions of this Lease, Tenant has no responsibility of repair or restoration. Tenant's obligation to observe or perform this covenant shall survive the expiration or other termination of the Term of this Lease. If the last day of the Term of this Lease or any renewal thereof falls on a day other than a Business Day, this Lease shall expire on the Business Day immediately following. Tenant shall pay twice the amount of Rent applicable to each month (or fraction thereof) during which Tenant remains in possession of any part of the Demised Premises in violation of the foregoing covenants, without prejudice to eviction and any other remedy available to Landlord on account thereof.

Any personal property in which Tenant has an interest which shall remain in the Building or on the Demised Premises after the expiration or termination of the Term of this Lease shall be conclusively deemed to have been abandoned, and may be disposed of in such manner as Landlord may see fit; provided, however, notwithstanding the foregoing, that Tenant will, upon request of Landlord made not later than ten (10) days after the expiration or termination of the Term hereof, promptly remove from the Building any such personal property or, if any part thereof shall be sold, that Landlord may receive and retain the proceeds of such sale and apply the same, at its option, against the expenses of the sale, the cost of moving and storage, any arrears of Rent payable hereunder by Tenant to Landlord and any damages to which Landlord may be entitled under Article 19 hereof or pursuant to law, with the balance if any, to be paid to Tenant.

21. RIGHTS OF MORTGAGEES

21.1 Entry and Possession. Upon entry and taking possession of the Property by a Mortgagee, for the purpose of foreclosure or otherwise, such Mortgagee shall have all the rights of Landlord, and shall be liable to perform all

the obligations of Landlord arising and accruing during the period of such possession by such Mortgagee.

21.2 Right to Cure. No act or failure to act on the part of Landlord which would entitle Tenant under the terms of this Lease, or by law, to be relieved of Tenant's obligations hereunder or to terminate this Lease, shall result in a release or termination of such obligations or a termination of this Lease unless (i) Tenant shall have first given written notice of Landlord's act or failure to act to first Mortgagees of record, if any, and to any other Mortgagees of whom Tenant has been given written notice, specifying the act or failure to act on the part of Landlord which could or would give basis to Tenant's rights; and (ii) such Mortgagees, after receipt of such notice, have failed or refused to correct or cure the condition complained of within 30 days thereafter for a monetary default and 60 days for a non-monetary default, but nothing contained in this paragraph shall be deemed to impose any obligation on any such Mortgagees to correct or cure any such condition.

21.3 Prepaid Rent. No Rent shall be paid more than thirty (30) days prior to the due dates thereof and, as to a first Mortgagee of record and any other Mortgagees of whom Tenant has been given written notice, payments made in violation of this provision shall (except to the extent that such Rent is actually received by such Mortgagee) be a nullity as against such Mortgagee and Tenant shall be liable for the amount of such payments to such Mortgagee.

21.4 Continuing Offer. The covenants and agreements contained in this Lease with respect to the rights, powers and benefits of a Mortgagee (particularly, without limitation thereby, the covenants and agreements contained in this Article) constitute a continuing offer to any person, corporation or other entity, which by accepting or requiring an assignment of this Lease or by entry or foreclosure assumes the obligations herein set forth with respect to such Mortgagee; every such Mortgagee is hereby constituted a party to this Lease as an obligee hereunder to the same extent as though its name was written hereon as such; and such Mortgagee shall be entitled to enforce such provisions in its own name.

21.5 Subordination. This lease shall be subordinate to all mortgages encumbering the Land and/or Building, but Tenant shall nevertheless have the benefit of the non-disturbance provisions hereinafter set forth, and Tenant agrees, at the request of Landlord or any Mortgagee, to execute and deliver promptly any certificate or other instrument which Landlord or such Mortgagee may reasonably request subordinating this Lease and all rights of Tenant hereunder to any Mortgage, and to all advances made under such Mortgage and/or agreeing to attorn to such Mortgagee in the event that it succeeds to Landlord's interest in the Property. Landlord shall provide that (i) the holder of each such Mortgage shall execute and deliver to Tenant a non-disturbance agreement to the effect that, in the event of any foreclosure of such Mortgage, such holder will not name Tenant as a party defendant to such foreclosure nor disturb its possession under the Lease, or

(ii) each such Mortgage shall contain provisions substantially to the same effect as those contained in such a non-disturbance agreement. The form of the non-disturbance agreement shall be a commercially reasonable form reflecting then current commercial lending practices for loans of the size and type as that related to the Building. Tenant agrees that a subordination, non-disturbance and attornment agreement substantially in form as that attached hereto shall be deemed commercially reasonable. In addition if the Prime Lease shall be terminated due to foreclosure of the mortgage made by Prime Landlord in favor of its mortgagee or due to such mortgagee's acceptance of a deed in lieu of foreclosure, Tenant shall attorn to mortgagee as landlord hereunder and this lease shall continue in full force and effect for its remaining term as a direct lease between Tenant and such mortgagee without the necessity of any additional act or agreement; provided, however, if requested by such Mortgagee, Tenant shall execute and deliver a new lease with such mortgagee on the same terms and conditions as set forth herein except that the term of such new lease shall be equal to the then remaining term hereunder. Landlord represents and warrants that as of the date of this Lease, Bank of America is the sole mortgagee of the Land and Building.

21.6 Limitations on Liability. Nothing contained in the foregoing Section 21.6 or in any such non-disturbance agreement or non-disturbance provision shall however, affect the prior rights of the holder of any Mortgage with respect to the proceeds of any award in condemnation or of any fire insurance policies affecting the Building, or impose upon any such holder any liability (i) for the erection or completion of the Building, or (ii) in the event of damage or destruction to the Building or the Demised Premises by fire or other casualty, for any repairs, replacements, rebuilding or restoration except such repairs, replacements, rebuilding or restoration as can reasonably be accomplished from the net proceeds of insurance actually received by, or made available to, such holder, or (iii) for any default by Landlord under the Lease occurring prior to any date upon which such holder shall become Tenant's landlord (unless and to the extent said default continues after such date upon which the holder becomes Tenant's landlord, in which event such mortgagee shall be responsible for correcting such default continuing after such date), or (iv) for any credits, offsets or claims against the Rent as a result of any acts or omissions of Landlord committed or omitted prior to such date, or (v) for return of any security deposit or other funds unless the same shall have been received by such holder, and any such agreement or provision may so state.

22. QUIET ENJOYMENT

Landlord covenants that if, and so long as, Tenant keeps and performs each and every covenant, agreement, term, provision and condition herein contained on the part and on behalf of Tenant to be kept and performed, Tenant shall quietly enjoy the Demised Premises from and against the claims of all persons claiming by, through or under Landlord subject, nevertheless, to the covenants, agreements,

terms, provisions and conditions of this Lease and to all Mortgages to which this Lease is subject and subordinate.

Without incurring any liability to Tenant, Landlord may permit access to the Demised Premises and open the same, whether or not Tenant shall be present, upon any demand of any receiver, trustee, assignee for the benefit of creditors, sheriff, marshall or court officer entitled to, or reasonably purporting to be entitled to, such access for the purpose of taking possession of, or removing Tenant's property or for any other lawful purpose (but this provision and any action by Landlord hereunder shall not be deemed a recognition by Landlord that the person or official making such demand has any right or interest in or to this Lease, or in or to the Demised Premises), or upon demand of any representative of the fire, police, building, sanitation or other department of the city, county, state or federal governments.

23. ENTIRE AGREEMENT—WAIVER—SURRENDER

23.1 Entire Agreement. This Lease and the Exhibits made a part hereof contain the entire and only agreement between the parties and any and all statements and representations, written and oral, including previous correspondence and agreements between the parties hereto, are merged herein. Tenant acknowledges that all representations and statements upon which it relied in executing this Lease are contained herein and that Tenant in no way relied upon any other statements or representations, written or oral. Any executory agreement hereafter made shall be ineffective to change, modify, discharge or effect an abandonment of this Lease in whole or in part unless such executory agreement is in writing and signed by the party against whom enforcement of the change, modification, discharge or abandonment is sought. Nothing herein shall prevent the parties from agreeing to amend this Lease and the Exhibits made a part hereof as long as such amendment shall be in writing and shall be duly signed by both parties.

23.2 Waiver by Landlord. The failure of Landlord to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease, or any of the Rules and Regulations promulgated hereunder, shall not prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. The failure of Landlord to enforce any of such Rules and Regulations against Tenant and/or any other tenant or subtenant in the Building shall not be deemed a waiver of any such Rules and Regulations. No provisions of this Lease shall be deemed to have been waived by Landlord unless such waiver be in writing signed by Landlord. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly rent herein stipulated shall be deemed to be other than on account of the stipulated rent, nor shall any endorsement or statement on any check or any letter accompanying any check or

payment as rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such rent or pursue any other remedy in this Lease provided.

23.3 Surrender. No act or thing done by Landlord during the term hereby demised shall be deemed an acceptance of a surrender of the Demised Premises, and no agreement to accept such surrender shall be valid, unless in writing signed by Landlord. No employee of Landlord or of Landlord's agents shall have any power to accept the keys of the Demised Premises prior to the termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord's agents shall not operate as a termination of the Lease or a surrender of the Demised Premises. In the event that Tenant at any time desires to have Landlord underlet the Demised Premises for Tenant's account, Landlord or Landlord's agents are authorized to receive the keys for such purposes without releasing Tenant from any of the obligations under this Lease, and Tenant hereby relieves Landlord of any liability for loss of or damage to any of Tenant's effects in connection with such underletting.

24. INABILITY TO PERFORM — EXCULPATORY CLAUSE

Except as otherwise expressly provided in this Lease, this Lease and the obligations of Tenant to pay Rent hereunder and perform all other covenants, agreements, terms, provisions and conditions hereunder on the part of Tenant to be performed shall in no way be affected, impaired or excused because Landlord is unable to fulfill any of its obligations under this Lease or is unable to supply or is delayed in supplying any service expressly or impliedly to be supplied or is unable to make or is delayed in making any repairs, replacements, additions, alterations, improvements or decorations or is unable to supply or is delayed in supplying any equipment or fixtures if Landlord is prevented or delayed from doing so by reason of any cause whatsoever beyond Landlord's reasonable control, including but not limited to governmental preemption in connection with a national emergency or by reason of any rule, order or regulation of any department or subdivision thereof of any governmental agency or by reason of strikes, labor troubles, shortages of labor or materials or conditions of supply and demand which have been or are affected by war, hostilities or other similar or dissimilar emergency. In each such instance of inability of Landlord to perform, Landlord shall exercise reasonable diligence to eliminate the cause of such inability to perform.

Tenant shall neither assert nor seek to enforce any claim for breach of this Lease against any of Landlord's assets other than Landlord's or Prime Landlord's interest in the Building of which the Demised Premises are a part and in the rents, issues and profits thereof, and Tenant agrees to look solely to such interest for the satisfaction of any liability of Landlord under this Lease, it being specifically agreed that in no event shall Landlord (which term shall include, without limitation any of the officers, trustees, directors, partners, beneficiaries, joint venturers, managers, members, stockholders or other principals or representatives, disclosed or

undisclosed, of Landlord or any managing agent) ever be personally liable for any such liability. This paragraph shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord or to take any other action which shall not involve the personal liability of Landlord to respond in monetary damages from Landlord's assets other than the Landlord's interest in said real estate, as aforesaid. In no event shall Landlord ever be liable for consequential damages.

25. BILLS AND NOTICES

Any notices required under this Lease shall be in writing and delivered by hand or mailed by registered or certified mail or by nationally recognized overnight delivery service (such as Federal Express) for next business day delivery to Landlord or Tenant at the addresses set forth in Article 1. Either party may at any time change the Address for such notices, consents, requests, bills, demands or statements by delivering or mailing, as aforesaid, to the other party a notice stating the change and setting forth the changed Address, provided such changed Address is within the United States.

All bills and statements for reimbursement or other payments or charges due from Tenant to Landlord hereunder shall be due and payable in full fifteen (15) days, unless herein otherwise provided, after submission thereof by Landlord to Tenant. Tenant's failure to make timely payment of any amounts indicated by such bills and statements within applicable notice and grace periods, whether for work done by Landlord at Tenant's request, reimbursement provided for by this Lease or for any other sums properly owing by Tenant to Landlord, shall be treated as a default in the payment of Rent, in which event Landlord shall have all rights and remedies provided in this Lease for the nonpayment of Rent.

26. SUCCESSORS AND ASSIGNS

The covenants, agreements, terms, provisions and conditions of this Lease shall bind and benefit the successors and assigns of the parties hereto with the same effect as if mentioned in each instance where a party hereto is named or referred to, except that no violation of the provisions of Article 14 hereof shall operate to vest any rights in any successor or assignee of Tenant and that the provisions of this Article shall not be construed as modifying the conditions of limitation contained in Article 19 hereof.

If in connection with or as a consequence of the sale, transfer or other disposition of the real estate (Land and/or Building, either or both, as the case may be) of which the Demised Premises are a part Landlord ceases to be the owner of the reversionary interest in the Demised Premises, Landlord shall be entirely freed and relieved from the performance and observance thereafter of all covenants and obligations hereunder accruing thereafter on the part of Landlord to be performed

and observed, it being understood and agreed in such event (and it shall be deemed and construed as a covenant running with the land) that the person succeeding to Landlord's ownership of said reversionary interest shall thereupon and thereafter assume, and perform and observe, any and all of such covenants and obligations of Landlord.

27. MISCELLANEOUS

27.1 Separability. If any provision of this Lease or portion of such provision or the application thereof to any person or circumstance is for any reason held invalid or unenforceable, the remainder of the Lease (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

27.2 Captions. The captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Lease nor the intent of any provisions thereof.

27.3 Broker. Each party represents and warrants that it has not directly or indirectly dealt, with respect to the leasing of space in the Building, with any broker or had its attention called to the Demised Premises or other space to let in the Building, by any broker other than the Broker (if any) listed in Article 1 whose commission shall be the responsibility of Landlord. Each party agrees to exonerate and save harmless and indemnify the other against any claims for a commission by any other broker, person or firm, with whom such party has dealt in connection with the execution and delivery of this Lease or out of negotiations between Landlord and Tenant with respect to the leasing of other space in the Building.

27.4 Governing Law. This Lease is made pursuant to, and shall be governed by, and construed in accordance with, the laws of the State of California.

27.5 Assignment of Lease and/or Rents. With reference to any assignment by Landlord or Prime Landlord of its interest in this Lease and/or the Rent payable hereunder, conditional in nature or otherwise, which assignment is made to or held by a bank, trust company, insurance company or other institutional lender holding a Mortgage on the Building, Landlord and Tenant agree:

(a) that the execution thereof by Landlord and acceptance thereof by such Mortgagee shall never be deemed an assumption by such Mortgagee of any of the obligations of the Landlord hereunder, unless such Mortgagee shall, by written notice sent to the Tenant, specifically otherwise elect; and

(b) that, except as aforesaid, such Mortgagee shall be treated as having assumed the Landlord's obligations hereunder only upon foreclosure of such Mortgagee's Mortgage and the taking of possession of the Demised

Premises after having given notice of its intention to succeed to the interest of the Landlord under this Lease.

27.6 Memorandum of Lease. Neither party shall record this Lease; provided, however, that either party shall at the request of the other, execute and deliver a recordable memorandum of this Lease setting forth the parties to this Lease, a description of the Demised Premises and the term of this Lease for recordation in the Official records of the County of San Mateo.

27.7 Arbitration of Certain Matters. At the election of either party, if any dispute as to the rentable square footage of the Demised Premises, the allocation of real estate taxes or operating expenses under Sections 6.5 and 6.6, the abatement of Yearly Fixed Rent pursuant to Article 16 or the abatement of Yearly Fixed Rent pursuant to Article 18 remains unresolved 30 days after written complaint by Tenant has been delivered to Landlord as to an allocation, reduction, apportionment or abatement made or proposed by Landlord, the matter may be submitted to binding arbitration pursuant to California Code of Civil Procedure Section 1280 et seq.

27.8 Sublease. Notwithstanding anything to the contrary herein, Landlord and Tenant acknowledge that this is a sublease and that Landlord derives its estate to the Demised Premises through the Prime Lease. Landlord represents and warrants that, as of the date hereof, Prime Landlord and Landlord are under common control. At such time as Landlord and Prime Landlord are no longer under common control, the responsibility for furnishing services, repairs, restoration and other similar functions of Landlord shall be performed by Prime Landlord, and Landlord shall be required to use reasonable efforts to enforce the provisions of the Prime Lease relating thereto, but without obligation to provide such services, repairs, restoration, and the like. Landlord shall have the right, but not the obligation, to assign this Lease to Prime Landlord, and after such assignment this Lease shall no longer be a sublease, but rather a direct lease between Tenant and Prime Landlord.

27.9 Holdover. If for any reason Tenant retains possession of the Premises or any part thereof after the termination of the Term or any extension thereof, such holding over shall constitute a tenancy from month to month, terminable by either party upon thirty (30) days prior written notice to the other party, and Tenant shall pay Landlord monthly rental during the month to month tenancy computed as the rent (including Yearly Fixed Rent and all additional rent) payable hereunder for the final month of the last year of the Term prior to such holding over plus fifty (50%) percent of said rent. The month to month tenancy shall otherwise be on the same terms and conditions as set forth in this Lease, as far as applicable.

27.10 Lease Amendments. Tenant acknowledges that amendments to this Lease may be required in connection with the financing of the Land or Building and

Tenant hereby agrees that it will enter into any reasonable modifications requested by a mortgagee in connection with such financing, provided the same do not (a) increase the Yearly Fixed Rent or additional rents payable by Tenant or increase Tenant's financial obligations hereunder; (b) reduce or extend the Term hereof; (c) change the Permitted Use; or (d) otherwise materially impair Tenant's rights hereunder.

27.11 Signage. Tenant shall be entitled to maintain exterior Building signage in accordance with the sign criteria attached hereto as Exhibit D. Landlord shall use commercially reasonable efforts to ensure that, subject to any contrary requirements of law or the OCR's, Tenant has proportional directional and monument signage within the project.

Tenant may maintain a sign on the northern elevation of the Building of equal size to the sign on the western elevation to be maintained by Landlord, which signs shall be the exclusive company signs on the facades of the Building. If additional signage rights are obtained for the roof or facade, the signage shall be shared on a pro rata basis based on square footage leased. Nothing herein shall be deemed to grant Tenant permission to install signs other than in accordance with the attached sign criteria and all applicable laws, regulations and private restrictions.

Tenant may maintain a sign on the right hand wall of the Building lobby of comparable size and design to Landlord's lobby wall sign.

27.12 Sierra Point CCRs. This Lease shall be subject to the Amended and Restated Declaration of Covenants, Conditions and Restrictions for Sierra Point recorded in the Official Records of San Mateo on October 23, 1998, as Document No. 98-172218, as amended by that certain First Amendment to Amended and Restated Declaration of Covenants, Conditions and Restrictions for Sierra Point recorded in the Official Records of San Mateo on August 6, 1999, as Document No. 1999-134787 (as amended, the "CCRs"). Tenant shall comply with the CCRs.

27.13 Financial Statements. Tenant shall furnish Landlord with complete audited financial statements within ninety (90) days after the close of each fiscal year of Tenant prepared by a certified public accountant (but not necessarily certified statements) and shall, upon written request from Landlord, provide copies of Tenant's quarterly unaudited financial statements within fifteen (15) days after Landlord's request.

27.14 Communications Dish. Tenant shall have the right to install, maintain and operate, at Tenant's sole cost and expense (without rental charge from Landlord), communications dishes or antennae, which receive and/or send signals (hereinafter called the *"Communications Dishes" on* the roof of the Building and fully contained (both vertically and horizontally) within the screens over the

portion of the third floor leased to the Tenant, and to run lines and conduits and cables necessary for the operations of the Communications Dishes from the roof of the Building into the Premises, provided that (and in the event Tenant makes such installation, Tenant hereby covenants and agrees that): (a) such installation is performed in accordance with all laws and requirements of public authorities and does not cause structural damage to the Building, (b) Tenant indemnifies and holds Landlord harmless from (i) any liability, cost or expense incurred by Landlord in connection with the erection, installation, maintenance and operations of the Communications Dishes and any related equipment installed by Tenant pursuant to the provisions of this Section 27.14 and (ii) any and all claims, costs, damages and expenses (including reasonable attorneys' fees) arising out of accidents, damage, injury or loss to any and all persons and property resulting from or arising in connection with the erection, installation, maintenance and operations of the Communications Dishes (including without limitation claims or damages due to interference with other signals or its own signal clarity and other claims or damages), (c) Tenant promptly reimburses Landlord for repairs made necessary by any damage caused to the roof or other portions of the Building by reason of such installation, including, without limitation, any repairs, restorations, maintenance, renewals or replacement of the roof necessitated by or in any way caused by or relating to such installations, (d) Tenant removes such installations and lines and repairs any resulting damage to the Building and restores the affected portion of the roof and the Building to a condition that is in all material respects the same as the condition which existed prior to any such installation, ordinary wear and tear and damage by casualty excepted, all at or prior to the expiration of the Term of this Lease, (e) Tenant shall not install the Communications Dishes without Landlord's prior approval of the manner of such installation and detailed plans and specifications for such installation, which approval shall not be unreasonably withheld, delayed or conditioned, (f) said Communication Dishes may not be used by anyone other than the Tenant and any Corporate Transferees lawfully occupying the Demised Premises and specifically may not be used by anyone in the business of broadcasting or providing wireless communications, (g) the electric current necessary to operate the Communications Dishes shall be obtained by Tenant from the public utility furnishing electric to the Premises and Landlord shall have no obligation to furnish any electric current in connection therewith, and (h) the installation of the Communications Dishes or their operation not interfere with Building operations or the use by other tenants or occupants of antennae or communication dishes installed by such tenants or occupants prior. Tenant shall have access to the roof as reasonably required in connection with the operation, installation and maintenance of the Communications Dishes; provided, however, Tenant shall always be accompanied on the roof by a representative of Landlord. Tenant agrees that Landlord shall have the right, at Landlord's sole cost and expense, to relocate the Communications Dishes, provided that such relocation does not affect the functioning of the Communications Dishes. Landlord makes no representation whether or not the roof of the Building is suitable for or conductive

to the operation of a Communications Dish and Tenant hereby agrees that Landlord shall have no liability to Tenant in the event that the Communications Dishes shall not operate in a manner satisfactory to Tenant.

28. SECURITY DEPOSIT

28.1 Security Deposit. Subject to Section 28.2 below, Tenant has deposited with Landlord the Security Deposit described in Article 1 hereof as security for the faithful performance and observance by Tenant of the terms, provisions, covenants and conditions of this Lease, and it is agreed that if an Event of Default by Tenant exists in respect of any of the terms, provisions, covenants and conditions of this Lease, including, but not limited to, the payment of Rent, Landlord may use, apply or retain the whole or any part of the security so deposited to the extent required for the payment of any Rent or any other sum as to which there exists an Event of Default by Tenant or for any sum which Landlord may expend or may be required to expend by reason of Tenant's Event of Default in respect of any of the terms, provisions, covenants and conditions of this Lease, including, but not limited to, any damages or deficiency accrued before or after summary proceedings or other re- entry by Landlord. Upon the expiration or earlier termination of this Lease, and providing there exists no default or Event of Default hereunder, any remaining balance of the Security Deposit (including, without limitation, any and all interest accrued thereon) and the Letter of Credit (as defined below) shall be returned by Landlord to Tenant after the date fixed as the end of the Term and not later than thirty (30) days after delivery of entire possession of the Premises to Landlord as provided hereunder. In the event of a sale of the Land and Building or leasing of the Building, of which the Premises form a part, Landlord shall have the right to transfer the security to the vendee or lessee and Landlord shall thereupon be released by Tenant from all liability for the return of such security, and Tenant agrees to look solely to the new Landlord for the return of said security, and it is agreed that the provisions hereof shall apply to every transfer or assignment made of the security to a new Landlord. Tenant further covenants that it will not assign or encumber or attempt to assign or encumber the monies deposited herein as security and that neither Landlord nor its successors or assigns shall be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. In the event Landlord applies or retains any portion or all of the security deposited pursuant to the terms of this Section 28.1, Tenant shall forthwith restore the amount so applied or retained so that at all times the amount deposited shall be the full amount of the security deposit required at the relevant time. Landlord shall not be responsible for the payment of any interest on the Security Deposit.

28.2 Letter of Credit. In satisfaction of the Security Deposit obligation contained in Section 28.1 above, Tenant shall deliver to Landlord, and shall maintain in effect at all times during the Initial Term following delivery thereof, a clean, unconditional and irrevocable letter of credit, in substantially the form

annexed hereto as Exhibit E (the "Letter of Credit") in the amount of the Security Deposit described in Article 1 hereof issued by Imperial Bank or another banking corporation ("Bank") reasonably satisfactory to Landlord. Such letter of credit shall have an expiration date no earlier than the first anniversary of the date of issuance thereof and it shall be automatically renewed from year-to-year unless terminated by the Bank by notice to Landlord given not less than forty-five (45) days prior to the then expiration date therefor. It is agreed that in the event there exists an Event of Default in respect of any of the terms, covenants or provisions of this Lease, including, but not limited to, the payment of Rent, or if any letter of credit is terminated by the Bank and is not replaced within thirty (30) days prior to its termination or expiration that (A) Landlord shall have the right to require the Bank to make payment to Landlord of so much of the entire proceeds of the letter of credit as shall be reasonably necessary to cure the Event of Default (or the entire proceeds if notice of termination is given as aforesaid and the letter of credit is not replaced as aforesaid), and (B) Landlord may apply said sum so paid to it by the Bank to the extent required for the payment of Rent or any other sum as to which an Event of Default by Tenant exists or for any sum which Landlord may expend or may be required to expend by reason of an Event of Default by Tenant in respect of any of the terms, covenants and conditions of this Lease, including, but not limited to, any damages or deficiency in the reletting of the Premises, whether such damages or deficiency accrue before or after summary proceedings or other re-entry by Landlord, without thereby waiving any other rights or remedies of Landlord with respect to such Event of Default. If Landlord applies any part of the proceeds of a letter of credit, Tenant, upon demand, shall deposit with Landlord promptly the amount so applied or retained (or increase the amount of the letter of credit) so that the Landlord shall have the full deposit on hand at all times during the Term. If, subsequent to a letter of credit being drawn upon, a new letter of credit meeting all the requirements set forth in this Section 28.2 is delivered to Landlord, any proceeds of the former letter of credit then held by Landlord shall be promptly returned to Tenant. If Tenant shall fully and faithfully comply with all of the terms, covenants and provisions of this Lease, any letter of credit, or any remaining portion of any sum collected by Landlord hereunder from the Bank, together with any other portion or sum held by Landlord as security, shall be returned to Tenant within thirty (30) days after the last day of the Initial Term of this Lease. In the event of an assignment by Landlord of its interest under this Lease, Landlord shall have the right to transfer the security to the assignee, and Tenant agrees to look to the new Landlord solely for the return of said security and it is agreed that the provisions hereof shall apply to every transfer or assignment made of the security to a new Landlord.

28.3 Reduction of Security Deposit. Provided Tenant is not then in default and there has never been an Event of Default under this Lease, the Security Deposit will be reduced to an amount equal to six (6) months Yearly Fixed Rent upon the later of (a) the commencement of the twenty-fifth month of the Lease Term or (b) the date on which Tenant has sustained for a period of six months a tangible

net worth in a total amount including cash and cash balances equal to or exceeding $30,000,000, as set forth in audited financial statements provided by Tenant, which financial statements shall be computed in accordance with generally accepted accounting principles. The date upon which Tenant is entitled to such a reduction in the Letter of Credit is hereinafter deemed the Reduction Date. Provided Tenant has met the conditions of this Section 28.3, upon the written request of Tenant made on or after the Reduction Date, Landlord shall exchange the Letter of Credit for a replacement letter of credit provided by Tenant in the amount equal to six (6) months Yearly Fixed Rent upon the same terms and conditions as the Letter of Credit.

29. SALE OF BUILDING

29.1 Except as otherwise provided, provided Tenant is not in default hereunder beyond any applicable notice and cure period, and the named Tenant Genesoft, Inc. is occupying not less than 50% of the Demised Premises, Landlord shall, prior to marketing the Building for sale to an unaffiliated third party, provide a pre-sale notice to Tenant advising Tenant of Landlord's intention to market the Building. Landlord will refrain from marketing the Building for a period of thirty (30) days, during which time Tenant may submit an offer to purchase to Landlord for Landlord's consideration without any obligation. Nothing herein shall require Landlord to accept any such offer submitted by Tenant. Notwithstanding the foregoing, said pre-sale notice shall not apply to (a) an unsolicited offer to purchase submitted to Landlord without marketing efforts by Landlord, (b) a deed of trust or mortgage and to the foreclosure of the same or the granting of a deed in lieu of foreclosure, or (c) a sale of the Building to an affiliate of Landlord or to anyone owning an equity interest in Landlord, or to the sale or transfer of equity interests in Landlord. The provisions of this Section 29 are (a) personal to Genesoft, Inc. and its Corporate Transferrees (but not to any assignee thereof) and shall apply only to the first sale of the Building to which this Section 29 applies, but not to any subsequent sale. Tenant agrees that a foreclosure or deed in lieu of foreclosure of a mortgage or deed of trust shall extinguish this Section 29.

IN WITNESS WHEREOF, Landlord and Tenant have caused this instrument to be executed under seal, all as of the day and year first above written.

MJ RESEARCH COMPANY, INC.

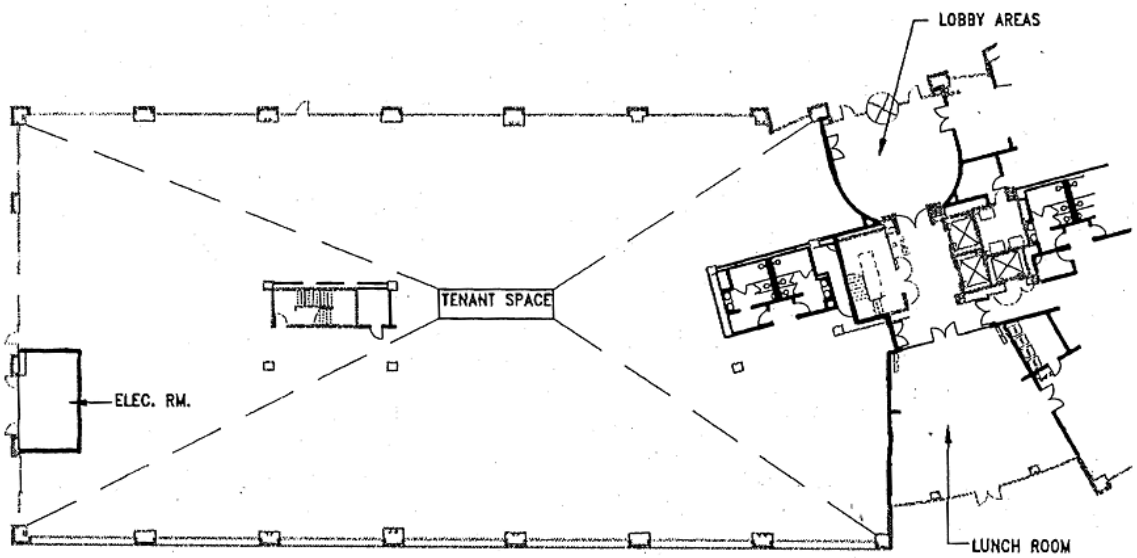
By /s/ Illegible
Its PRESIDENT
title (duly-authorized)

GENESOFT, INC.

By /s/ David B. Singer
Its President & CEO
title (duly-authorized)

EXHIBIT A

PLAN OF DEMISED PREMISES

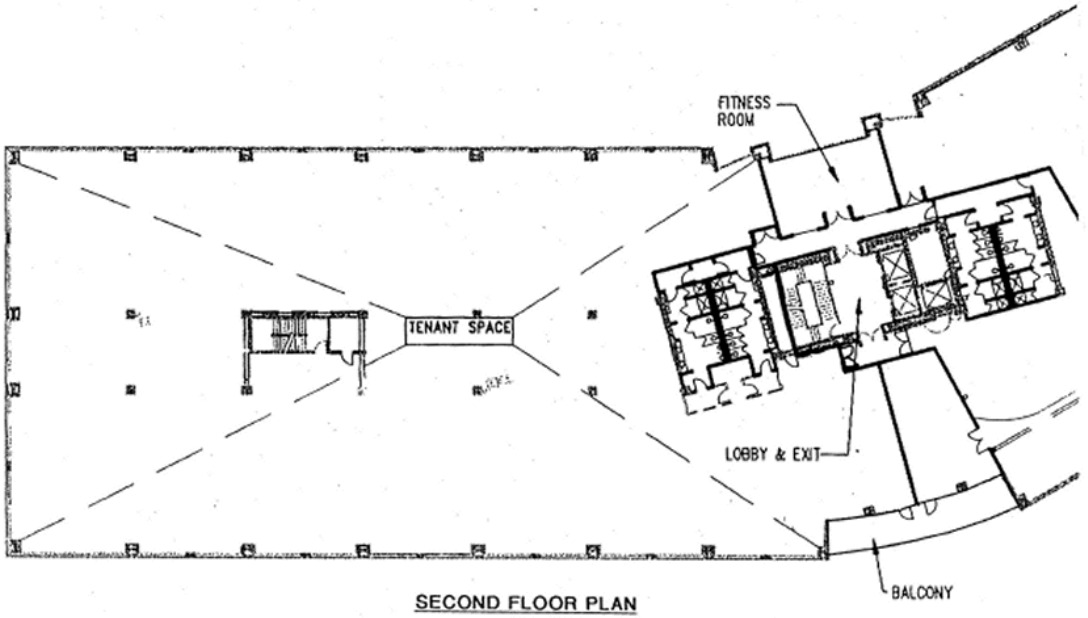


GROUND FLOOR PLAN

Not to Scale

EXHIBIT A

PLAN OF DEMISED PREMISES

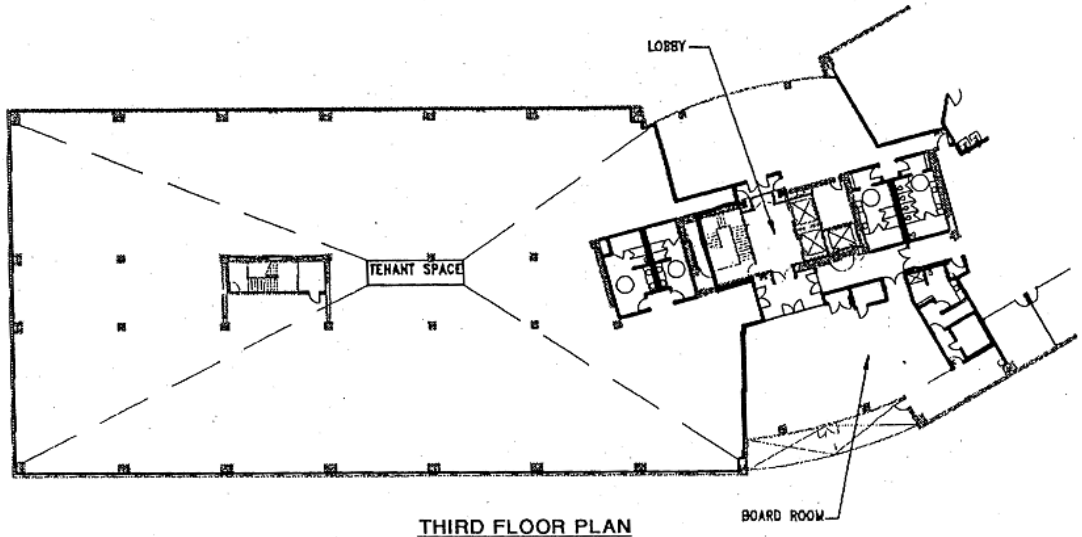


SECOND FLOOR PLAN

Not to Scale

EXHIBIT A

PLAN OF DEMISED PREMISES



THIRD FLOOR PLAN

Not to Scale

EXHIBIT A-1

LANDLORD'S WORK

1. **Building Type:** 3 Story, Group B, Type III, 1 Hour Rated, fully sprinklered office building. All design and construction in conformance with the 1998 (CBC) Building Standards Administrative Code of the California Building Standards Commission (CBSC) and the City of South San Francisco amendments, applicable codes and regulations. The building exit's, lavatories and common space will be furnished fully-ADA compliant throughout.

2. **Site Development:** Bituminous paved parking lots with concrete curbing. Parking allocation as per lease Section 2.2. Walks are concrete and masonry pavers. All parking areas and walkways are illuminated to required minimum code specifications. BCDC path is paved in bituminous with benches, drinking fountain and open pavilion area. Loading door into tenant space with shared trash enclosure and fencing around utility yard. Entire site fully landscaped including palm tree lined roadway, burms, waterfront lawn area, extensive shrubbery and automatic irrigation system.

Tenant's proposed future chemical containment facility subject to all approvals, rules and regulations of Sierra Point Owners Association, Sierra Point Environmental Management Association and all pertaining governmental agencies. Although owner will use reasonable efforts to accommodate the proposed facility, it is at tenant's sole risk and responsibility to obtain approvals and permits. The unit will be required to contain an approved automatic fire suppression system. The facility and finish will be screened, constructed and landscaped with materials and methods consistent with the integrity of the project and site. Any parking allocation eliminated by the siting of the facility will be deducted from tenant's non-exclusive allocation. Public access to BCDC path will be in no way hindered by facility. Upon termination of the lease, it will be required that the unit be removed and remediated and the site is returned to its originally landscaped condition.

3. **Telephone, Gas and Electric Utilities:** Gas and electric will be provided to separately metered services within the building. A 4000 amp electric service will be divided equally between the 2 tenants and plumbed to individual sub panel distribution rooms. Tenant is responsible for 50% of any upgrade costs incurred by landlord to increase from 3500 amp service to 4000 amp's as proposed by tenant. Emergency generator will be provided for back up power for tenant's use, emergency lighting, life safety systems and laboratory support equipment. Tenant is responsible for 50% of all cost's associated with the purchase and installation of generator to be specified by owner. Generator size will not exceed twice tenant's load requirement. Two telephone service entrance conduits (4") are provided into buildings common electrical room and are to be shared by all building tenants. Tenant's telephone service requirements are tenant's sole responsibility and will need to be further accessed by Pac Bell or other service provider.

4. **Water Service:** Domestic hot and cold water to core bathrooms and showers will be provided. House meter in landlord's space will be affixed to tenant's water feed to calculate consumption of water to areas other than common space. Base building fire sprinkler system will be provided with only upturned heads throughout. Modifications to base system to accommodate tenant improvements are the sole responsibility of tenant.

5. **Sanitary and Laboratory Sewer:** Additional provisions have been made below the 1st floor slab for both normal and laboratory waste systems. Both systems are oversized with 6" piping. The lab system is of chemical and DI resistant plastic piping. Stub ups for waste connections on the 1st floor have been provided intermittently, along the central column lines. Tenant is responsible to monitor, downstream, the DI resistant waste line to insure that no chemicals are released into the laboratory waste system.

6. **Foundation / Superstructure:** The structure is founded on cathodically protected steel pilings, concrete footings, structural slab and skirt wall supporting a rigid structural steel frame. Joists are I-beam shaped and protected with sprayed on monokote fireproofing. The main floor is a concrete topping slab structural concrete main slab. The floor to floor dimension is 16'-6" on the first floor and 17' on the 2nd and 3rd floors. The floor live loading is 140 lbs. per square foot. The upper 2 floors are poured concrete on metal decking. The roof load is designed with 24 lb. per square foot loading. A continual central band of 50 lb. per square foot loading is provided for rooftop mechanical equipment. Rooftop screen areas are oversized to house intensive rooftop equipment. Any alterations required to support, distribute, screen or house the tenant's rooftop mechanical equipment is at the sole responsibility and cost of the tenant. Any alterations to the roof that require the penetration, removal, flashing, or capping shall be constructed in a fashion as not to void the landlord's warranty of the roof.

7. **Envelope:** Exterior wall system is Glass Fiber Reinforced Concrete (GFRC) with a glass curtain wall system and aluminum frames. Window heights are (floor to head) 10' on 1st floor and 11' on 2nd and 3rd floors with spandrel glass above. Windows are 1/4" monolithic vision glass, tinted 'Blue Sapphire' and manufactured by Interpane. GFRC system is white with brown base and darker stone aggregate. Rooftop mechanical screens are +- 9'-6" tall at EIFS and +- 12' tall at the spandrel glass curtain wall, built on galvanized steel frames. Roofing system is a 4-ply built up membrane over rigid insulation. Any alterations to the roof that require penetration, removal, flashing or capping shall be the sole responsibility of the tenant and be constructed by a manufacturers certified installer as not to void the landlords warranty on the roof. Landlord does not warranty to tenant any roofing areas that are affected by tenant's alterations.

8. **Tenant Area Improvements:** Bathroom cores, all floors, complete and functional with fixtures, accessories, lighting and finishes consistent with core improvements. The general finish concept is to create a high-tech industrial but warm feeling. Stained and colorized concrete floors, granite tile walls, brushed stainless steel accents, partitions, hardboard paneling and laminates and accent lighting will be used. Galvanized spiral ductwork and exposed ceilings may be used in bathrooms and core for accents. Open areas will be furnished with perimeter wall and column furring throughout. Horizontal window blinds will be provided at all windows. Rated stair shafts and doors along with electrical distribution rooms will be constructed on all floors. Automatic fire sprinkler system with up-turned heads and basic fire alarm panel will be provided. Exit signs at all major exits. Stairwells will be provided with colorized concrete stair pans or rubber studded tile treads. Painted steel railings with horizontal balustrade will be provided at tenant stairwell. Future elevator pit and shaft provisions have been provided for tenant's use. Elevator improvements other than the 2 core elevators are not included. If tenant elects to provide additional elevator it is at their sole cost.

9. **Common Area Improvements:** Lobby complete with architectural security desk, oversized wood doors, lighted soffits, semi-exposed ceilings, spiral ductwork, colorized concrete floors, accent lighting, hardboard paneling and etc. Elevator finishes to be brushed stainless steel with light wood hardboard paneling. Feature stair to be provided with architectural stainless steel railing & balustrade, flooring consistent with core improvements. Finishes and other common areas such as fitness and lunch room to match the integrity and concept of the described core improvements. Lunchroom to be fully equipped with sinks, casework, counters, interior and exterior seating.

EXHIBIT A-2

LANDLORDS WORK NECESSARY FOR TENANT IMPROVEMENTS

1. **Building Type:** 3 Story, Group B, Type III, I Hour Rated, Sprinklered Office Building. All design and construction progress in conformance with the 1998 (CBC) Building Standards Administrative Code of the California Building Standards Commission (CBSC) and the City of South San Francisco amendments, applicable codes and regulations. ADA compliance may not be completed prior to tenant's construction commencement.

2. **Site Development:** Walks, paving and parking lots will be substantially complete. Striping may not be complete. Loading areas and paths of travel will be provided to allow for the interior and exterior construction of improvements. Substantial sitework and landscaping will be in place and must be adequately protected by tenant's construction team. Any damage to these areas will need to be adequately repaired or replaced by tenant. A tenant construction trailer, storage container and debris container will be allowed on site subject to approval and siting by landlord's representative. Any damage to these designated areas will need to be adequately restored to original condition by tenant.

3. **Telephone Gas and Electric Utilities:** 2000 amps of permanent electric will be provided to the tenant's pull section in common electrical room and can be used for construction power subject to delays in tenant's request for upgrade. Upgrade from 3500 amp to 4000 amp main service and switchgear, subject to additional tenant cost. Gas meter and service will be provided subject to tenant's mechanical loads and installation schedule. Telephone entrance conduits only are provided to common electrical room. Temporary jobsite telephone is tenant's sole responsibility.

4. **Water Service:** Water service to building and main meter in vault outside building. Tie in subject to tenants requirements and schedule.

5. **Sanitary and Laboratory Sewer:** Below slab plumbing to be provided. Tie in and activation subject to tenant's loads and installation schedule.

6. **Foundation / Superstructure:** To be provided as per Section 6 in Lease Exhibit A-1, Landlord's Work.

7. **Envelope:** Building to be substantially 'dried in' complete with GFRC exterior wall system, glass curtain wall system, exterior doors and roofing. A section of window and frame will be left void, on each upper floor, to allow for the delivery and handling of construction materials. It is the tenant's sole responsibility to protect the opening from weather as well as protect the GFRC and surrounding area from damage. When reasonably requested by tenant, landlord will then install window unit in coordination with tenants contractor. Roofing system will be substantially complete in areas not affected by tenants extensive rooftop alterations.

8. **Tenant Area Improvements:** Work in central core areas will be progressing simultaneously with tenant's work. Efforts will be made to leave areas free of obstruction and debris. If deemed necessary, temporary dust barriers will be constructed to segregate the simultaneous build outs. Vertical circulation will be provided via the tenant stairwell. Stairwell shafts will be enclosed and operational but will remain unfinished until appropriate time in coordination with tenant's build out. Perimeter and column furring will be provided throughout. Automatic fire sprinkler with upturned heads only will be provided throughout. Provisions have been made to zone off the sprinkler mains per each floor. Any shut downs to accommodate tenant's sprinkler installation will need to be coordinated with landlord's contractor. Freight elevator pit will be constructed be and left void with temporary railing surround.

9. **Common Area Improvements:** Work in central core and common areas will be accessible but work will be progressing simultaneously with tenant's work. Common Electrical room will be constructed. Completion of electrical room is subject to schedule and coordination of power upgrade, generator installation, and telephone equipment installation. Central stair will be under finish construction and restricted for access by tenant's contractors except for cases of material handling hardships. The intention is to preserve and maintain the architectural finishes of the central stair, until actual building occupancy.

EXHIBIT B

CLEANING SCHEDULE

I. Premises

Daily on Business Days:

a. Empty all waste receptacles and ash trays and remove waste materials from the Premises.

b. Sweep and dust mop all uncarpeted areas using a dust-treated mop.

c. Vacuum all rugs and carpeted areas.

d. Hand dust and wipe clean with treated cloths all horizontal cleared surfaces including desk tops, office equipment, window sills, door ledges, chair rails and counter tops, within normal reach.

e. Wash clean all water fountains.

f. Upon completion of cleaning, all lights will be turned off and doors locked, leaving the Premises in an orderly condition.

Quarterly

Render high dusting not reached in daily cleaning to include:

a. Dusting all pictures, frames, charts, graphs and similar wall hangings.

b. Dusting all vertical surfaces, such as walls, partitions, doors and ducts.

c. Dusting of all pipes, ducts and high moldings.

II. Lavatories

Daily on Business Days:

a. Sweep and damp mop floors.

b. Clean all mirrors, powder shelves, dispensers and receptacles, bright work, flushometers, pipes and toilet seats.

c. Wash both sides of all toilet seats.

d. Wash all basins, bowls and urinals.

e. Dust and clean all powder room fixtures.

f. Empty and clean paper towel and sanitary disposal receptacles.

g. Remove waste paper and refuse.

h. Refill tissue holders, soap dispensers, towel dispensers, vending sanitary dispensers; materials to be furnished by Landlord.

i. A sanitizing solution will be used in all lavatory cleaning.

Monthly:

a. Machine scrub lavatory floors.

b. Wash all partitions and tile walls in lavatories.

III. Main Lobby, Elevators, Building Exterior and Corridors

Daily on Business Days:

a. Sweep and wash or spray buff all marble floors.

b. Sweep all entrance mats.

c. Clean elevators, wash or vacuum floors, wipe down walls and doors.

d. Spot clean any metal work surrounding building entrance doors.

Monthly:

All resilient tile floors in public areas to be treated equivalent to spray buffing.

IV. Window Cleaning

The outside of exterior wall windows will be washed once every three months, weather permitting, and the inside of exterior wall windows will be ·washed every six months.

V. Tenants requiring services in excess of those described above shall request same through Landlord, at Tenant's expense.

EXHIBIT C

RULES AND REGULATIONS

1. The sidewalks, entrances, passages, courts, elevators, vestibules, stairways, corridors or halls of the Building shall not be obstructed or encumbered or used for any purpose other than ingress and egress to and from the premises demised to any tenant or occupant.

2. No awnings or other projections shall be attached to the outside walls or windows of the Building without the prior consent of Landlord. No curtains, blinds, shades, or screens shall be attached or hung in, or used in connection with, any window or door of the premises demised to any tenant or occupant, without the prior consent of Landlord. Such awnings, projections, curtains, blinds, shades, screens, or other fixtures must be of a quality type, design and color, and attached in a manner, approved by Landlord.

3. No sign, advertisement, object, notice or other lettering shall be exhibited, inscribed, painted or affixed on any part of the outside or inside of the premises demised to any tenant or occupant or of the Building without the prior consent of Landlord. Interior signs on doors and directory tables, if any, shall be of a size, color and style approved by Landlord.

4. The sashes, sash doors, skylights, windows, and doors that reflect or admit light and air into the halls, passageways or other public places in the Building shall not be covered or obstructed, nor shall any bottles, parcels, or other articles be placed on any window sills.

5. No show cases or other articles shall be put in front of or affixed to any part of the exterior of the Building, nor placed in the halls, corridors, vestibules or other parts of the Building.

6. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags, or other substances shall be thrown therein.

7. No tenant or occupant shall mark, paint, drill into, or in any way deface any part of the Building or the premises demised to such tenant or occupant, except to the extent required for the mounting of pictures and other normal office fixtures. No boring, cutting or stringing of wires shall be permitted, except with the prior consent of the, Landlord, and as Landlord may direct. No tenant or occupant shall install any resilient tile or similar floor covering in the premises demised to such tenant or occupant except in a manner reasonably approved by Landlord.

8. No bicycles, vehicles or animals of any kind (other than animals allowed under the Permitted Uses) shall be brought into or kept in or about the

premises demised to any tenant. Bicycles may be stored in racks, if any, furnished for such purpose by Landlord in a common area of the Property. No cooking shall be done or permitted in the Building (other than microwave use and coffee machines) by any tenant without the approval of Landlord. No tenant shall cause or permit any unusual or objectionable odors to emanate from the Premises demised to such tenant.

9. Without the prior consent of Landlord, no space in the Building shall be used for manufacturing, or for the sale of merchandise, goods or property of any kind at auction.

10. No tenant shall make, or permit to be made, any unseemly or disturbing noises or disturb or interfere with other tenants or occupants of the Building or neighboring buildings or premises whether by the use of any musical instrument, radio, television set or other audio device, unmusical noise, whistling, signing, or in any other way. Nothing shall be thrown out of any doors or windows.

11. Each tenant must, upon the termination of its tenancy, restore to Landlord all keys of stores, storage areas, offices and toilet rooms, either furnished to, or otherwise procured by, such tenant.

12. All removals from the Building, or the carrying in or out of the Building or the premises demised to any tenant, of any sales, freight, furniture, or bulky matter of any description must take place at such time and in such manner as Landlord or its agents may determine, from time to time. Landlord reserves the right to inspect all freight to be brought into the Building and to exclude from the Building all freight which violates any of the Building Rules or the provisions of such tenant's lease.

13. No tenant shall use or occupy, or permit any portion of the premises demised to such tenant to be used or occupied, as an office for a public stenographer, messenger service or typist, or as a barber or manicure shop, or as an employment bureau. No tenant or occupant shall engage or pay any employees in the Building, except those actually working for such tenant or occupant in the Building, nor advertise for laborers giving an address at the Building.

14. No tenant or occupant shall purchase spring water, ice, food, beverage, lighting maintenance, cleaning towels or other like service, from any company or person not approved by Landlord, such approval not unreasonably to be withheld.

15. Landlord shall have the right to prohibit any advertising by any tenant or occupant which, in Landlord's opinion, tends to impair the reputation of the Building or its desirability as a building for offices, and upon notice from Landlord, such tenant or occupant shall refrain from or discontinue such advertising.

16. Landlord reserves the right to exclude from the Building, between the hours of 6:00 p.m. and 8:00 a.m. on Business Days and otherwise at all hours, all persons who do not present adequate identification or a pass to the building signed by the Landlord. Landlord will furnish passes to persons for whom any tenant requests such passes. Each tenant shall be responsible for all persons for whom it requests such passes and shall be liable to Landlord for all wrongful acts of such persons.

17. Each tenant, before closing and leaving the premises demised to such tenant at any time, shall see that all entrance doors are locked and windows closed.

18. Each tenant shall, at its expense, provide artificial light in the premises demised to such tenant for Landlord's agency, contractors, and employees while performing janitorial or other cleaning services and making repairs or alterations in said premises.

19. No premises shall be used, or permitted to be used, for lodging or sleeping, or for any immoral or illegal purpose.

20. There shall not be used in the Building, either by any tenant or occupant or by their agents or contractors, in the delivery or receipt of merchandise, freight or other matter, any hand trucks or other means of conveyance except those equipped with rubber tires, rubber side guards and such other safeguards as Landlord may require.

21. Canvassing, soliciting and peddling in the Building are prohibited and each tenant and occupant shall co-operate in seeking their prevention.

22. Subject to Section 7.6, if the premises demised to any tenant become infested with vermin, such tenant, at its sole cost and expense, shall cause its premises to be exterminated from time to time, to the satisfaction of Landlord, and shall employ such exterminators therefor as shall be approved by Landlord.

23. No premises shall be used, or permitted to be used, at any time, without the prior approval of Landlord, as a store for the sale or display of goods, wares or merchandise of any kind, or as a restaurant, shop, booth, bootblack or other stand, or for the conduct of any business or occupation which predominantly involves direct patronage of the general public in the premises demised to such tenant, or for manufacturing or for other similar purpose.

24. No tenant shall move, or permit to be moved, into or out of the Building or the premises demised to such tenant, any heavy or bulky matter, without the specific approval of Landlord. If any such matter requires special handling, only a person holding a Master Rigger's license shall be employed to perform such special handling. No tenant shall place, or permit to be placed, on any part of the floor or floors of the premises demised to such tenant, a load exceeding

the floor load per square foot which such floor was designed to carry and which is allowed by law. Landlord reserves the right to prescribe the weight and position of safes and other heavy matter, which must be placed so as to distribute the weight.

25. The requirements of tenants will be attended to only upon application at the office of the Building. Building employees shall not be required to perform, and shall not be requested by any tenant or occupant to perform, any work outside of their regular duties, unless under specific instructions from the office of the managing agent of the Building.

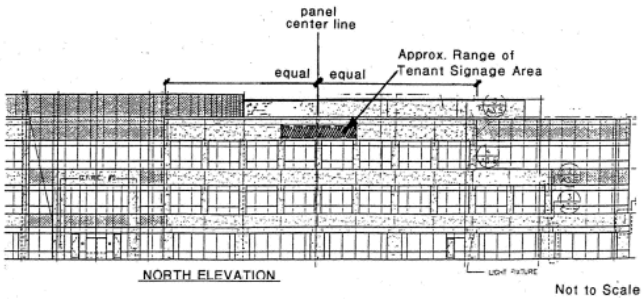
EXHIBIT D

SIGN CRITERIA

Notes:

1. Total tenant signage area not to exceed 100 square feet and shall be consistent with Landlord and Sierra Point format as approved by The City of South San Francisco Building Department and Planning Commission.

2. Tenant shall use Landlords sign contractor. Signage shall not be permitted in areas beyond those shown on elevations below.



NORTH ELEVATION

Not to Scale

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision) International Chamber of Commerce Publication No. 500 and any subsequent revisions thereof approved by a Congress of the International Chamber of Commerce and adhered to by Bank.

IMPERIAL BANK INTERNATIONAL 3,696,840 00 CTS

International Division

IMPERIAL BANK
California's Business Bank
Member FDIC

[x] 2015 Manhattan Beach Blvd.
Redondo Beach, CA 90278

[ ] 456 Montgomery St.
4th Floor, Suite 420
San Francisco, CA 94104

SWIFT IMPBUS66
Telex: 3730628
Answer Back: Imperial INW

DATE: 11/07/00

FROM: IMPERIAL BANK
INTERNATIONAL DIVISION
2015 MANHATTAN BEACH BLVD
REDONDO BEACH, CA 90278
U.S.A.
TELEX: 3730628 (IMPERIAL INW)
SWIFT: IMPBUS66

APPLICANT: GENESOFT, INC.
TWO CORPORATE DRIVE
SOUTH SAN FRANCISCO, CA 94080

IN FAVOR OF: MJ RESEARCH COMPANY, INC
384 OLYMPIC POINT BLVD.
SOUTH SAN FRANCISCO, CA 94080

WE HEREBY ESTABLISH OUR IRREVOCABLE TRANSFERABLE STANDBY LETTER OF CREDIT NO. OSF00001477 EXPIRING 11/07/01 AT OUR S.F. INTL. DIV. COUNTERS FOR AMOUNT: USD3,696,840.00 (THREE MILLION SIX HUNDRED NINETY SIX THOUSAND EIGHT HUNDRED FORTY EXACTLY).

CREDIT IS AVAILABLE WITH IMPERIAL BANK

INTERNATIONAL DIVISION
275 BATTERY STREET SUITE 1100
SAN FRANCISCO, CA 94111 U.S.A.

BY PAYMENT OF DRAFTS AT SIGHT.

DRAFTS DRAWN ON:

IMPERIAL BANK
INTERNATIONAL DIVISION
275 BATTERY STREET SUITE 1100
SAN FRANCISCO, CA 94111 U.S.A.

REQUIRED DOCUMENTS:

1. THE ORIGINAL OF THIS LETTER OF CREDIT AND AMENDMENT(S) IF ANY.

2. BENEFICIARY'S STATEMENT DATED AND PURPORTEDLY SIGNED BY AN AUTHORIZED OFFICER CERTIFYING THAT THE "TENANT" (AS DEFINED IN THE LEASE) IS IN DEFAULT OR THAT AN EVENT OF DEFAULT HAS OCCURRED UNDER ONE OR MORE OF THE TERMS OF THAT CERTAIN LEASE AGREEMENT DATED OCT. 6, 2000 THAT EXISTS BETWEEN GENESOFT, INC. AND MJ RESEARCH COMPANY, INC. (THE "LEASE") AND THAT ANY APPLICABLE CURE PERIOD HAS LAPSED WITHOUT REMEDY.

ADDITIONAL CONDITIONS:

ALL INFORMATION REQUIRED UNDER DOCUMENT REQUIREMENT NO. 2 WHETHER INDICATED BY BLANKS, BRACKETS OR OTHERWISE, MUST BE COMPLETED AT THE TIME OF DRAWING.

ALL SIGNATURES MUST BE MANUALLY EXECUTED IN ORIGINALS.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision) International Chamber of Commerce Publication No. 500 and any subsequent revisions thereof approved by a Congress of the International Chamber of Commerce and adhered to by Bank.

International Division

IMPERIAL BANK
California's Business Bank
Member FDIC

[X] 2015 Manhattan Beach Blvd.
Redondo Beach, CA 90278

[ ] 456 Montgomery St.
4th Floor, Suite 420
San Francisco, CA 94104

SWIFT IMPBUS66
Telex: 3730628
Answer Back: Imperial INW

PARTIAL DRAWINGS MAY BE MADE UNDER THIS LETTER OF CREDIT, PROVIDED, HOWEVER, THAT EACH SUCH DEMAND THAT IS PAID BY US SHALL REDUCE THE AMOUNT AVAILABLE UNDER THIS LETTER OF CREDIT.

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT SHALL BE DEEMED AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR ONE YEAR PERIODS FROM THE PRESENT EXPIRATION DATE HEREOF, UNLESS FORTY FIVE (45) DAYS PRIOR TO ANY SUCH DATE, WE SHALL NOTIFY YOU IN WRITING BY CERTIFIED MAIL OR COURIER SERVICE AT THE ABOVE LISTED ADDRESS THAT WE ELECT NOT TO CONSIDER THIS IRREVOCABLE LETTER OF CREDIT RENEWED FOR ANY SUCH ADDITIONAL PERIOD. UPON RECEIPT BY YOU OF SUCH NOTICE, YOU MAY DRAW HEREUNDER BY MEANS OF YOUR DRAFT(S) ON US AT SIGHT ACCOMPANIED BY YOUR ORIGINAL SIGNED STATEMENT WORDED AS FOLLOWS: MJ RESEARCH COMPANY, INC. OR THE "LANDLORD" UNDER THE "LEASE " HAS RECEIVED A NOTICE FROM IMPERIAL BANK THAT THE EXPIRATION DATE OF LETTER OF CREDIT NO. OSF00001477 WILL NOT BE EXTENDED FOR AN ADDITIONAL PERIOD. AS OF THE DATE OF THIS DRAWING, MJ RESEARCH COMPANY, INC. OR SUCH "LANDLORD" HAS NOT RECEIVED A SUBSTITUTE LETTER OF CREDIT OR OTHER INSTRUMENT ACCEPTABLE TO MJ RESEARCH COMPANY, INC., OR SUCH "LANDLORD" IN ITS SOLE DISCRETION, AS SUBSTITUTE FOR IMPERIAL BANK LETTER OF CREDIT NO. OSF00001477.

NOTWITHSTANDING THE ABOVE, THE FINAL EXPIRATION DATE SHALL BE APRIL 1, 2011.

THIS LETTER OF CREDIT IS TRANSFERABLE IN WHOLE ONLY. YOU MAY TRANSFER THIS LETTER OF CREDIT TO YOUR TRANSFEREE OR SUCCESSOR UPON SATISFACTORY DELIVERY AND PRESENTATION TO THE ISSUING BANK OF (1) THE ORIGINAL L/C AND AMENDMENTS, IF ANY, FOR PROPER ENDORSEMENT (2) A REQUEST FOR TRANSFER ON THE ISSUER'S USUAL TRANSFER FORM (3) VERIFICATION OF SIGNATURE AND AUTHORITY ON SUCH TRANSFER FORM SIGNING FOR THE BENEFICIARY (4) PAYMENT OF A TRANSFER FEE OF USD 1,000 AND (5) ANY OTHER REQUIREMENTS RELATIVE TO THE UCP 500 AND U.S. GOVERNMENT REGULATIONS.

IMPERIAL BANK, UPON RECEIPT OF BENEFICIARY'S REQUEST IN A MANNER AS STATED HEREIN, TO TRANSFER THIS LETTER OF CREDIT, WILL REQUIRE THAT THE ORIGINAL OF THIS LETTER OF CREDIT AND ALL AMENDMENTS THERETO, IF ANY, BE RETURNED TO US FOR CANCELLATION. UPON OUR RECEIPT OF SAME, A NEW LETTER OF CREDIT SHALL BE ISSUED TO THE TRANSFEREE, AS BENEFICIARY.

ALL DRAFTS AND DOCUMENTS REQUIRED UNDER THIS LETTER OF CREDIT MUST BE MARKED: "DRAWN UNDER IMPERIAL BANK LETTER OF CREDIT NO. OSF00001477."

ALL DOCUMENTS ARE TO BE DISPATCHED IN ONE LOT BY COURIER SERVICE TO IMPERIAL BANK INTERNATIONAL DIVISION, 275 BATTERY STREET, SUITE 1100, SAN FRANCISCO, CA 94111.

THIS LETTER OF CREDIT SETS FORTH IN FULL THE TERMS OF OUR UNDERTAKING AND SUCH UNDERTAKING SHALL NOT BE IN ANY WAY MODIFIED, AMENDED OR AMPLIFIED BY REFERENCE TO ANY DOCUMENT, INSTRUMENT OR AGREEMENT REFERRED TO HEREIN OR IN WHICH THIS LETTER OF CREDIT IS REFERRED TO OR TO WHICH THIS LETTER OF CREDIT RELATES, AND ANY SUCH REFERENCE SHALL NOT BE DEEMED TO INCORPORATE HEREIN BY REFERENCE ANY DOCUMENT, INSTRUMENT OR AGREEMENT.

IMPERIAL BANK

FROM: IMPERIAL BANK
INTERNATIONAL BANKING DIVISION
2015 MANHATTAN BEACH BLVD., 2ND FLOOR
REDONDO BEACH, CA 90278
TEL: 310 725-4488 FAX: 310 649-3407

DATE: 11/07/00

TO: MJ RESEARCH COMPANY, INC
384 OLYMPIC POINT BLVD.
SOUTH SAN FRANCISCO, CA 94080

ATTN: REAL ESTATE OR LETTER OF CREDIT DEPARTMENT

AT THE REQUEST OF THE ACCOUNT PARTY, WE ENCLOSE HEREWITH ORIGINAL OF OUR STANDBY LETTER OF CREDIT NO. OSF00001477.

SINCERELY,

(ILLEGIBLE SIGNATURE)

AUTHORIZED SIGNATURE

EXHIBIT F

LIST OF ENVIRONMENTAL REPORTS GIVEN TO TENANT

1. ENVIRONMENTAL DUE DILLIGENCE REVIEW OF THE SIERRA POINT ASSOCIATES TWO PROPERTIES BRISBANE AND SOUTH SAN FRANCISCO, CALIFORNIA

Prepared for
Jon K. Wactor of Luce Forward, Hamilton and Scripps as attorney for potential purchaser Opus West Corporation, Plessanton, California

Prepared By
ENVIRON Corporation, Emeryville, California

Dated
February 4, 1998
Project No. 03-6248A

2. UPDATE OF ENVIRONMENTAL DUE DILLIGENCE REVIEW, PARCEL 10, SHORELINE COURT, SIERRA POINT, SOUTH SAN FRANCISCO, CALIFORNIA

Prepared For
MJ Sierra Point, LLC, South San Francisco, California

Prepared By
Harding Lawson Associates, Novato, California

Dated
December 14,1998
HLA Project No. 43142 001

3. FIRST AMENDED AND RESTATED DECLARATION OF COVENANTS, CONDITIONS AND ENVIRONMENTAL RESTRICTIONS RELATING TO ENVIRONMENTAL COMPLIANCE FOR SIERRA POINT

Recorded By
Luce, Forward, Hamilton and Scripps, San Diego, California

Dated
August 5, 1999

4. SUPPLEMENTAL ENVIRONMENTAL DUE DILLIGENCE, PARCEL 10, SHORELINE COURT, SIERRA POINT, SOUTH SAN FRANCISCO, CALIFORNIA

Prepared by
Harding Lawson Associates, Novato, California

Dated
August 24, 1999

EXHIBIT G

PERMITTED HAZARDOUS MATERIALS

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	1-METHYLPIPERAZINE 1-Methylpiperazine	 100	Corr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	1-NAPHTHALENESULFONYL CHLORIDE	 100	Corr	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	1-NAPHTHOL	 99	Tox Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	1-NAPHTHOYL CHLORIDE	 100	CL-IIIB Carr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	1-NAPHTHYLAMINE		Carc	0 Lbs.	0 Lbs.	.055 Lbs.	
2 MedChem	1-OCTANOL Octanol	 100	CL-IIIA lrr	0 Gal.	.13 Gal.	0 Gal.	
2 MedChem	1-OCTYNE	 100	FL-1B Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	1-PHENYL-2-PROPANOL		CL-IIIA	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	1-PIPERAZINECARBOXALDEHYDE	 100	CL-IIIB lrr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	(+/-)-10-CAMPHORSULFONIC ACID	 100	Corr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	1,1[1]-CARBONYLDIIMIDAZOLE 1,1[1]-Carbonyldiimidazole	 100	WR-1 Corr	.026 Gal.	.026 Gal.	0 Gal.	
2 MedChem	1,1-DICHLOROPROPENE		FL-1B lrr OHH	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	1,10-PHENANTHROLINE		Tox Irr	0 Lbs.	0 Lbs.	.011 Lbs.	
2 MedChem	1,2-DIBROMOETHANE 1,2-Dibromoethane	 100	Tox Corr	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	1,2-Dichloroethane 1,2-Dichloroethane	 100	Carc	Gal.	2.1 Gal.	Gal.	
2 MedChem	1,2-DIMETHOXYETHANE Ethylene glycol dimethyl ether	 100	FL-1B	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	1,3-CYCLOHEXANEBIS(METHYLAMINE)	 100	CL-IIIB Corr	0 Gal.	.026 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	1,3-DIBROMOPROPANE		CL-II Irr	0 Gal.	.065 Gal.	0 Gal.	
2 MedChem	1,3-DIMETHYL-3,4,5,6-TETRAHYDRO-2(1H)PYRIMIDINONE		Irr CL-II	.06 Gal.	.06 Gal.	0 Gal.	
2 MedChem	1,4-DIAMINOBUTANE putrescine	99	Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	15-CROWN-5		Irr CL-II	0 Gal.	.06 Gal.	0 Gal.	
2 MedChem	1,5-DIAMINOPENTANE	100	CL-IIIA Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	18-CROWN-6 18-Crown-6 ether	100	Irr CL-IIIB	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	1,8-DIAZABICYCLO[5.4.0]UNDEC- 7-ENE 1,8-Diazabicyclo(5.4.0)Undec	100	Corr-Base	0 Gal.	.13 Gal.	0 Gal.	
2 MedChem	(1S,2R-)-(-)-CIS-1-AMINO-2-INDANOL		Irr Sens	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	(1S,2R)-(+)-NOREPHEDRINE	100	Irr Tox	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	2-(2-AMINOETHYL)-1-METHYLPYRROLIDINE	100	CL-IIIA Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2-(4-METHOXYPHENYL)ETHYLAMINE	100	CL-IIIA Corr	0 Gal.	0 Gal.	0 Gal.	
2 MedChem	2-(4-PYRIDYL)ETHANESULFONIC ACID	100	Corr	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	2-(BROMOMETHYL)NAPHTHALENE 2-(Bromomethyl) naphthalene	100	Corr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-(METHYLAMINO)PYRIDINE	100	CL-IIIA Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2-(TRIBUTYLSTANNYL)FURAN		CL-IIIB Irr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2-(TRIMETHYLSILYL)ETHOXYMETHYL CHLORIDE	100	CL-II Corr Irr OHH	0 Gal.	.0065 Gal	0 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	2-ACETAMIDO-4-METHYL-5-THIA ZOLESULFONYL CHLORIDE	100	Corr	0 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem.	2-AMINO-5-CHLOROBENZOXAZOLE	100	Irr OHH	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	2-AMINO-5-DIETHYLAMINOPENTANE		CL-IIIA Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-AMINO-5-NITROPHENOL		Tox Irr OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-AMINO-6-METHYLPYRIDINE	100	Tox Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	2-AMINOBIPHENYL	100	Irr OHH FS	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-AMINOFLUORENE		OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-AMINOPYRIDINE 2 - Aminopyridine	100	Tox	0 Lbs.	0 Lbs.	.055 Lbs.	
2 MedChem	2-benzylalniline	100	FS Irr	0 Lbs.	.11 Lbs.	0 Lbs.	
2 MedChem	2-BIPHENYLYL ISOCYANATE		Irr OHH Sens	0 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	2-BROMOBENZYL BROMIDE	100	CL-IIIB Irr Corr Sens	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-BROMOETHANOL	95	CL-II Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	(2-BROMOETHYL)BENZENE		CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-BROMOETHYL METHYL ETHER	100	FL-1C Irr OHH	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-BROMOMETHYL-1,3-DIOXOLANE		CL-IIIA WR-1 Irr	0 Gal.	.026 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	2-BROMOPHENYL ISOCYANATE		Irr OHH Sens	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	2-BROMOTEREPHTHALIC ACID	100	CL-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-CHLORO-1-METHYLPYRIDINIUM IODIDE		Irr OHH	0 Lbs.	.00022 Lbs.	0 Lbs.	
2 MedChem	2-CHLORO-3-NITROPYRIDINE	100	Fs Irr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-CHLORO-4-METHYL-3-NITROPY RIDINE	100	FS Irr	0 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	2-CHLOROBENZALDEHYDE	100	CL-IIIA Corr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-CHLOROBENZOYL CHLORIDE Chlorobenzoyl chloride	100	Corr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-CHLOROBENZYL ISOCYANATE	100	CL-IIIB Irr OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2-CHLOROETHANESULFONYL CHLORIDE		CL-IIIB Tox Corr OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2-CHLOROETHYL PHENYL SULFIDE	100	CL-IIIB Tox Irr Sens	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-CHLOROETHYL PHENYL SULFONE	100	Sens Irr OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-CHLOROPYRIDINE		CL-IIIA Tox Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-CYCLOHEXEN-1-ONE		Tax CL-II	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-DECALONE	100	CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	2-DIMETHYLAMINOETHYL CHLORIDE HYDROCHLORIDE	100	Tox Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	2-ETHOXYBENZYLAMINE	100	FS Irr	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	2-FLUOROBENZALDEHYDE	100	CL-II Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	2-FLUOROBENZYLAMINE	100	CL-IIIA Irr	0 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	2-FLUOROPYRIDINE	98%	fl2 irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2-FUROYL CHLORIDE	100	CL-IIIA Corr Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-IODOBENZOIC ACID	100	Sens OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-IODOPROPANE Iso-Propyl Iodide	100	FL-1B Irr	0 Gal.	0 Gal.	1.43 Gal.	
2 MedChem	2-MESITYLENESULFONYL CHLORIDE	100	FS Corr Tax WR-1	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-METHOXYBENZYLAMINE	100	CL-IIIB Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-METHOXYETHYLAMINE		FL-1B Corr	0 Gal.	.065 Gal.	0 Gal.	
2 MedChem	2-METHOXYPROPENE		FL-1A	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	2-NAPHTHOYL CHLORIDE	100	FS Corr	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	2-NITROIMIDAZOLE	100	Tax Irr	.0088 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	2-NITROPHENYLACETIC ACID		OHH Irr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2-PHENYL-1-PROPANOL		CL-IIIB	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2-PYRIDINECARBOXALDEHYDE		CL-II Irr	0 Gal.	.026 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration	3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
				Open[2]	Closed[3]	
2 MedChem	2-THIENYLLITHIUM	FL-1b Corr Irr WR-2	.052 Gal.	.026 Gal.	0 Gal.	Yes
2 MedChem	2-THIOPHENECARBOXALDEHYDE 100	CL-IIIA N/R	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2-THIOPHENESULFONYL CHLORIDE	CL-IIIB Corr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2,2[1]-AZOBIS(ISOBUTYRONITRILE) 100	FS UR-3 Irr OHH	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANAMINE 100	CL-IIIA Corr	0 Gal.	.0013 Gal.	O.Gal.	
2 MedChem	2,2-DIPHENYLETHYLAMINE 100	FS Irr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2,2,6,6-TETRAMETHYLPIPERIDINE 100	FL-1C Tox	.0065 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2,3-DIBROMOPROPENE 100	CL-II OHH Tox	.013 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	2,3-DICHLORO-5,6-DICYANO-1,4-BENZOQUINONE 100	Tox WR-1	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	2,3-DIHYOROFURAN	FL-1B Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2,4-DI-TERT-BUTYLPHENOL 100	FS Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	2,4-DIBROMOPHENOL 100	CL-IIIA Tox Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2,4-DICHLOROBENZYL ISOCYANATE	CL-IIIB OHH Irr Sens	.0026 Gal.	.0026 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored1	5. Quantity in Use Open2	Closed3	6. Stored in Approved Cabinet?
2 MedChem	2,4-DIMETHOXYBENZOYL CHLORIDE	100	Irr Corr	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	2,4-DIMETHOXYPHENYL ISOCYANATE	100	CL-IIIB Carr Irr OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	2,4-DINITROFLUOROBENZENE 2,4-dinitro-1-f1uorobenzene	99	H.T.	0 Gal.	0 Gal.	.0065 Gal.	
2 MedChem	2,4,5-TRIBROMOIMIDAZOLE		H.T. Irr	.055 Lbs.	.055 Lbs.	0 Lbs.	Yes
2 MedChem	2,4,6-COLIDINE		CL-II Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	2,4,6-TRIISOPROPYLBENZENESU LFONYL CHLORIDE	100	Corr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	2,5-DIMETHYL-3-PYRROl|NE	100	FL-1B Irr	.0039 Gal.	.0013 Gal.	0 Gal.	Yes
2 MedChem	2,6-DIAMINOPYRIDINE		Tox Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	2,6-DICHLOROPYRIDINE	100	Tox Irr	0 Lbs.	.55 Lbs.	0 Lbs.	
2 MedChem	2,6-HEPTADIENOIC ACID	100	CL-IIIB Corr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	2,6-LUTIDINE 2.6-Lutidine	100	FL-1C Tox Irr	.026 Gal.	0 Gal.	.026 Gal.	
2 MedChem	(2R,8AS)-(+)-(CAMPHORYLSULFO NYL)OXAZlRIDINE		Tox Irr OHH	0 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	3-(TRIFLUOROMETHYL)BENZALD EHYDE	100	CL-IIIA Irr	.0065 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	3-(TRIFLUOROMETHYL)BENZEN ESULFONYL CHLORIDE	100	CL-IIIB Corr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	3-(TRIFLUOROMETHYL)BENZOYL CHLORIDE	100	CL-IIIB Corr	0 Gal.	.0065 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	3-ACETYL-1-PROPANOL		CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-AMINO-1-PHENYLBUTANE	100	CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-AMINO-1-PROPANOL		Corr CL-II	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-AMINO-1,2-PROPANEDIOL	100	CL-IIIB Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3-AMINOPYRIDINE	100	Tox Irr	0 Lbs.·	.055 Lbs.	0 Lbs.	
2 MedChem	3-BROMOPYRIDINE	100	CL-II Tox Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-BUTEN-1-0L	100	FL-1C Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	3-BUTENYLMAGNESIUM BROMIDE BUTENYLMAGNESIUM Tetrahydrofuran	.5M	FL-1B WR-2 UR-3 OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-BUTYN-1-OL	100	FL-1C Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	3-CHlOROBENZALDEHYDE	100	CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-CHlOROBENZOYL CHLORIDE	100	WR-1 Corr Irr OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-CHlOROPEROXYBENZOIC ACID M-Chloroperoxybenzoic Acid	100	Oxy-1	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-CHlOROPROPANESULFONYL CHLORIDE		CL-IIIB Irr OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3-CYANOPHENYL ISOCYANATE		Irr OHH Sens	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	3-CYANOPHENYLBORONIC ACID		Irr OHH	0 Lbs.	.0022 Lbs.	0 Lbs.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored1	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open2	Closed3	
2 MedChem	3-CYCLOPENTYLPROPIONYL CHLORIDE		CL-IIIA Corr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	3-FLUORO-P-ANISALDEHYDE	100	FS Irr	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	3-FLUOROANlIINE	100	FL-1C Tox Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	3-FLUOROBENZALDEHYDE	100	CL-II Irr	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	3-METHOXYBENZVLAMINE	100	CL-IIIB IIT	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	3-METHYLACETOPHENONE	100	CL-IIIA Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3-METHYLBENZYLISOCYANATE	100	CL-IIIB Irr Sens OHH	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3-METHYLNORCAMPHANE-2-METHANOL	100	CL-IIIA Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	3-NITROBENZOYL CHLORIDE		UR-4 WR-1 Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	3-NITROPHENYLACETONITRILE	100	Tox	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	3-PENTENOIC ACID	100	Corr	.0065 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	3-PHENOXYPROPYL BROMIDE	100	CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-PHENYL-1-PROPYNE		CL-II Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3-PHENYLPROPYLAMINE		CL-IIIA Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	3-PYRIDINECARBOXALOEHYDE	99	Sens CL-II	.026 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3-PYRIDYLCARBINOL		CL-IIIB Irr	0 Gal.	.0013 Gal.	0 Gal.	

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored1	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open2	Closed3	
2 MedChem	3-PYRROLINE		FL-1B Tox Corr OHH	.00104 Gal.	.00026 Gal.	0 Gal.	Yes
2 MedChem	3,3-DIMETHYLBUTYRALDEHYOE	100	FL-1B Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3,4-DICHLOROANILINE	100	Tox Sens OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	3,4-DIHYORO-2H-PYRAN 3,4 Dihydro-2H-pyran	100	FL-1B Irr	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	3,4-DIMETHOXYBENZENESULFO NYL CHLORIDE	100	Corr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	3,4,5-TRIMETHOXYPHENYL ISOCYANATE		CL-IIIB Irr OHH Sens	0 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	3,5-BIS(TRIFLUOROMETHYL)BEN ZALDEHYDE	100	FL-1C Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3,5-BIS(TRIFLUOROMETHYL)BRO MOBENZENE	100	CL-IIIB Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	3,5-DICHLORO-2-HYDROXYBENZ ENESULFONYL CHLORIDE	100	Tox Care OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	3,5-DICHLOROANILINE	100	FS Irr Tox	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	3,5-DICHLOROBENZALDEHYDE		Corr	.011 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	3,5-DIFLUOROBENZVLAMINE	100	CL-IIIA Corr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	3,5-0IMETHYLPIPERIDINE	100	FL-1C Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	4-(AMINOMETHYL)PIPERIDINE	100	Cl-lIIA Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	4-(DIMETHYLAMINO)PYRIDINE Dimethylaminopyridine	100	CORR	0 Lbs.	.22 Lbs.	0 Lbs.	

Inventory for Building Occupancy Classification

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	4-(TRIFLUOROMETHOXY)BENZENESULFONYL CHLORIDE	100	CL-IIIB Irr Corr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	4-(TRIFLUOROMETHYL)-2-PYRIMIDINETHIOL		Tox	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	4-(TRIFLUOROMETHYL)BENZALDEHYDE	100	CL-IIIA Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	4-(TRIFLUOROMETHYL)BENZYLAMINE	100	FL-1C Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	4"-CHLOROACETOPHENONE	100	CL-IIIA OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	4-AMINO-1-BUTANOL		CL-IIIB Corr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	4-AMINOBENZOTRIFLUORIDE	100	Tox Irr CL-II	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	4-AMINOBIPHENYL		Carc Tox	0 Lbs.	0 Lbs.	.055 Lbs.	
2 MedChem	4-AMINOPYRIDINE		H.T. Irr OHH	0 Lbs.	.055 Lbs.	0 Lbs.	Yes
2 MedChem	4-BENZYLPIPERIDINE	100	CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	4-BIPHENYLSULFONYL CHLORIDE		Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	4-BROMO-2-METHYL-2-BUTENE	100	FL-1C Corr Irr OHH	0 ·Gal.	.0026 Gal.	0 Gal.	
2 MedChem	4-BROMOBENZALDEHYDE		FS Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	4-BROMOBUTYRONITRILE	100	CL-IIIB Irr Tox	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	4-CHLOROBENZALDEHYDE 4-Chlorobenzaldehyde	100	FS Irr	0 Lbs.	.55 Lbs.	0 Lbs.	

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	4-CHLOROBENZENESULFONYL CHLORIDE	100	FS Corr WR-1	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	4-CHLOROBENZOYL CHLORIDE		FS Corr Irr OHH	0 Lbs.	.00022 Lbs.	0 Lbs.	
2 MedChem	4-CHLOROPHENYL ISOTHIOCYANATE	100	FS Irr OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	4-CYANOBENZOYL CHLORIDE	100	Corr WR-1	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	4-CYANOPHENYL ISOCYANATE	100	Irr Sens OHH	0 Lbs.	.0044 Lbs.	0 Lbs.	
2 MedChem	4-DIMETHYLAMINO-2,2,6,6-TETRAMETHYLPIPERIDINE	100	CL-II Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	4-DIMETHYLAMINOAZOBENZENE- -4[1]-SULFONYL CHLORIDE	100	Corr OHH	0 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	4-ETHYLPHENYL ISOCYANATE	100	CL-IIIA Irr OHH Sens	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	4-FLUOROBENZALDEHYDE 4-Fluorobenzaldehyde	100	CL-II Irr	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	4-FLUOROBENZENESULFONYL CHLORIDE	100	FS Corr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	4-FLUOROBENZYL ISOCYANATE		CL-IIIA Irr OHH Sens	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	4-FLUORONITROBENZENE	100	CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	4-METHOXY-1-NAPHTHALDEHYDE		CL-IIIB	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	4-METHOXYBENZYLAMINE	100	CL-IIIB Corr	0 Gal.	.0065 Gal.	0 Gal.	

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	5-CHLOROVALERYL CHLORIDE		CL-IIIA Corr Irr OHH	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	5,6-DIMETHYLBENZIMIDAZOLE	100	Tox	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	6-AMINOCAPROIC ACID 6-Aminohexanoic Acid	100	OHH	0 Lbs.	0 Lbs.	0 Lbs.	
2 MedChem	6-PHENYL-1-HEXANOL	100	CL-IIIB Irr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	7-OXOOCTANOIC ACID		CL-IIIB Irr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	8-QUINOLINESULFONYL CHLORIDE		Corr	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	A,A,A-TRIFLUORO-P-TOLYL ISOCYANATE		CL-IIIA Irr OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	ACETALDEHYDE Acetaldehyde	100	FL-1B	0 Gal.	0 Gal.	.065 Gal.	
2 MedChem	ACETIC ANHYDRIDE Acetic Anhydride	100	CL-II WR-2 Corr-Acid	.26418 Gal.	.26418 Gal.	0 Gal.	
2 MedChem	Acetone	100	FL-1B Irr	2.1 Gal.	0 Gal.	0 Gal.	Yes
2 MedChem	Acetone	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	ACETONE CYANOHYDRIN	100	H.T. CL-IIIA Irr OHH	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	ACETYL CHLORIDE	100	Corr FL-1B	.013 Gal.	0 Gal.	.013 Gal.	Yes
2 MedChem	ACETYLACETONE Acetylacetone	100%	FL-1C Irr OHH Tox	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	ALLYL ALCOHOL Allyl Alcohol	100	FL-1B Corr Tox	0 Gal.	0 Gal.	.026 Gal.	

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Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use Open[2]	Closed[3]	6. Stored in Approved Cabinet?
2 MedChem	ALLYL BROMIDE Allyl Bromide	100	Tox Irr	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	ALUMINUM CHLORIDE ALUMINUM CHLORIDE	100	WR-2 Corr	0 Lbs.	0 Lbs.	1.76 Lbs.	
2 MedChem	AMMONIA Ammonia, Anhydrous	100	Corr FG OHH	0 Cu.Ft.	0 Cu.Ft.	6.3 Cu.Ft.	
2 MedChem	AMMONIUM SULFAMATE ammonium sulfamate	100%	Oxy-1 UR-1 Irr	0 Lbs.	2.2 Lbs.	0 Lbs.	
2 MedChem	ANILINE Aniline	100	Irr Tox CL-IIIA	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	ANISOLE Anisole	100	Irr CL-II	0 Gal.	0 Gal.	0 Gal.	
2 MedChern	ANTHRANILIC ACID anthranilic acid	99	Irr Sens	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem	B-BROMOCATECHOLBORANE	100	FS Corr	0 Lbs.	.11 Lbs.	0 Lbs.	
2 MedChem	BARIUM HYDROXIDE OCTAHYDRATE		H.T. Corr	0 Lbs.	0 Lbs.	.055 Lbs.	
2 MedChem	BDCS SILYLATION REAGENT Tert-Butyl Dimethylsilyl	100	FS CORR	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	BENZALDEHYDE	100	CL-IIIA Irr OHH Sens	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	BENZENESUlFONYL CHLORIDE		WR-1 Corr CL-IIIB	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	BENZIMIDAZOLE	100	Tox	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	BENZO[B]FURAN-2-CARBOXALD EHYDE	100	FS Irr	.022 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	BENZOPHENONE IMINE		CL-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	

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1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2	BENZOYL CHLORIDE		UR-1				
MedChem	Benzoyl Chloride	100	WR-1	0 Gal.	.065 Gal.	0 Gal.	
2	BENZOYL PEROXIDE		Perox-II				
MedChem	Benzoyl peroxide 77-95%	77-95	Oxy-3	0 Lbs.	0 Lbs.	.22 Lbs.	
2	BENZYL		CL-IIIB				
MedChem	1-PIPERAZINECARBOXYLATE	100	Irr	0 Gal.	.0065 Gal.	0 Gal.	
2	BENZYL ALCOHOL		CL-IIIB				
MedChem	Benzyl Alcohol		Tox				
			Irr				
		100	Sens	0 Gal.	0 Gal.	.026 Gal.	
2	BENZYL BROMIDE						
MedChem	BENZYL BROMIDE	100	Corr	0 Lbs.	.22 Lbs.	0 Lbs.	
2	BENZYL CHLOROFORMATE		CL-IIIA				
MedChem	Benzyl Chloroformate		Corr				
		100	WR-1	0 Gal.	.026 Gal.	0 Gal.	
2	BENZYL ISOCYANATE		CL-II				
MedChem			Irr				
			Sens				
		100	OHH	0 Gal.	.0065 Gal.	0 Gal.	
2	BENZYLAMINE		Tox				
MedChem	Benzylamine	100	Corr	0 Gal.	0 Gal.	.026 Gal.	
2	BENZYLTRIETHYLAMMONIUM						
MedChem	CHLORIDE		CF (Comb.				
	benzyltriethylammonium	100	Irr	0 Lbs.	0 Lbs.	.22 Lbs.	
2	BENZYLTRIMETHYLAMMONIUM		Corr				
MedChem	HYDROXIDE		Tox				
	benzyltrimethylammonium		—				
		40	—	0 Gal.	0 Gal.	.13 Gal.	
2	BETA-METHYLPHENETHYLAMIN		CL-IIIA				
MedChem		100	Corr	0 Gal.	.0013 Gal.	0 Gal.	
2	BIS(1,5-CYCLOOCTADIENE)NICKEL(O)		FS				
MedChem			Tox				
			Sens	0 Lbs.	.0044 Lbs.	0 Lbs.	
2	BIS(CYCLOPENTADIENYL)TITANIUM		Irr				
MedChem			OHH	0 Lbs.	.11 Lbs.	0 Lbs.	
2	BIS(TRI-N-BUTYLTIN) OXIDE		Tox				
MedChem			CL-IIIB	0 Gal.	.13 Gal.	0 Gal.	

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1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	BOC-4-PIPERIDONE		CL-IIIA UR-2 WR ·2 Carc	0 Gal.	0 Gal.	.013 Gal.	
2 MedChem	BORANE TETRAHYDROFURAN COMPLEX Borane-tetrahydrofuran	100	FL-1A WR-2 UR-2	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	BORANE ·METHYL SULFIDE COMPLEX	100	FL-1B Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	BORON TRIBROMIDE Boron Tribromide	100	Tox WR-2 Corr	0 Gal.	0 Gal.	.065 Gal.	
2 MedChem	BORON TRIFLUORIDE Boron trifluoride etherate	100	CL-II WR-2 Tox	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	BROMINE Bromine	100	Tox Corr Oxy-3	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	BROMOACETALDEHYDE DIMETHYL ACETAL	100	CL-II Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	BROMOACETIC ACID Bromo Acetic Acid	100	Corr-Acid	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	BROMOACETONITRILE	100	Corr	0 Gal.	0 Gal.	0 Gal.	
2 MedChem	BROMOACETYL BROMIDE Bromoacetyl bromide	100	Corr WR-2	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	BROMOACETYL CHLORIDE		Corr WR ·2	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	BROMOETHANE bromoethane	100	FL-1B Irr	0 Gal.	0 Gal.	.013 Gal.	
2 MedChem	BUTYL CHLOROFORMATE	100	Tox OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	BUTYLLITHIUM		FL-1A Tox Corr WR-3	0 Gal.	0 Gal.	.026 Gal.	

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1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	DIETHYL ACETYLENEDICARBOXYLATE	100	CL-II Corr Irr OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	DIETHYL AZODICARBOXYLATE		Irr CL-II Tox	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	DIETHYL CHLOROPHOSPHATE	100	CL-IIIA WR-1 Corr H.T.	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	DIETHYL GLUTACONATE		CL-IIIB	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	DIETHYL KETOMALONATE	100	CL-IIIB Irr	.0065 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	DIETHYL OXALATE		CL-IIIA Tox Irr	0 Gal.	0 Gal.	.0065 Gal.	
2 MedChem	DIETHYL PHOSPHITE	100	FL-1C Irr	0 Gal.	.065 Gal.	0 Gal.	
2 MedChem	DIISOBUTYLALUMINUM HYDRIDE Diisobutylaluminum Hydride	100	Pyro UR-2 WR-3 Tox	0 Gal.	Gal.	.026 Gal.	
2 MedChem	DIISOPROPYLAMINE Diisopropylamine	100	Tox FL-1B Corr-Base	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	DIMETHYL CYANODITHIOIMINOCARBONATE		FS Tox OHH	0 Lbs.	.11 Lbs.	0 Lbs.	
2 MedChem	Dimethyl formamide (DMF)		CL-II Carc Irr	Gal.	2.1 Gal.	Gal.	
2 MedChem	DIMETHYL ITACONATE	100	FS Irr	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem	DIMETHYL SULFATE	100	CL-IIIA WR-1 Carc Corr	0 Gal.	0 Gal.	.13 Gal.	

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					Open[2]	Closed[3]	
2 MedChem	DIMETHYL SULFIDE Methyl Sulfide	100	Irr FL-1B	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	Dimethyl Sulfoxide (DMSO) Dimethylsulfoxide (DMSO)	100	Irr CL-IIIB Sens	Gal.	2.1 Gal.	Gal.	
2 MedChem	DIMETHYLAMINE Dimethylamine	100	Corr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	DIMETHYLCARBAMYL CHLORIDE	100	FL-1C Irr Carc OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	Dioxane 1,4-Dioxane	100	Irr Carc FL-1B	Gal.	1 Gal.	Gal.	
2 MedChem	DIPHENYLACETALDEHYDE	100	CL-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	DIPHENYLPHOSPHORYL AZIDE	100	Tox Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	DL-ADRENALINE	100	Tox	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	EATON'S REAGENT Phosphorous Pentoxide Methanesulfonic Acid		CL-IIIB H.T. WR-2	0 Gal.	.13 Gal.	0 Gal.	
2 MedChem	EPICHLOROHYDRIN	100	FL-1C UR-1 Carc Tox	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	Ethanol Ethyl Alcohol	100	FL-1B Irr OHH	2.1 Gal.	0 Gal.	0 Gal.	Yes
2 MedChem	ETHANOLAMINE Ethanolamine	100	Corr	0 Gal.	.026 Gal.	0 Gal.·	
2 MedChem	ETHER ANHYDROUS		FL-1A	2.1 Gal.	0 Gal.	0 Gal.	
2 MedChem	ETHYL 1-METHYLNIPECOTATE	100	CL-IIIA Irr	.0065 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	ETHYL 3-AMINOBENZOATE	100	CL-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	

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Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use Open[2]	Closed[3]	6. Stored in Approved Cabinet?
2 MedChem	ETHYL 3-BROMOPROPIONATE	100	CL-IIIA Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	ETHYL	100	FS Irr Sens OHH	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	ETHYL	100	CL-II Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	ETHYL 5-OXOHEXANOATE		CL-IIIA	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	Ethyl acetate ethyl acetate-1-13C	100%	FL-1B Irr	6.3 Gal.	0 Gal.	0 Gal.	Yes
2 MedChem	Ethyl acetate ethyl acetate	100%	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	ETHYL ACETOACETATE Ethyl Acetoacetate	100	CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	ETHYL CHLOROFORMATE Ethyl Chloroformate	100	WR-1 FL-1B	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	Ethyl ether	100	FL-1A Irr	Gal.	4.2 Gal.	Gal.	
2 MedChem	ETHYL HYDROGEN MALONATE		CL-IIIB Irr	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	ETHYL LEVULINATE	100	CL-IIIB	0 Gal.	.13 Gal.	0 Gal.	
2 MedChem	ETHYL NIPECOTATE	100	CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	ETHYL (R)-(-)-2-HYDROXY-4-PHENYLBUT	100	CL-IIIB Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	ETHYL TRIFLUOROACETATE Ethyl trifluoroacetate	100	FL-1B Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	ETHYL VINYL ETHER	100	FL-1A Irr OHH	0 Gal.	.065 Gal.	0 Gal.	
2 MedChem	ETHYLENE GLYCOL 1,2 Ethanediol	100	CL-IIIB Irr OHH	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	ETHYLENEDIAMINE Ethylenediamine	100	Tox Corr	0 Gal.	0 Gal.	.00026 Gal.	

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Inventory for Building Occupancy Classification

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					Open[2]	Closed[3]	
2 MedChem	ETHYLENEIMINE	100	FL-1B UR-3D Carc Corr	.104 Gal.	0 Gal.	.026 Gal.	Yes
2 MedChem	EXO-2-AMINONORBORNANE	100	FL-1C Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	FENOPROFEN	100	Tox Irr	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	FORMALDEHYDE Formaldehyde Sol'n	37	CL-II Carc Tox Corr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	FURFURYLAMINE	100	FL-1C Tox Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	GLYOXYLIC ACID	50	Corr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	HEXAMETHYLPHOSPHORAMIDE Hexamethylphosphoramide	100	CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	Hexane Hexane	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	hexanes, ACS HPLC grade; hexanes, anhydrous hexanes, mixed isomers		FL-1B Irr OHH	6.3 Gal.	0 Gal.	0 Gal.	Yes
2 MedChem	HEXYL ISOCYANATE	100	CL-II Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	HISTAMINE	100	Tox Irr Sens	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	HYDRAZINE HYDRATE Hydrazine, monohydrate	100	Tox Corr CL-IIIA Carc	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	Hydrochloric Acid >30% Hydrogen Chloride	100	Corr-Acid	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	HYDROCINNAMOYL CHLORIOE	100	CL-IIIB Corr OHH	0 Gal.	.0065 Gal.	0 Gal.	

Inventory for Building Occupancy Classification

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Signature of Preparer: _____ Date: 9/18/2000

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					Open[2]	Closed[3]	
2 MedChem	ISOPROPYLSULFONYL CHLORIDE		CL-IIIA Corr OHH	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	ISOVALERYL CHLORIDE		FL-1B Corr WR-2 OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	KARL FISCHER REAGENT 2-METHOXYETHANOL	100	CL-II Irr OHH	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	L-PROLINE METHYL ESTER HYDROCHLORIDE	100	WR-1 Irr	.011 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	LITHIUM ALUMINUM HYDRIDE Lithium Aluminum Hydride	100	Corr WR-2	.026 Gal.	0 Gal.	.026 Gal.	
2 MedChem	LITHIUM BIS(TRIMETHYLSILYL)AMIDE		FS WR-2 Corr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	LITHIUM BOROHYDRIDE Lithium Borohydride	100	FS	0 Lbs.	.11 Lbs.	0 Lbs.	
2 MedChem	LITHIUM CHLORIDE Lithium Chloride	100	OHH	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	LITHIUM DIISOPROPYLAMIDE Lithium Diisopropylamide	100	FL-1B	0 Gal.	0 Gal.	.208 Gal.	
2 MedChem	LITHIUM TETRAFLUOROBORATE		Corr	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	M-TOLUOYL CHLORIDE		CL-IIIA Corr Irr OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	MAGNESIUM magnesium	100	FS UR-2 WR-1	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	MAGNESIUM PERCHLORATE HEXAHYDRATE		Oxy-3 Irr	0 Lbs.	.22 Lbs.	0 Lbs.	Yes
2 MedChem	METHANESULFONIC ACID	98	CL-IIIB Corr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	METHANESULFONYL CHLORIDE Methanesulfonyl Chloride	100	CL-IIIB Corr-Acid	0 Gal.	.026 Gal.	0 Gal.	

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					Open[2]	Closed[3]	
2 MedChem	Methanol Methyl Alcohol, Anhydrous	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	Methanol Methyl Alcohol, Anhydrous	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	METHOXYAMINE HYDROCHLORIDE Methoxylamine Hydrochloride	100	Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	METHYL 1-CYCLOPENTENE-1-CARBOXYL	100	CL-II Irr	.0026 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	METHYL 2-(BROMOMETHYL)ACRYLATE	100	CL-II OHH Irr	.0013 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	METHYL 2-BROMOBENZOATE	100	CL-IIIB Irr	.02 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	METHYL 3-BROMOPROPIONATE		CL-IIIA Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	METHYL 4-BROMOCROTONATE		CL-IIIA Corr Irr OHH	.052 Gal.	.026 Gal.	0 Gal.	
2 MedChem	METHYL 4-METHOXYACETOACETATE	100	FL-1C Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	METHYL BROMOACETATE Methyl Bromoacetate	100	Corr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	METHYL CHLOROFORMATE Methyl Chloroformate	100	FL-1B Tox	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	METHYL CROTONATE	98	FL-1b Irr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	METHYL CYCLOHEXYLACETATE		CL-IIIA	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	METHYL ISOCYANATE Methyl Isocyanate	100	H.T. FL-1B WR-2	0 Gal.	0 Gal.	.007 Gal.	
2 MedChem	METHYL OXALYL CHLORIDE	100	CL-II Corr-Acid Irr	0 Gal.	.013 Gal.	0 Gal.	

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					Open[2]	Closed[3]	
2 MedChem	METHYL PROPIOLATE	100	FL-1B Irr UR-1	.013 Gal.	0 Gal.	.013 Gal.	Yes
2 MedChem	METHYL PYRUVATE	100	CL-II Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	METHYL TRANS-3-PENTENOATE	100	FL-1C Irr	.0078 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	METHYLUTHIUM		Pyro Corr Tox WR-3	0 Gal.	Gal.	.026 Gal.	
2 MedChem	MOLYBDENUM HEXACARBONYL		Tox Irr	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	MORPHOLINE Morpholine	100	FL-1C	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	N-(2-AMINOETHYL)CARBAMIC ACID TERT-BUTYL ESTER	100	CL-IIIB Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	N-(3'-AMINOPROPYL)-2-PYRROLIDINONE	100	CL-IIIB Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	N-(BENZYLOXYCARBONYLOXY)SUCCINIMIDE		Sens	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE Tetramethylethylenediamine	100	FL-1B CORR	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	N,N,N"-TRIMETHYL-1,3-PROPANE DIAMINE		FL-1B Corr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	N,N'-DICYCLOHEXYLCARBODIIMIDE N,N-Dicyclohexylcarbodiimide	95	Corr Tox CL-IIIA	0 Gal.	0 Gal.	.25 Gal.	
2 MedChem	N,N'-DIETHYL-1,3-PROPANEDIAMINE		CL-II Corr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	N,N'-DIISOPROPYLCARBODIIMIDE 1,3-Diisopropylcarbodiimide	99	FL-1B	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	N,N-diisopropylethylamine N,N-diisopropylethylamine	99	Corr FL-1B	Gal.	1 Gal.	Gal.	

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					Open[2]	Closed[3]	
2 MedChem	N,N-DIMETHYLANILINE		CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	N,N-DIMETHYLETHYLENEDIAMIN E		FL-1C Corr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	N,N-DIMETHYLFORMAMIDE DI-TERT-BUTYL ACETAL	100	FL-1C Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	N,N-DIMETHYLFORMAMIDE DIMETHYL ACETAL N,N-Dimethylformamide	100	FL-1B Irr UR-1	0 Gal.·	0 Gal.	.026 Gal.	
2 MedChem	N,N-DIMETHYLNEOPENTANEDIA MINE		FL-1B Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	N-(TERT-BUTOXYCARBONYL)-D-PROLINAL	100	CL-IIIB Irr	0 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	N-ACETYLSULFANILYL CHLORIDE		Corr	0 Lbs.	.22 Lbs.	0 lbs	
2 MedChem	N-BROMOSUCCINIMIDE N-Bromosuccinimide	100	Corr	0 Lbs.	0 Lbs.	1.1 Lbs.	
2 MedChem	N-BUTYLAMINE	100	FL-1B Tox Corr	0 Gal.	0 Gal.	.0065 Gal.	
2 MedChem	N-CARBOBENZYLOXY-L-SERINE METHYL ESTER	100	CL-IIIB Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	N-CHLOROSUCCINIMIDE CHLOROSUCCINIMIDE	100	Oxy-2 Corr OHH	0 Gal.	0 Gal.	0 Gal.	
2 MedChem	N-ETHYLMETHYLAMINE	100	FL-1B Corr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	N-HEXYLMETHYLAMINE	100	FL-1C Irr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	N-Methyl Pyrrolidone (NMP) N-Methyl Pyrrolidone (NMP)	100	CL-IIIA Irr	26 Gal.	1 Gal.	6 Gal.	
2 MedChem	N-METHYL-N'-NITRO-N-NITROSO GUANIDINE	100	Tox FS Carc OHH	0 Lbs.	.055 Lbs.	0 Lbs.	

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					Open[2]	Closed[3]	
2 MedChem	N-METHYL-N-PROPARGYLBENZYLAMINE	100	Tox Irr CL-II	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	N-METHYLANILINE N-methylaniline	100	CL-IIIA Irr Tox	0 Gal.	0 Gal.	.013 Gal.	
2 MedChem	N-METHYLSENZYLAMINE		CL-IIIA Corr Sens	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	N-METHYLHOMOVERATRYLAMINE	100	CL-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	N-methylmorpholine N-methylmorpholine	100	Corr FL-1C	Gal.	4.2 Gal.	Gal.	
2 MedChem	N-METHYLPHENETHYLAMINE	100	CL-IIIA Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	N-PROPYL ISOCYANATE		FL-1B Tox OHH Sens	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	N-TRIMETHYLSILYLIMIDAZOLE	100	FL-1B Irr WR-1	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	NICKEL Nickel (Raney Activated)	100	FS Carc Sens	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem	NICOTINOYL CHLORIDE HYDROCHLORIDE		Corr	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	Nitric Acid 41-86% Nitric Acid	41-86	Oxy-2 Corr-Acid	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	NITROMETHANE Nitromethane	100	FL-1B UR-3 Irr	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	NITROSONIUM TETRAFLUOROBORATE Nitrosonium Tetrafluoroborate	100	CORR	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	O-ANISALDEHYDE		CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	

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					Open[2]	Closed[3]	
2 MedChem	O-ANISIDINE o-Anisidine	100	CL-IIIB Carc Irr OHH,sens	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	O-PHENYLENEDIAMINE Phenylenediamine	100	Sens Irr Tox	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	O-PHTHALALDEHYDE	100	Irr CL-IIIB	.0065 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	O-XYLENE		FL-1B Irr OHH	0 Gal.	0 Gal.	.26418 Gal.	
2 MedChem	OSMIUM TETROXIDE Osmium(VlII) Oxide	100	Tox Oxy-1 Irr	0 Lbs.	0 Lbs.	.055 Lbs.	
2 MedChem	OXALIC ACID Oxalic Acid	100	Tox Irr	0 Gal.	0 Gal.	.065 GaL	
2 MedChem	OXALYL CHLORIDE Oxalyl chloride	100	WR-2 Corr Tox OHH	.026 Gal.	.026 Gal.	0 Gal.	Yes
2 MedChem	P-ANISALDEHYDE		CL-IIIB	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	P-ANISIDINE		Irr Sens	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	P-ANISOYL CHLORIDE P-Anisoyl chloride	100	Corr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	(+)-P-MENTH-1-EN-9-OL		CL-IIIB	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	P-TOLUALDEHYDE		CL-IIIA	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	P-TOLUENESULFONIC ACID MONOHYDRATE p-toluenesulfonic acid	100	CF (Comb. Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	P-TOLUENESULFONYL CHLORIDE Toluenesulfonyl Chloride	100	Corr-Acid	0 Gal.	0 Gal.	.26418 Gal.	
2 MedChem	P-TOLUOYL CHLORIDE p-Toluoyl chloride	100	CL-IIIA Corr	0 Gal.	.026 Gal.	0 Gal.	

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					Open[2]	Closed[3]	
2 MedChem	P-TOLYL ISOTHIOCYANATE	100	CL-IIIB Irr OHH	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	PALLADIUM Palladium on activated		Irr FS	0 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	PARAFORMALDEHYDE PARAFORMALDEHYDE	100	FS Corr	0 Lbs.	0 Lbs.	1.1 Lbs.	
2 MedChem	PERFLUORO-1-BUTANESULFONYL FLUORIDE	100	Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	PERIODIC ACID Periodic Acid	100	Oxy-1 CORR	.66 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	Petroleum Ether Petroleum Ether	100	FL-1A Irr	2.1 Gal.	0 Gal.	0 Gal.	
2 MedChem	PHENETHYL ISOCYANATE		Irr OHH Sens	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	PHENETHYLAMINE		CL-IIIA Irr Sens	0 Gal.	.208 Gal.	0 Gal.	
2 MedChem	PHENOTHIAZINE phenothiazine	+98%	Sens	0 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	PHENYL CHLOROFORMATE Phenyl chloroformate	100	Tox Carr	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	PHENYL ISOTHIOCYANATE		CL-IIIA Tox Sens OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	PHENYLACETALDEHYDE		CL-IIIA Irr Sens	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	PHENYLACETYL CHLORIDE	100	WR-2 Corr	0 Lbs.	.22 Lbs.	0 Lbs.	Yes
2 MedChem	PHENYLACETYLENE	98	FL-1C	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	PHENYLLITHIUM cyclohexane ethher	1.8M	Pyro Corr WR-3 UR-3	0 Gal.	Gal.	.026 Gal.	

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					Open[2]	Closed[3]	
2 MedChem	PHOSGENE Phosgene	100	H.T. WR-1 Irr	.052 Cu.Ft.	0 Cu.Ft.	2.6 Cu.Ft.	
2 MedChem	PHOSPHOMOLYBDIC ACID HYDRATE Phosphomolybdic Acid,	100	Oxy-2 CORR	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem ·	PHOSPHORIC ACID	100	Corr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	Phosphorous Trichloride Phosphorous Trichloride	100	H.T. UR-2 WR-2 Corr	0 Gal.	0 Gal.	.055 Gal.	
2 MedChem	PHOSPHORUS OXYCHLORIDE POCL3	100	H.T. Corr WR-2	.022 Gal.	0 Gal.	.006 Gal.	
2 MedChem	PHOSPHORUS PENTACHLORIDE Phosphorus Pentachloride	100	WR-2 Corr	0 Lbs.	0 Lbs	.22 Lbs.	
2 MedChem	PHOSPHORUS PENTOXIDE Phosphorous Pentoxide	100	CORR WR-2 Tox	0 Lbs.	0 Lbs	.22 Lbs.	
2 MedChem	PHOSPHORUS (V) TRIBROMIDE OXIDE, 98%		WR-2 Corr OHH	.052 Gal.	.026 Gal.	0 Gal.	Yes
2 MedChem	PHTHALOYL DICHLORIDE		Tox Corr Irr OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	PIPERIDINE Piperidine	100	FL-1B Tox Corr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	PIPERONAL		Irr OHH	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	POLYPHOSPHORIC ACID	100	Corr OHH	0 Gal.	.26 Gal.	0 Gal.	
2 MedChem	POTASSIUM potassium	100	FS WR-2 Corr	0 Lbs.	0 Lbs.	.11 Lbs.	

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					Open[2]	Closed[3]	
2 MedChem	POTASSIUM BIS(TRIMETHYLSILYL)AMIDE		FL-1B Irr	0 Gal.	.026 Gal.	0 Gal.	
	Potassium bis (trimethyl silyl)	0.1					
	Toluene	99.9					
2 MedChem	POTASSIUM BOROHYDRIDE		FS WR-2 Corr	0 Lbs.	0 Lbs.	.011 Lbs.	
2 MedChem	POTASSIUM CARBONATE		Corr	0 Gal.	0 Gal.	.065 Gal.	
		100					
2 MedChem	POTASSIUM CYANIDE		H.T.	0 Gal.	0 Gal.	.0065 Gal.	
	Potassium Cyanide	100	Irr				
2 MedChem	POTASSIUM FLUORIDE		Tox	0 Gal.	0 Gal.	.13 Gal.	
	Potassium Fluoride	100	OHH				
2 MedChem	POTASSIUM HYDROGEN SULFATE		Corr	0 Lbs.	1.1 Lbs.	0 Lbs.	
	Potassium Bisulfate	100					
2 MedChem	POTASSIUM NITRATE		Oxy-1	0 Lbs.	1.1 Lbs.	0 Lbs.	
	potassium nitrate	100	Irr				
2 MedChem	POTASSIUM NITROSODISULFONATE		WR-2 Irr	.022 Lbs.	.022 Lbs.	0 Lbs.	Yes
2 MedChem	POTASSIUM TERT-BUTOXIDE		FS	0 Lbs.	1.1 Lbs.	0 Lbs.	
	Potassium tert-Butoxide	100	WR-2				
2 MedChem	POTASSIUM TRIMETHYLSILANOLATE		Corr	.165 Lbs.	.055 Lbs.	0 Lbs.	
2 MedChem	PROCAINAMIDE HYDROCHLORIDE		Irr OHH	0 Lbs.	.055 Lbs.	0 Lbs.	
		100					
2 MedChem	PROPARGYLALCOHOL		FL-1C	0 Gal.	0 Gal.	·.026Gal.	
	Propargyl Alcohol	100	Irr H.T.				
2 MedChem	PROPARGYL BENZENESULFONATE		CL-IIIB Corr	0 Gal.	.13 Gal.	0 Gal.	
		100					
2 MedChem	PROPIOLIC ACID		CI-II	0 Gal.	.026 Gal.	0 Gal.	
		98	Corr Tox				
2 MedChem	PROPIONALDEHYDE		FL-1B UR-1 Corr	.0065 Gal.	.0065 Gal.	0 Gal.	Yes

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	Pyridine Pyridine	 100	Fl-1B Irr	1 Gal.	Gal.	1 Gal.	Yes
2 MedChem	PYRIDINE-3-SULFONIC ACID 3-Pyridine Sulfonic Acid	 100	CORR	0 Lbs.	.055 Lbs.	0 lbs.	
2 MedChem	PYRIDINE-4-METHANOL	 100	Cl-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	PYRIDINIUM CHLOROCHROMATE Pyridinium Chlorochromate	 100	Oxy-1	0 Lbs.	1.1 lbs.	0 lbs.	
2 MedChem	PYRIDINIUM DICHROMATE Pyridinium Dichromate	 100	Carc Oxy-1	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem	PYRROLIDINE Pyrrolidine	 100	Tox WR-1	0 Gal.	0 Gal.	0 Gal.	
2 MedChem	(R)-(+)-1-PHENYL-1-BUTANOL	 100	FS Irr	0 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	R(-)-1-PHENYL-2-PROPANOL		CL-IIIA	0 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	(R)-(+)-2-METHYL-1-PHENYL-1-PR OPANOL		CL-IIIA	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	(R)-(+)-2-PHENYL-1-PROPANOL		CL-IIIB	.00026 Gal.	.00026 Gal.	0 Gal.	
2 MedChem	(R)-(-)-EPICHLOROHYDRIN		FL-1B Tox Carc OHH	.0026 Gal.	.0013 Gal.	0 Gal.	Yes
2 MedChem	(S)-(+)-EPICHLOROHYDRIN		FL-1C Tox Carc OHH	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	SAMARIUM(II) IODIDE Iodine Tetrahydrofuran	 .1m	FL-1B UR-3 Sens OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	SELENIUM DIOXIDE Selenium(lV) Oxide	 100	Tox Irr	0 Lbs.	0 Lbs.	1.1 Lbs.	
2 MedChem	SILVER (II) OXIDE		Oxy-3 Irr	0 Lbs.	.022 Lbs.	0 Lbs.	Yes
2 MedChem	SILVER NITRATE Silver Nitrate	 100	Oxy-1 Irr	0 Lbs.	1.1 Lbs.	0 Lbs.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	SODIUM sodium	100	FS UR-2 WR-2 Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	SODIUM AZIDE Sodium Azide	100	UR-3 H.T. WR-1	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	SODIUM BIS(TRIMETHYLSILYL)AMIDE		FL-1B Corr	0 Gal.	Gal.	.208 Gal.	
2 MedChem	SODIUM BOROHYDRIDE Sodium Borohydride	100	Corr WR-2	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	SODIUM CYANOBOROHYDRIDE Sodium Cyanoborohydride	100	WR-1 FS	0 Lbs.	.11 Lbs.	0 Lbs.	
2 MedChem	SODIUM DITHIONITE		FS WR-1 Irr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	SODIUM ETHOXIDE		FS WR-2 Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	SODIUM HYDRIDE		FS WR-2 Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	SODIUM HYPOCHLORITE SODIUM HYPOCHLORITE	12-15	Corr	0 Gal.	0 Gal.	.26418 Gal.	
2 MedChem	SODIUM METAPERIODATE Sodium Metaperiodate	100	Oxy-3 Irr	0 Lbs.	1.1 Lbs.	0 Lbs.	Yes
2 MedChem	SODIUM METHOXIDE		CF/D (loose) WR-3 Corr	0 Lbs.	0 Lbs.	.22 Lbs.	
2 MedChem	SODIUM NITRATE Sodium Nitrate	100	Oxy-1 Irr	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem	SODIUM NITRITE Sodium Nitrite	100	Oxy-1 Corr Tox	0 Lbs.	0 Lbs.	1.1 Lbs.	
2 MedChem	SODIUM TERT-BUTOXIDE	100	Corr	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	SODIUM THIOMETHOXIDE	100	FS Corr	0 Lbs.	.011 Lbs.	0 Lbs.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	SOLKETAL		CL-IIIA	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	TBTU		FS Irr	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	TERT-BUTYL 1-PIPERAZINECARBOXYLATE	100	CL-IIIB Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	TERT-BUTYL ALCOHOL Tert Butyl Alcohol	100	FL-1B Irr	0 Gal.	0 Gal.	.26418 Gal.	
2 MedChem	TERT-BUTYL BROMOACETATE		CL-II Corr-Acid	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	TERT-BUTYL HYDROPEROXIDE	90	FL-1C Perox-I Oxy-4 UR-4	.013 Gal.	0 Gal.	.013 Gal.	
2 MedChem	TERT-BUTYL	100	CL-IIIB Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	TERT-BUTYL N-(3-AMINOPROPYL)CARBAMAT	100	CL-IIIB Corr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	TERT-BUTYL NITRITE	90	Tox Oxy-l FL-1B Irr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	TERT-BUTYLACETYL CHLORIDE	100	FL-1B Corr Irr OHH	0 Gal.	Gal.	.26418 Gal.	
2 MedChem	TETRA-N-BUTYLAMMONIUM TRIBROMIDE	100	Irr WR-l	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	TETRABUTYLAMMONIUM FLUORIDE Tetrabutylammonium fluoride	100	Irr FL-1B	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	TETRAETHYL	100	CL-II Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	Tetrahydrofuran Tetrahydrofuran	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	Tetrahydrofuran Tetrahydrofuran	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	TETRAHYDROFURFURYLAMINE		CL-II Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	TETRAMETHYL ORTHOCARBONATE		FL-1B Irr	.0065 Gal.	.0065 Gal.	0 Gal.	Yes
2 MedChem	TETRAPROPYLAMMONIUM PERRUTHENATE		Oxy-3 UR-3 Irr	0 Lbs.	.0022 Lbs.	0 Lbs.	Yes
2 MedChem	THIONYL BROMIDE	100	WR-2 Corr	.026 Gal.	.026 Gal.	0 Gal.	Yes
2 MedChem	THIONYL CHLORIDE Thionyl chloride	100	Tox Corr	0 Gal.	0 Gal.	.26418 Gal.	
2 MedChem	THIOPHENE ·2-CARBONYL CHLORIDE	100	CL-IIIB Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	THIOPHOSGENE Thiophosgene	100	WR-2	0 Gal.	.026 Gal.	0 Gal.	Yes
2 MedChem	THIOUREA Thiourea	100	Tox Irr	0 Gal.	0 Gal.	.013 Gal.	
2 MedChem	TIN(IV) CHLORIDE Tin (IV) chloride	100	Tox WR-1 Corr	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	TITANIUM(IV) CHLORIDE Titanium Tetrachloride	100	WR-2 · Tox CORR OHH	0 Lbs.	0 Lbs.	.44 Lbs.	
2 MedChem	Toluene Toluene	100	FL-1B Irr	2.1 Gal.	0 Gal.	0 Gal.	Yes
2 MedChem	Toluene Toluene	100	FL-1B Irr	3 Gal.	Gal.	1 Gal.	Yes
2 MedChem	TRANS-1,4-DIAMINOCYCLOHEXANE	100	FS Corr OHH	0 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	TRANS-DICHLOROBIS(TRIPHENYL-PHOSPHINE)PALLADIUM (II)		FS	.0242 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	TRI-N-BUTYLTIN CHLORIDE		CL-IIIB Corr Tox OHH	0 Gal.	0 Gal.	.026 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use Open[2]	Closed[3]	6. Stored in Approved Cabinet?
2 MedChem	TRI-N-BUTYLTIN HYDRIDE Tributyltin Hydride	100	CL-IIIA WR-1	0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	TRIBUTYL BORATE	100	CL-IIIB Irr	0 Gal.	.0234 Gal.	0 Gal.	
2 MedChem	TRICHLOROMETHYL CHLOROFORMATE	100	Tox Corr OHH	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	TRIETHYL ORTHOACETATE		FL-1C WR-1 Irr	0 Gal.	0 Gal.	.13 Gal.	
2 MedChem	Triethylamine Triethylamine	100	FL-1B Irr Tox	1 Gal.	Gal.	1 Gal.	Yes
2 MedChem	TRIETHYLAMINE HYDROCHLORIDE	100	Irr OHH	0 Gal.	.065 Gal.	0 Gal.	
2 MedChem	TRIETHYLSILANE Triethylsilane	100	FL-1B Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	TRIFLUOROACETIC ACID	25	Corr-Acid	0 Gal.	0 Gal.	.026 Gal.	
2 MedChem	TRIFLUOROACETIC ANHYDRIDE Trifluoroacetic anhydride	100	Corr OHH	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	TRIFLUOROMETHANESULFONIC ACID Trifluoromethanesulfonic Acid	100	WR-1 Corr-Acid	0 Gal.	0 Gal.	.0026 Gal.	
2 MedChem	TRIFLUOROMETHANESULFONIC ANHYDRIDE Trifluoromethanesulfonic	100	Corr-Acid	. 0 Gal.	.013 Gal.	0 Gal.	
2 MedChem	TRIISOPROPYL BORATE		FL-1B Irr OHH	0 Gal.	.0208 Gal.	0 Gal.	
2 MedChem	TRIMETHYL 4-BROMOORTHOBUTYRATE	100	CL-IIIA Irr	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	TRIMETHYL ORTHOACETATE		FL-1B Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	TRIMETHYL ORTHOFORMATE	100	FL-1B Irr	0 Gal.	Gal.	.13 Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	TRIMETHYL ORTHOVALERATE		CL-II Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	TRIMETHYL PHOSPHONOACETATE	100	CL-IIIA Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	TRIMETHYLAMINE Trimethylamine	100	FG	0 Cu.Ft.	Cu.Ft.	5.5 Cu.Ft.	
2 MedChem	TRIMETHYLOXONIUM TETRAFLUOROBORATE	100	Corr-Acid	.044 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	TRIMETHYLSILYL BROMOACETATE		FL-1C Corr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	TRIMETHYLSILYL CYANIDE Trimethylsilylcyanide	100	FL-1B Tox	0 Gal.	0 Gal.	.0065 Gal.	
2 MedChem	TRIMETHYLSILYLDIAZOMETHANE	100	FL-1B Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	TRIMETHYLTIN CHLORIDE	100	H.T. Corr OHH	0 Lbs.	0 Lbs.	0 Lbs.	
2 MedChem	TRIPHOSGENE Triphosgene	100	Irr OHH	.22 Lbs.	.22 Lbs.	0 Lbs.	
2 MedChem	TRYPTAMINE	100	Tox	0 Lbs.	.11 Lbs.	0 Lbs.	
2 MedChem	UREA HYDROGEN PEROXIDE		Oxy-3 Corr	0 Gal.	.026 Gal.	0 Gal.	Yes
2 MedChem	VALERYL CHLORIDE	100	FL-1B Corr Irr OHH	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	VINYLMAGNESIUM BROMIDE Tetrahydrofuran	1M	FL-1B Corr WR-3 UR-2	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	Xylene Mixed Xylenes	100	FL-1C Irr OHH	Gal.	2.1 Gal.	Gal.	

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2	ZINC		CF/D (loose)	0 Lbs.	0 Lbs.	2.2 Lbs.	
MedChem	ZINC METAL DUST	100	FS UR-1 WR-2				
2	ZINC CHLORIDE		Tox	0 Lbs.	0 Lbs.	.55 Lbs.	
MedChem	Zinc Chloride	100	Irr OHH				
2	ZINC CYANIDE		Tox	0 Lbs.	.011 Lbs.	0 Lbs.	
MedChem		100					
2	ZINC IODIDE		Irr	0 Lbs.	0 Lbs.	.11 Lbs.	
MedChem	zinc iodide	100	OHH Sens				

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: _____

Control Area No.: 3 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
3 Biology	Acetic Acid, Glacial Acetic Acid	 100	CL-II Corr-Acid	13 Gal.	1.5 Gal.	1.5 Gal.	
3 Peptide	Dichloromethane		Corr OHH Carc	3 Gal.	1 Gal.	Gal.	
3 Biology	Ethanol Ethyl Alcohol	 100	FL-1B Irr OHH	2 Gal.	0 Gal.	0 Gal.	Yes
3 Peptide	N-Methyl Pyrrolidone (NMP) N-Methyl Pyrrolidone (NMP)	 100	CL-IIIA Irr	3 Gal.	1 Gal.	Gal.	
3 Peptide	Piperidine Piperidine	 100	FL-1B Tox Corr	.75Gal.	.25 Gal.	Gal.	Yes
3 Peptide	TRIFLUOROACETIC ACID (TFA) TRIFLUOROACETIC ACID	 25	Corr	.75Gal.	.25 Gal.	Gal.	
3 Peptide	Waste	 100	FL-1B Irr OHH	Gal.	Gal.	4 Gal.	

1 Total Quantity. Includes aggregate quantity in use and storage per UBC.

2 Open Use — Use of a solid or liquid hazardous material in a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for liquids include dispensing from or into open beakers or containers; dip tank operations: plating operations: etc.

3 Closed Use — Use of a solid or liquid hazardous material in a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal use: and all uses of compressed gases.

Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system, or piece of equipment; reaction process operations;

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: H3

Control Area No.: H3 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
H3 Store	Acetonitrile Cyanomethane/Methyl	 100	FL-1B Irr	330 Gal.	Gal.	330 Gal.	
H3 Store	Dichloromethane		Corr OHH Carc	160 Gal.	Gal.	Gal.	
H3 Store	Dimethyl formamide (DMF) Dimethyl formamide (DMF)	 	CL-II Carc Irr	32 Gal.	Gal.	Gal.	
H3 Store	Flammable Solvent Waste Cyanomethane/Methyl	 <20	FL-1C Irr	Gal.	Gal.	1000 Gal.	
H3 Store	N-Methyl Pyrrolidone (NMP) N-Methyl Pyrrolidone (NMP)	 100	CL-IIIA Irr	160 Gal.	Gal.	Gal.	
H3 Store	Piperidine Piperidine	 100	FL-18 Tox Corr	32 Gal.	Gal.	Gal.	
H3 Store	Trifluoroacetic Acid Trifluoroacetic Acid	 100	WR-1 Tox Corr-Acid	32 Gal.	Gal.	Gal.	

[1] Total Quantity. Includes aggregate quantity in use and storage per UBC.
[2] Open Use — Use of a solid or liquid hazardous material in a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for liquids include dispensing from or into open beakers or containers; dip tank operations; plating operations; etc.
[3] Closed Use — Use of a solid or liquid hazardous material in a closed vessel or system that remains dosed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal use; and all uses of compressed gases. Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system, or piece of equipment; reaction process operations;

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 2 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
2 MedChem	1-(2-AMINOETHYL)PIPERIDINE	100	CL-II Corr	0 Gal.	.0026 Gal.	0 Gal.	
2 MedChem	1-(3-AMINOPROPYL)IMIDAZOLE	100	CL-IIIB Irr	0 Gal.	0 Gal.	0 Gal.	
2 MedChem	1-(3-DIMETHYLAMINOPROPYL)-3-ETHYLCARBODIIMIDE	100	Irr Sens	0 Lbs.	.022 Lbs.	0 Lbs.	
2 MedChem	1-ADAMANTYL ISOCYANATE	100	Irr OHH Sens	0 Lbs.	.011 Lbs.	0 Lbs.	
2 MedChem	1-AMINO-4-METHYLPIPERAZINE	100	CL-IIIA Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	1-CHLORO-2,4-DINITROBENZENE	100	FS Sens Irr OHH	0 Lbs.	1.1 Lbs.	0 Lbs.	
2 MedChem	1-CHLORO-3-IODOPROPANE	100	CL-IIIB Irr	0 Gal.	.026 Gal.	0 Gal.	
2 MedChem	1-CHLORO-4-ETHYNYLBENZENE	100	FS Irr	.0022 Lbs.	.0022 Lbs.	0 Lbs.	
2 MedChem	1-CHLORO-4-PHENYLBUTANE	100	CL-IIIB Irr	.0013 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	1-ETHYNYLCYCLOHEXENE	100	FL-1C Irr OHH	0 Gal.	.0013 Gal.	0 Gal.	
2 MedChem	1-HEPTYNE	100	FL-1B Irr	0 Gal.	.0065 Gal.	0 Gal.	
2 MedChem	1-IODOBUTANE		FL-1B Irr	0 Gal.	Gal.	.13 Gal.	
2 MedChem	1-METHYLIMIDAZOLE N-Methyl imidazole	100	CL-IIIA Corr	0 Gal.	0 Gal.	0 Gal.	

1 Total Quantity. Includes aggregate quantity in use and storage per UBC.
2 Open Use — Use of a solid or liquid hazardous material in a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for liquids include dispensing from or into open beakers or containers; dip tank operations; plating operations; etc.
3 Closed Use — Use of a solid or liquid hazardous material in a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal use; and all uses of compressed gases. Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system, or piece of equipment; reaction process operations;

Inventory for Building Occupancy Classification

Plan Check No.: _____ Proposed Occupancy Classification: B

Control Area No.: 1 Is this area protected by a fire sprinkler system? Yes

Signature of Preparer: _____ Date: 9/18/2000

1. Room No.	2. Chemical Name & Concentration		3. UBC Class(es) Physical & Health Hazards	4. Quantity Stored[1]	5. Quantity in Use		6. Stored in Approved Cabinet?
					Open[2]	Closed[3]	
1 HPLC	Acetic Acid, Glacial Acetic Acid	 100	CL-II Corr-Acid	6 Gal.	2 Gal.	Gal.	
1 HPLC	Acetonitrile Cyanomethane/Methyl	 100	FL-1B Irr	Gal.	Gal.	60 Gal.	
1 HPLC	Buffer Acetic Acid	 1	Irr	Gal.	Gal.	55 Gal.	
1 HPLC	Chloroform Chloroform	 100	Carc Irr OHH	3 Gal.	1 Gal.	Gal.	
1 HPLC	HPLC Waste Cyanomethane/Methyl	 100	FL-1B Irr	Gal.	Gal.	4 Gal.	
1 HPLC	N,N-Dimethylformamide N,N-Dimethylformamide	 100	FL-1B Irr UR-1	3 Gal.	Gal.	1 Gal.	Yes
1 HPLC	Piperidine Piperidine	 100	FL-1B Tox Corr	.75 Gal.	.25 Gal.	Gal.	Yes
1 HPLC	Trifluoroacetic Acid Trifluoroacetic Acid	 100	WR-1 Tox Corr	3 Gal.	1 Gal.	Gal.	

[1] Total Quantity. Includes aggregate quantity in use and storage per UBC.
[2] Open Use — Use of a solid or liquid hazardous material in a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for liquids include dispensing from or into open beakers or containers; dip tank operations; plating operations; etc.
[3] Closed Use — Use of a solid or liquid hazardous material in a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal use; and all uses of compressed gases. Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system, or piece of equipment; reaction process operations;

EXHIBIT H

Casework and Hoods (including benches)
Cagewasher
Glasswasher
Autoclave
Vac Unit
CDA Unit
DI Water System
Hazardous Materials Storage Structures and Tank
Any Plumbing Carrying Hazardous Materials and/or Animal Shower and Cleaning Facilities.

FIRST AMENDMENT TO LEASE

This Agreement made as of this 5th day of December, 2002, between MJ Research, Incorporated ("Landlord") and Genesoft, Inc. ("Tenant").

Whereas, Landlord and Tenant are parties to a certain lease dated as of October 6, 2000 with respect to premises at 7000 Shoreline Court, South San Francisco, California (the "Lease") and

Whereas, Tenant has requested that Landlord partially defer certain payments of Fixed Rent as more particularly set forth herein, and

Whereas, Landlord is willing to do so upon the terms and conditions set forth herein,

Now, therefore, the parties agree as follows:

1. Yearly Fixed Rent, as defined in the Lease, shall continue to accrue and be owed at the rates set forth in the Lease.

2. Provided Tenant is not otherwise in default under the Lease, Landlord agrees to defer temporarily (with respect to the Rent Deferred Space as hereinafter defined) receipt of Fixed Rent in excess of $3.00 per rentable square foot per month for the months of December, 2002 and January through June, 2003 (the "Deferral Period"), but only with respect to 38,229 s.f. of the Premises (the "Rent Deferred Space"). Said deferred rent shall be hereinafter referred to as the "Deferred Rent." All Deferred Rent shall continue to accrue and be fully earned by Landlord, who, as a convenience to Tenant, has agreed to defer receipt of payment of the same, subject to the conditions of this Agreement. Tenant shall continue to pay when due during the Deferral Period Fixed Rent at the rate of $3.00/s.f./month and any additional rent or charges due under the Lease with respect to the Rent Deferred Space. Tenant shall also pay in full all Fixed Rent and other charges, without deferral of any kind, on the portion of the Premises other than the Rent Deferred Space.

3. The parties agree that the total amount of Fixed Rent deferred under this Agreement is $425,488.77. Tenant may defer payment of the entire December payment of Fixed Rent with respect to the Rent Deferred Space ($172,030.50), and the balance of the Deferred Rent shall be deferred on a monthly basis of $38,190.77 per month for January and February, 2003, and $44,211.84 per month for March through June, 2003. All Deferred Rent shall be due and payable in full on July 1, 2003. Notwithstanding the foregoing, if after the date hereof there shall occur an Event of Default, all Deferred Rent theretofore accrued but unpaid shall be immediately due and payable, and Fixed Rent shall no longer be deferred.

4. Article 28 is hereby modified to provide as follows:

(a) In case of an Event of Default, Landlord may draw upon the letter of credit to the extent of any Deferred Rent in addition to any other damages or costs for which Landlord has the right to so draw; and

(b) Section 28.3 is hereby deleted from the Lease.

5. Section 2.4 of the Lease is modified to delete subsection (b) thereof and also to delete the words "(other than the security desk)" from the last paragraph of Section 2.4.

6. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Lease.

7. Tenant hereby confirms that the Lease is in full force and effect, that it has no claims against Landlord or right to offset against rent or other charges, and the Landlord is not in default of its obligations under the Lease.

8. This Agreement shall be null and void unless the Tenant pays all December rent (not deferred by this Agreement) on or before December 6, 2002.

Executed under seal as of the date first set forth above.

MJ Research, Incorporated

By: /s/ Illegible
Duly Authorized

Genesoft, Inc.

By: /s/ David B. Singer
Duly Authorized

David B. Singer
Chairman and CEO
Genesoft, Inc.

SECOND AMENDMENT TO LEASE

This Agreement made as of this 25th day of March, 2004 between MJ Research, Incorporated ("Landlord") and Genome Therapeutics Corporation ("Tenant").

WHEREAS, Landlord and Genesoft, Inc. executed a certain Agreement of Lease dated as of October 6, 2000, as amended by a First Amendment to Lease dated December 5, 2002 (the "Lease"), and

WHEREAS, Genome Therapeutics Corporation is the successor by merger to Genesoft, Inc., and

WHEREAS, the parties desire to further amend the Lease.

NOW, THEREFORE, for consideration paid, the receipt and sufficiency of which is hereby acknowledged, the parties agree to amend the Lease as follows:

1. Section 16(a) and 16(b) of the Lease are deleted and replaced with the following Section 16(a) and 16(b):

"(a) If the Demised Premises, or any part thereof, shall be damaged by fire or other casualty, Tenant shall give prompt notice thereof to Landlord, and Landlord, upon receiving such notice and the insurance proceeds for such casualty, shall proceed in a commercially reasonable manner, subject to unavoidable delays, to repair, or cause to be repaired, such damage to the extent hereinafter provided. Landlord shall be responsible to restore only to the "cold shell" condition as set forth on Exhibit A-1, and Tenant shall be responsible for restoration of all leasehold improvements beyond such cold shell (the "TI"). Notwithstanding the preceding sentence to the contrary, solely with respect to the portion of the Demised Premises subleased pursuant to that certain Sublease (the " Fluidigm Sublease") dated as of April 1, 2004 between Tenant and Fluidigm Corporation (the "Fluidigm Space"), provided that if within thirty (30) days of the date of the casualty, Landlord is furnished with (a) a full set of the approved working construction plans, in electronic form, used by Tenant in Tenant's construction of the TI (the "TI Plans"), together with a full release or assignment of rights to use said plans, and (b) the proceeds of insurance required to be carried by Tenant under Section 13.1(b) with respect to the TI, which proceeds, together with any other sums contributed by Tenant or any subtenant thereof, shall be sufficient to pay for the full cost of reconstructing the TI in the Fluidigm Space, Landlord shall also reconstruct the TI in the Fluidigm Space. Tenant agrees to maintain separate insurance required under Section 13.1(b) of the Lease for the TI in the Fluidigm Space, and, if Landlord has agreed to reconstruct said TI, to make the proceeds thereof available to Landlord. Tenant shall cooperate, at no expense to Tenant, in making available such TI

Plans as may be in the possession or control of Tenant. Landlord shall be under no obligation to furnish the TI Plans. If the foresaid conditions are met with respect to reconstructing the TI in the Fluidigm Space, for purposes of Sections 16(a) and 16(b), the term Demised Premises shall be deemed to be the "cold shell" as to the space leased by Tenant exclusive of the Fluidigm Space and both cold shell and TI with respect to the Fluidigm Space; if said conditions are not met, all restoration shall be to a cold shell. If the Demised Premises or any part thereof shall be rendered untenantable by reason of such damage, whether to the Demised Premises or to the Building, Yearly Fixed Rent shall proportionately abate for the period from the date of such damage to the date when the Demised Premises shall have been restored by Landlord.

(b) If, as a result of fire or other casualty, the whole or a substantial portion of the Building is rendered untenantable, within ninety (90) days from the date of such fire or casualty, Landlord shall notify Tenant and the lessee under the Fluidigm Sublease of its opinion of the time required to restore the Demised Premises, taking into account a reasonable time for adjusting loss and obtaining plans and permits for restoration. If in Landlord's opinion the Demised Premises cannot be made tenantable within one (1) year after such event, Landlord, within ninety (90) days from the date of such fire or casualty, may terminate this Lease by notice to Tenant, specifying a date not less than thirty (30) nor more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. In addition, if in Landlord's opinion said estimated time for restoration exceeds one (1) year and Landlord does not elect to terminate this Lease, Tenant shall, by notice given to Landlord within fifteen (15) days of Landlord's notice as aforesaid, elect (a) to terminate this Lease or (b) accept Landlord's estimated restoration period (the "Longer Restoration Period"). If Tenant accepts a Longer Restoration Period, Tenant's right to terminate as hereinafter provided shall be effective only if actual restoration takes more than 60 days beyond such estimated Longer Restoration Period, such termination to be elected within 30 days after the expiration of said estimated Longer Restoration Period plus 60 days. If neither Landlord or Tenant elects to terminate this Lease as provided above, then Landlord shall (to the extent that proceeds of insurance required to be carried by Landlord, net of any portion thereof retained by a Mortgagee, plus any sums contributed by Tenant or any subtenant of Tenant, are made available for such purpose) proceed with diligence to repair the damage to the Demised Premises and all facilities serving the same, if any, which shall have occurred, and the Yearly Fixed Rent shall meanwhile proportionately abate, all as provided in Paragraph (a) of this Section. However, if such damage is not repaired and the Demised Premises restored to substantially the same condition as they were prior to such damage within one (1) year (or, if elected, the Longer Restoration Period plus 60 days) from the date of such damage,

Tenant, within thirty (30) days from the expiration of the later of such one (1) year period (or, if elected, the Longer Restoration Period plus 60 days), or from the expiration of any extension thereof by reason of the delays set forth in the following sentence, may terminate this Lease by notice to Landlord, specifying a date not more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. The period within which the required repairs may be accomplished shall be extended by the number of days, lost as a result of unavoidable delays, which term shall be defined to mean all delays referred to in Article 24. ”

Except as modified hereby, the Lease is ratified and confirmed in full force and effect.

Executed under the date first set forth above.

MJ RESEARCH INCORPORATED

By: /s/ [ILLEGIBLE]
VP, Finance, Duly authorized

GENOME THERAPEUTICS CORPORATION

By: /s/ [ILLEGIBLE]
, Duly authorized

AGREEMENT OF LEASE

AGREEMENT OF LEASE made as of the ____ day of November, 1999, by and between Mountain Cove Tech Center, L.L.C., a Delaware limited liability company (hereinafter referred to as "Landlord") and MJ Research Company, Inc. (hereinafter referred to as "Tenant").

W I T N E S S E T H:

Landlord hereby leases to Tenant and Tenant hereby hires from Landlord the entire land and building (the "Building") in South San Francisco a portion, as shown on the plan attached hereto as Exhibit A and made a part hereof (hereinafter referred to as the "Premises" or the "Demised Premises").

1. REFERENCE DATA

1.1 Definitions. Each reference in this Lease to any of the terms and titles contained in this Article shall be deemed and construed to incorporate the data stated following that term or title in this Article.

1)	Additional Rent:	Sums or other charges payable by Tenant to Landlord under this Lease, other than Yearly Fixed Rent, all of which shall be payable as additional rent under this Lease.
2)	Broker:	
3)	Business Day:	All days except Saturdays, Sundays, days defined as "legal holidays" for the entire state under the laws of the State of California, and such other days as Tenant presently or in the future recognizes as holidays for Tenant's general staff.
4)	Environmental Laws	As defined in Section 5.3 (a) (1).
5)	Event of Default:	The occurrence of an event listed in Section 19.1.
6)	Hazardous Materials	As defined in Section 5.3 (a) (1).
7)	Interest Rate	2 1/2% per month or the maximum interest rate Landlord is permitted to charge Tenant under applicable law, whichever is less.
8)	Land:	The parcel of land on which the Building is situated.
9)	Landlord's Address:	
10)	Landlord's Architect:	Any licensed architect from time to time designated by Landlord.

11)	Lease Year:	A twelve (12) month period beginning on the Term Commencement Date and each succeeding twelve (12) month period during the Term of this Lease, except that if the Term Commencement Date shall be other than the first day of a calendar month, the first Lease Year shall include the partial calendar month in which the Term Commencement Date occurs as well as the succeeding twelve (12) full calendar months.
12)	Mortgage:	A mortgage, deed of trust, trust indenture, or other security instrument of record creating an interest in or affecting title to the Land or Building or any part thereof, and any and all renewals, modifications, consolidations or extensions of any such instrument.
13)	Mortgagee:	The holder of any Mortgage.
14)	Operating Expense Base:	
15)	Property:	The Land and Building.
16)	Rent:	Yearly Fixed Rent and Additional Rent.
17)	Rentable Area of the Demised Premises:	141,677 square feet.
18)	Tax Base:	
19)	Tenant's Address:	Until the Term Commencement Date, _____, and thereafter, the Demised Premises.
20)	Tenant's Operating Expense Share:	100%
21)	Tenant's Tax Share:	100%
22)	Term Commencement Date:	As defined in Section 3.2.
23)	Term of this Lease:	As defined in Section 3.1.
24)	Termination Date:	As defined in Section 3.1.
25)	Use of Demised Premises:	
26)	Yearly Fixed Rent:	

1.2 Exhibits. The following exhibits are attached hereto and made a part hereof:

A - Plan of Demised Premises
A-l - Plans and Specifications for Landlord's Work
B - Cleaning Specifications
C - Rules and Regulations

2. DESCRIPTION OF DEMISED PREMISES

2.1 Demised Premises. The Demised Premises are that portion of the Building as described above (as the same may from time to time be constituted after changes therein, additions thereto and eliminations therefrom pursuant to rights of Landlord hereinafter reserved).

2.2 Appurtenant Rights. Tenant shall have, as appurtenant to the Demised Premises, rights to use in common, subject to reasonable rules from time to time made by Landlord of which Tenant is given notice, those common roadways, walkways, elevators, hallways and stairways necessary for access to that portion of the Building occupied by the Demised Premises.

2.3 Reservations. All the perimeter walls of the Demised Premises except the inner surfaces thereof, any balconies, terraces or roofs adjacent to the Demised Premises, and any space in or adjacent to the Demised Premises used for serving other portions of the Building exclusively or in common with the Demised Premises, including without limitation (where applicable) shafts, stacks, pipes, conduits, wires and appurtenant fixtures, fan rooms, ducts, electric or other utilities, sinks or other Building facilities, and the use thereof, as well as the right of access through the Demised Premises for the purpose of operation, maintenance, decoration and repair, are expressly reserved to Landlord.

3. TERM OF LEASE

3.1 Term. The Term of this Lease is ten (10) years (or until such Term shall sooner cease or expire) commencing on the Term Commencement Date and ending on the day immediately prior to the 10th anniversary thereof, except that if the Term Commencement Date shall be other than the first day of a calendar month, the Term of this Lease shall end on the last day of the calendar month in which said 10th anniversary of the Term Commencement Date shall fall (which date on which the Term of this Lease is scheduled to expire is hereinafter referred to as the "Termination Date").

3.2 Term Commencement Date. The Term Commencement Date shall be the earlier of (a) the date on which, pursuant to permission therefor duly given by Landlord, Tenant undertakes Use of the Demised Premises for the purposes set forth in Article 1, or (b) the date on which the Demised Premises are ready for Tenant's occupancy in accordance with the provisions of Section 4.2.

4. PREPARATION OF PREMISES; TENANT'S ACCESS

4.1 Plans and Specifications. Landlord shall lay out the Demised Premises for Tenant's occupancy in accordance with the plans and specifications (the "Plans") referenced in Exhibit A-l attached hereto and made a part hereof.

4.2 When Premises Deemed Ready. The Demised Premises shall be conclusively deemed ready for Tenant's occupancy after Landlord gives notice to Tenant that the installations to be done by Landlord in the Demised Premises (as set forth in Section 4.1) have been substantially completed by Landlord. Such work shall not be deemed incomplete if only minor or insubstantial details of construction or mechanical adjustments remain to be done, or if a delay is caused in whole or in part by Tenant. Landlord's Architect's certificate of substantial completion, as hereinabove stated, given in good faith, or of any other facts pertinent to such work, shall be deemed conclusive of the statements therein contained and binding upon Tenant.

4.3 Conclusiveness of Landlord's Performance. Tenant shall be conclusively deemed to have agreed that Landlord has performed all of its obligations under this Article 4 unless not later than the end of the second calendar month next beginning after the Landlord's notice of substantial completion under Section 4.2 Tenant shall give Landlord written notice specifying the respects in which Landlord has not performed such obligations.

4.4 Entry by Tenant; Interference With Construction. Tenant may enter the Demised Premises prior to the Term Commencement Date to undertake such work as is to be performed by Tenant pursuant and subject to this Lease in order to prepare the Demised Premises for Tenant's occupancy. Such entry shall be deemed to be pursuant to a license from Landlord to Tenant and shall be at the risk of Tenant. In no event shall Tenant interfere with any construction being performed by or on behalf of Landlord in or around the Building; without limiting the generality of the foregoing, Tenant shall comply with all instructions issued by Landlord's contractors relative to the moving of Tenant's equipment and other property into the Demised Premises and shall pay any fees or costs imposed in connection therewith.

5. USE OF PREMISES

5.1 Permitted Use. Tenant shall continuously during the Term of this Lease occupy and use the Demised Premises for the permitted Use set forth in Article 1 and for no other purpose. Service and utility areas (whether or not a part of the Demised Premises) shall be used only for the particular purpose for which they are designated.

5.2 Prohibited Uses. Tenant shall not use, or suffer or permit the use of, or suffer or permit anything to be done in or anything to be brought into or kept in, the Demised Premises or any part thereof (i) which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease, (ii) for any unlawful purposes or in any unlawful manner, or (iii) which, in the reasonable judgment of Landlord shall in any way (a) impair or tend to impair the appearance or reputation of the Building, (b) impair or interfere with or tend to impair or interfere with any of the Building services or the proper and economic heating, cleaning, air conditioning or other servicing of the Building or with the use of any of the other areas of the Building, or (c) occasion discomfort, inconvenience or annoyance to any of the other tenants or occupants of the Building, whether through the transmission of noise or odors or vibrations or dust or otherwise. Without limiting the generality of the foregoing, no food shall be prepared or served for consumption by the general public on or about the Demised Premises; no intoxicating liquors or alcoholic beverages shall be sold or otherwise served for consumption by the general public on or about the Demised Premises; no lottery tickets (even where the sale of such tickets

is not illegal) shall be sold and no gambling, betting or wagering shall otherwise be permitted on or about the Demised Premises; no loitering shall be permitted on or about the Demised Premises; and no loading or unloading of supplies or other material to or from the Demised Premises shall be permitted on the Land except at times (excluding Business Days from 7:00 to 9:30 a.m. and from 4:00 to 6:00 p.m.) and in locations to be designated by Landlord. The Demised Premises shall be maintained in a sanitary condition. Tenant shall suitably store all trash and rubbish in the Demised Premises or other locations designated by Landlord from time to time. Tenant specifically agrees that its indemnification obligations pursuant to Section 13.3 shall extend to any claim arising from the consumption of intoxicating liquors or alcoholic beverages on or about the Demised Premises.

5.3 Hazardous Materials.

(a) Definitions.

(1) Environmental Law means any governmental statute, code, ordinance, regulation, rule or order and any amendment thereto governing or regulating materials that are toxic, explosive, corrosive, flammable, radioactive, carcinogenic, dangerous or otherwise hazardous. Environmental Laws include, without limitation, the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 *et seq.*, the Resource Conservation and Recovery Act, 42 U.S.C. 6901 *et seq.*, the California Hazardous Substances Act at California Health and Safety Code Section 108100 *et seq.*, the provisions regarding hazardous waste control at California Health and Safety Code Sections 25100 through 25250.25 and the California Medical Waste Management Act at California Health and Safety Code 117600 *et seq.*

(2) Hazardous Materials shall mean any substance: (A) that now or in the future is regulated or governed by, requires investigation or remediation under, or is defined as a hazardous waste, hazardous substance, pollutant or contaminant under any Environmental Law or (B) that is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, dangerous or otherwise hazardous, including gasoline, diesel fuel, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), asbestos, radon and urea formaldehyde foam insulation.

(b) Tenant's Covenants. No Hazardous Materials shall be stored, placed, handled, used or released by Tenant or its employees, contractors, sublessees, guests or visitors at or about the Demised Premises or Property without Landlord's prior written consent, which consent may be granted, denied, or conditioned upon compliance with Landlord's requirements, all in Landlord's absolute discretion. Notwithstanding the foregoing, normal quantities and use of those Hazardous Materials customarily used in the conduct of general office activities, such as copier fluids and cleaning supplies may be used and stored at the Demised Premises without Landlord's prior written consent, provided that Tenant's activities at or about the Demised Premises and Property shall comply at all times with the laws all Environmental Laws. Tenant shall keep Landlord fully and promptly informed of all storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials, other than Hazardous Materials permitted by the preceding sentence. At the expiration or termination of the Lease, Tenant shall promptly remove all Hazardous Materials from the Demised Premises. Tenant shall be responsible

and liable for the compliance with all of the provisions of this Section by all of Tenant's employees, contractors, sublessees, guests and visitors and all of Tenant's obligations under this Section (including its indemnification obligations under subsection (e) below) shall survive the expiration or termination of this Lease.

(c) Compliance. Tenant shall at Tenant's expense promptly take all actions required by any governmental agency or entity in connection with or as a result of the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials at or about the Demised Premises or Property, including inspection and testing, performing all cleanup, removal and remediation work required with respect to those Hazardous Materials, complying with all closure Laws and postclosure monitoring, and filing all required reports or plans. [Insert if applicable: 'All medical waste regulated by any Environmental Laws that is brought to the Demised Premises shall be stored in leak-proof, closeable containers, which containers shall be stored in a specified "dirty storage area" of the Demised Premises that shall be protected from leaks or any other type of contamination of the Demised Premises. Tenant shall never use any of the Landlord's trash receptacles for disposing of any medical waste.'] All of the foregoing work shall be performed in a good, safe and workmanlike manner by consultants qualified and licensed to undertake such work and in a manner that will not interfere with any other tenant's quiet enjoyment of the Property or Landlord's use, operation, leasing and sale of the Property. Tenant shall deliver to Landlord prior to delivery to any governmental agency, or promptly after receipt from any such agency, copies of all permits, manifests, closure or remedial action plans, notices, and all other documents relating to the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials at or about the Demised Premises or Property. If any lien attaches to the Demised Premises or the Property in connection with or as a result of the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials, and Tenant does not cause the same to be released, by payment, bonding or otherwise, within ten (10) days after the attachment thereof, Landlord shall have the right but not the obligation to cause the same to be released and any sums expended by Landlord in connection therewith shall be payable by Tenant on demand.

(d) Landlord's Rights. Landlord shall have the right, but not the obligation, to enter the Demised Premises at any reasonable time (i) to confirm Tenant's compliance with the provisions of this Section, and (ii) to perform Tenant's obligations under this Section if Tenant has failed to do so after reasonable notice to Tenant. Landlord shall also have the right to engage qualified Hazardous Materials consultants to inspect the Demised Premises and review the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials, including review of all permits, reports, plans, and other documents regarding same. Tenant shall pay to Landlord on demand the costs of Landlord's consultants' fees and all costs incurred by Landlord in performing Tenant's obligations under this section. Landlord shall use reasonable efforts to minimize any interference with Tenant's business caused by Landlord's entry into the Demised Premises, but Landlord shall not be responsible for any interference caused thereby.

(e) Tenant's Indemnification. Tenant agrees to indemnify, defend and hold harmless Landlord and its members, managers, directors, officers, agents and employees and their partners, members, managers, directors, officers, shareholders, employees and agents from all shall mean all costs and expenses of any kind, damages, including foreseeable and unforeseeable consequential damages, fines and penalties incurred in connection with any violation of and compliance with the Environmental Laws and all losses of any kind attributable to the diminution of value, loss of use or adverse effects on marketability or use of any portion of the Demised Premises or Property and all other claims, actions, losses, damages, liabilities, costs and expenses of every kind, including reasonable attorneys', experts' and consultants' fees and costs, incurred at any time and arising from or connection with the storage, placement, handling, use or release by Tenant or its employees, contractors, sublessees, guests or visitors of Hazardous Materials at or about the Property or Tenant's failure to comply in full with all Environmental Laws with respect to the Demised Premises and the Property.

5.4 Licenses and Permits. If any governmental license or permit shall be required for the proper and lawful conduct of Tenant's business, and if the failure to secure such license or permit would in any way affect Landlord, Tenant, at Tenant's expense, shall duly procure and thereafter maintain such license or permit and submit the same to inspection by Landlord. Tenant, at Tenant's expense, shall at all times comply with the terms and conditions of each such license or permit.

6. RENT

6.1 Yearly Fixed Rent. Tenant shall pay to Landlord, without any set-off or deduction, at Landlord's office, or to such other person or at such other place as Landlord may designate by notice to Tenant, the Yearly Fixed Rent set forth in Article 1. The Yearly Fixed Rent shall be paid in equal monthly installments in advance on or before the first Business Day of each calendar month during the Term of this Lease and shall be apportioned for any fraction of a month in which the Term Commencement Date or the last day of the Term of this Lease may fall.

6.2 Taxes. Tenant shall pay to Landlord as Additional Rent Tenant's Tax Share of all real estate taxes imposed against the Property during any calendar year (including without limitation all so-called linkage and impact fees, betterment assessments, fire and police service availability fees and similar charges for customary governmental services and charges in lieu of such taxes, assessment district assessments, governmental charges, fees or assessments for traffic or transit mitigation, personal property taxes assessed on personal property of Landlord used in the operation of the Property, increases in the foregoing due to changes in values, tax rate, alterations made by Tenant or other factors and the reasonable cost of contesting by appropriate proceedings the amount or validity of any of the foregoing) in excess of the Tax Base, prorated with respect to any portion of a calendar year in which the Term of this Lease begins or ends. As soon as Tenant's share of real estate taxes with respect to any calendar year can be determined, the same will be certified by Landlord to Tenant (which certification shall be accompanied by copies of the relevant tax bills) and will become payable to Landlord within ten (10) days thereafter. If Landlord shall receive any refund of real estate taxes of which Tenant has paid a portion pursuant to this Section, then, out of any balance remaining after deducting Landlord's

expenses incurred in obtaining such refund, Landlord shall pay to Tenant the same proportionate share of said balance, prorated as set forth above. Tenant shall, if as and when demanded by Landlord and with each monthly installment of Fixed Rent, make tax fund payments to Landlord. "Tax fund payments" refer to such payments as Landlord shall determine to be sufficient to provide in the aggregate a fund adequate to pay, when they become due and payable, all payments required from Tenant under this Section. In the event that tax fund payments are so demanded, and if the aggregate of said tax fund payments is not adequate to pay Tenant's share of such taxes, Tenant shall pay to Landlord the amount by which such aggregate is less than the amount of said share, such payment to be due and payable at the time set forth above. Any surplus tax fund payments shall be accounted for to Tenant after payment by Landlord of the taxes on account of which they were made, and may be credited by Landlord against future tax fund payments or refunded to Tenant at Landlord's option.

In addition, Tenant shall timely file business property statements with respect to Tenant's personal property and trade fixtures and pay when due all taxes imposed on such personal property and trade fixtures.

6.3 Operating Expenses. Tenant shall pay to Landlord as Additional Rent Tenant's Operating Expense Share of all costs and expenses incurred by Landlord during any calendar year in the operation and maintenance of the Building and the Land in accordance with generally accepted operational and maintenance procedures in excess of the Operating Expense Base, including, without limiting the generality of the foregoing, all such costs and expenses in connection with (1) insurance, license fees, janitorial service, landscaping and snow removal, (2) wages, salaries, management fees, employee benefits, payroll taxes, on-site office expenses, administrative and auditing expenses, and equipment and materials for the operation, management and maintenance of the Property, (3) any capital expenditure (amortized, with interest, on such reasonable basis as Landlord shall determine) made by Landlord for the purpose of reducing other operating expenses or complying with any governmental requirement, (4) the furnishing of heat, air conditioning, electricity and other utilities, and any other service to the extent to which Landlord is not reimbursed by tenants, and (5) the furnishing of the repairs and services referred to in Article 7 (the foregoing being hereinafter referred to as "operating expenses"). If, during any portion of a calendar year for which operating expenses are being computed pursuant to this Section, less than the entire rentable area of the Building is occupied or Landlord is not supplying all occupants with the same services being supplied hereunder, such costs and expenses shall be reasonably extrapolated in order to take into account the costs and expenses which would have been incurred had the entire rentable area of the Building been occupied and had such services been supplied to all occupants. As soon as Tenant's share of operating expenses with respect to any calendar year can be determined, the same will be certified by Landlord to Tenant and will become payable to Landlord within ten (10) days following such certification, subject to proration with respect to any portion of a calendar year in which the Term of this Lease begins or ends. Tenant shall, if as and when demanded by Landlord and with each monthly installment of Yearly Fixed Rent, make operating fund payments to Landlord. "Operating fund payments" refer to such payments as Landlord shall determine to be sufficient to provide in the aggregate a fund adequate to pay, when they become due and payable, all payments required from Tenant under this Section. In the event that operating fund payments are so demanded, and if the aggregate of said operating fund payments

is not adequate to pay Tenant's share of operating expenses, Tenant shall pay to Landlord the amount by which such aggregate is less than the amount of said share, such payment to be due and payable at the time set forth above. Any surplus operating fund payments shall be accounted for to Tenant after such surplus has been determined, and may be credited by Landlord against future operating fund payments or refunded to Tenant at Landlord's option.

6.4 Obligations Survive Termination. All obligations and liabilities of Tenant relating to any period prior to the termination of the Term of this Lease, including without limitation the obligation to pay any Additional Rent due pursuant to the provisions of this Article, shall survive such termination.

6.5 Payment to Mortgagee. Landlord reserves the right to provide in any Mortgage given by it of the Property that some or all rents, issues, and profits and all other amounts of every kind payable to the Landlord under this Lease shall be paid directly to the Mortgagee for Landlord's account and Tenant covenants and agrees that it will, after receipt by it of notice from Landlord or Mortgage designating such Mortgagee to whom payments are to be made by Tenant, pay such amounts thereafter becoming due directly to such Mortgagee until excused therefrom by notice from such Mortgagee.

7. UTILITIES AND LANDLORD'S SERVICES

7.1 Electricity. Tenant shall purchase directly from the public utility serving the Building all electrical energy that Tenant requires for operation of the lighting fixtures, appliances and equipment servicing the Demised Premises. The costs of initially installing any required meter and related installation equipment shall be paid by Landlord. Landlord shall not be liable in any way to Tenant for any failure or defect in the supply or character of electrical energy furnished to the Demised Premises by reason of any requirement, act or omission of the public utility serving the Building. Tenant's use of electrical energy in the Demised Premises shall not at any time exceed the capacity of any of the electrical conductors and equipment in or otherwise serving the Demised Premises. In order to insure that such capacity is not exceeded and to avert possible adverse effect upon the Building electrical services Tenant shall give notice to Landlord and obtain Landlord's prior written consent whenever Tenant shall connect to the Building electrical distribution system any fixtures, appliances or equipment other than lamps, typewriters, personal computers and similar small machines. Any additional feeders or risers to supply Tenant's electrical requirements in addition to those originally installed and all other equipment proper and necessary in connection with such feeders or risers, shall be installed by Landlord upon Tenant's request, at the sole cost and expense of Tenant, provided that such additional feeders and risers are permissible under applicable laws and insurance regulations and the installation of such feeders or risers will not cause permanent damage or injury to the Building or cause or create a dangerous condition or unreasonably interfere with other tenants of the Building. Tenant agrees that it will not make any alteration or addition to the electrical equipment in the Demised Premises without the prior written consent of Landlord in each instance first obtained, which consent will not be unreasonably withheld. Landlord, at Tenant's expense, shall purchase, install and replace all light fixtures, bulbs, tubes, lamps, lenses, globes, ballasts and switches used in the Demised Premises.

7.2 Water Charges. Landlord shall furnish hot and cold water for ordinary cleaning, toilet, lavatory and drinking purposes. If Tenant requires, uses or consumes water for any purpose other than for such purposes, Landlord may (i) assess a reasonable charge for the additional water so used or consumed by Tenant or (ii) install a water meter and thereby measure Tenant's water consumption for all purposes. In the latter event, Landlord shall pay the cost of the meter and the cost of installing any equipment required in connection therewith, and Tenant shall keep said meter and installation equipment in good working order and repair, and shall pay for water consumed, as shown on said meter, together with the sewer charge based on said meter charges, as and when bills are rendered. On default in making such payment Landlord may pay such charges and collect the same from Tenant.

7.3 Heat and Air Conditioning. Landlord shall furnish to and distribute in the Demised Premises heat and air conditioning as normal seasonal changes may require on Business Days from 8:00 a.m. to 6:00 p.m. when reasonably required for the comfortable occupancy of the Demised Premises by Tenant. Tenant agrees to lower and close the blinds or drapes when necessary because of the sun's position whenever the air conditioning system is in operation, and to cooperate fully with Landlord with regard to, and to abide by all the regulations and requirements which Landlord may prescribe for the proper functioning and protection of, the heating and air conditioning system. Without limiting the generality of the foregoing, all windows in the Demised Premises must remain closed at all times notwithstanding the fact that such windows may be operable. The air conditioning system servicing the Building is designed to provide cooling based upon an occupancy of not more than one person per one hundred (100) square feet of floor area, and upon a combined lighting and standard electrical load not to exceed 3.0 watts per square foot. In the event Tenant exceeds such condition or introduces into the Demised Premises equipment which overloads such system, or in any other way causes such system not to adequately perform its proper functions, supplementary systems may at Landlord's option be provided by Landlord at Tenant's expense.

7.4 Additional Heat and Air Conditioning Services. Landlord shall, upon reasonable advance written notice from Tenant of its requirements in that regard, received before 3:00 p.m. on the preceding Business Day, furnish additional heat or air conditioning services to the Demised Premises on days and at times other than as provided in this Article. Tenant will pay to Landlord a reasonable charge for any such additional heat or air conditioning service required by Tenant.

7.5 Elevator Service. Landlord shall provide passenger elevator service to the Demised Premises on Business Days from 8:00 a.m. to 6:00 p.m. and on a reduced basis at all other times. Freight elevator service shall be available in common with other tenants on Business Days from 9:30 a.m. to 4:00 p.m. and at other times at reasonable charge.

7.6 Cleaning. Landlord shall furnish cleaning services to the Building substantially in accordance with the specifications attached hereto as Exhibit B and made a part hereof.

7.7 Repairs and Other Services. Except as otherwise provided in Articles 16 and 18, and subject to Tenant's obligations in Article 12 and elsewhere in this Lease, Landlord shall (a) keep and maintain the roof, exterior walls, structural floor slabs and columns of the Building in

as good condition and repair as they are in on the Term Commencement Date, reasonable use and wear excepted, (b) keep and maintain in workable condition the Building's sanitary, electrical, heating, air conditioning and other systems, (c) keep all walkways on the Property clean and remove all snow and ice therefrom, (d) provide grounds maintenance to all landscaped areas and (e) arrange for the extermination of rodents and vermin in the Building.

7.8 Interruption or Curtailment of Services. Landlord reserves the right to interrupt, curtail, stop or suspend the furnishing of services and the operation of any Building system, when necessary by reason of accident or emergency, or of repairs, alterations, replacements or improvements in the reasonable judgment of Landlord desirable or necessary to be made, or of difficulty or inability in securing supplies or labor, or of strikes, or of any other cause beyond the reasonable control of Landlord, whether such other cause be similar or dissimilar to those hereinabove specifically mentioned, until said cause has been removed. Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems, except that Landlord shall exercise reasonable diligence to eliminate the cause of same.

8. CHANGES OR ALTERATIONS BY LANDLORD

Landlord reserves the right, exercisable by itself or its nominee, at any time and from time to time without the same constituting an actual or constructive eviction and without incurring any liability to Tenant therefor or otherwise affecting Tenant's obligations under this Lease, to make such changes, alterations, additions, improvements, repairs or replacements in or to the Building and the fixtures and equipment thereof, as well as in or to the street entrances, halls, passages, elevators, and stairways thereof, as it may deem necessary or desirable, and to change the arrangement and/or location of entrances or passageways, doors and doorways, and corridors, elevators, stairs, toilets, or other public parts of the Building, provided, however, that there be no unreasonable obstruction of the right of access to, or unreasonable interference with the use and enjoyment of, the Demised Premises by Tenant, except that Landlord shall not be obligated to employ labor at so-called "over-time" or other premium pay rates. Nothing contained in this Article shall be deemed to relieve Tenant of any duty, obligation or liability of Tenant with respect to making or causing to be made any repair, replacement or improvement or complying with any law, order or requirement of any governmental or other authority. Landlord reserves the right to from time to time change the address of the Building. Neither this Lease nor any use by Tenant shall give Tenant any right or easement or the use of any door or any passage or any concourse connecting with any other building or to any public convenience, and the use of such doors, passages and concourses and of such conveniences may be regulated or discontinued at any time and from time to time by Landlord without notice to Tenant and without affecting the obligations of Tenant hereunder or incurring any liability to Tenant therefor.

9. FIXTURES, EQUIPMENT AND IMPROVEMENTS — REMOVAL BY TENANT

All fixtures, equipment, improvements and appurtenances attached to or built into the Demised Premises prior to or during the Term, whether by Landlord at its expense or at the expense of Tenant (either or both) or by Tenant shall be and remain part of the Demised Premises and shall not be removed by Tenant at the end of the Term unless otherwise expressly

provided in this Lease. Where not built into the Demised Premises, and if furnished and installed by and at the sole expense of Tenant, all removable electric fixtures, air conditioning, carpets, drinking or tap water facilities, furniture, or trade fixtures or business equipment shall not be deemed to be included in such fixtures, equipment, improvements and appurtenances and may be, and upon the request of Landlord will be, removed by Tenant upon the condition that such removal shall not materially damage the Demised Premises or the Building and that the cost of repairing any damage to the Demised Premises or the Building arising from such removal shall be paid by Tenant, provided, however, that any of such items toward which Landlord shall have granted any allowance or credit to Tenant shall be deemed not to have been furnished and installed in the Demised Premises by or at the sole expense of Tenant.

10. ALTERATIONS AND IMPROVEMENTS BY TENANT

Tenant shall make no alterations, decorations, installations, removals, additions or improvements in or to the Demised Premises without Landlord's prior written consent and then only by contractors or mechanics approved by Landlord. No such installations or other work shall be undertaken or begun by Tenant until Landlord has approved written plans and specifications therefor; and no amendments or additions to such plans and specifications shall be made without prior written consent of Landlord. Any such alterations, decorations, installations, removals, additions and improvements shall be done at the sole expense of Tenant and at such times and in such manner as Landlord may from time to time designate. If Tenant shall make any alterations, decorations, installations, removals, additions or improvements, then Landlord may elect to require Tenant at the expiration of this Lease to restore the Demised Premises to substantially the same condition as existed at the Term Commencement Date.

11. TENANT'S CONTRACTORS — MECHANICS' AND OTHER LIENS — STANDARD OF TENANT'S PERFORMANCE — COMPLIANCE WITH LAWS

Whenever Tenant shall make any alterations, decorations, installations, removals, additions or improvements or do any other work in or to the Demised Premises, Tenant will strictly observe the following covenants and agreements:

(a) In no event shall any material or equipment be incorporated in or added to the Demised Premises in connection with any such alteration, decoration, installation, addition or improvement which is subject to any lien, charge, mortgage or other encumbrance of any kind whatsoever or is subject to any security interest or any form of title retention agreement. Any mechanic's lien filed against the Demised Premises or the Building for work claimed to have been done for, or materials claimed to have been furnished to Tenant shall be discharged by Tenant within ten (10) days thereafter, at the expense of Tenant, by filing the bond required by law or otherwise. If Tenant fails so to discharge any lien, Landlord may do so at Tenant's expense and Tenant shall reimburse Landlord for any expense or cost incurred by Landlord in so doing within fifteen (15) days after rendition of a bill therefor.

(b) All installations or work done by Tenant under this or any other Article of this Lease shall be at its own expense (unless expressly otherwise provided) and shall at all times comply with (i) laws, rules, orders and regulations of governmental authorities having

jurisdiction thereof and (ii) plans and specifications prepared by and at the expense of Tenant theretofore submitted to Landlord for its prior written approval.

(c) Tenant shall procure all necessary permits before undertaking any work in the Demised Premises; do all such work in a good and workmanlike manner, employing materials of good quality and complying with all governmental requirements, and defend, save harmless, exonerate and indemnify Landlord from all injury, loss or damage to any person or property occasioned by or growing out of such work.

(d) No work shall be commenced prior to the time Landlord has posted a "Notice of nonresponsibility" at the Demised Premises and recorded said notice in the county in which the Property is located pursuant to California Civil Code Section 3094.

12. REPAIRS BY TENANT

Tenant, at its expense, shall keep or cause to be kept all and singular the Demised Premises in such repair, order and condition as the same are in on the Term Commencement Date or may be put in during the Term hereof, reasonable use and wear thereof and damage by fire or by unavoidable casualty excepted. Without limiting the generality of the foregoing, Tenant shall keep all windows and other glass whole, and shall replace the same whenever broken with glass of the same quality. Tenant hereby waives the benefits of California Civil Code Section 1932(1).

13. INSURANCE, INDEMNIFICATION, EXONERATION AND EXCULPATION

13.1 Tenant's Insurance

(a) Liability Insurance. Tenant shall maintain in full force throughout the Term commercial general liability and property damage insurance providing coverage on an occurrence form basis with limits of not less than Two Million Dollars ($2,000,000.00) each occurrence for bodily injury and property damage combined, Two Million Dollars ($2,000,000.00) annual general aggregate, and Two Million Dollars ($2,000,000.00) products and completed operations annual aggregate. Tenant's liability insurance policy or policies shall: (i) include premises and operations liability coverage, automobile, products and completed operations liability coverage, broad form property damage coverage including completed operations, blanket contractual liability coverage with, to the maximum extent possible, coverage for the indemnification obligations of Tenant under this Lease, and personal and advertising injury coverage; (ii) provide that the insurance company has the duty to defend all insureds under the policy; (iii) provide that defense costs are paid in addition to and do not deplete any of the policy limits; (iv) cover liabilities arising out of or incurred in connection with Tenant's use or occupancy of the Premises or the Property; and (v) extend coverage to cover liability for the actions of Tenant's employees, contractors, sublessees, guests and visitors.

(b) Personal Property Insurance. Tenant shall at all times maintain in effect with respect to tenant improvements and Tenant's trade fixtures and personal property located at or within the Demised Premises, commercial property insurance providing coverage, at a minimum, for "broad

form" perils, to the extent of 100% of the full replacement cost of covered property. Tenant may carry such insurance under a blanket policy, provided that such policy provides equivalent coverage to a separate policy. During the Term, the proceeds from any such policies of insurance shall be used for the repair or replacement of such tenant improvements, trade fixtures and personal property so insured. Landlord shall be provided coverage under such insurance to the extent of its insurable interest and, if requested by Landlord, both Landlord and Tenant shall sign all documents reasonably necessary or proper in connection with the settlement of any claim or loss under such insurance. Landlord shall have no obligation to carry insurance on any such tenant improvements or on Tenant's trade fixtures or personal property.

(c) Workmen's Compensation Insurance. Tenant shall maintain worker's compensation insurance as required by law and employer's liability insurance in an amount not less than Five Hundred Thousand Dollars ($500,000).

(d) Business Interruption/Extra Expense Insurance. Tenant shall maintain loss of income, business interruption and extra expense insurance in such amounts as will reimburse Tenant for direct or indirect loss of earnings and incurred costs attributable to the perils commonly covered by Tenant's property insurance described above but in no event less than One Million Dollars ($1,000,000). Such insurance shall be carried with the same insurer that issues the insurance for the personal property.

(e) Other Coverage. Tenant, at its cost, shall maintain such other insurance as Landlord may reasonably require from time to time, but in no event may Landlord require any other insurance which is (i) not then being required of comparable tenants leasing comparable amounts of space in comparable buildings in the vicinity of the Building or (ii) not then available at commercially reasonable rates.

(f) Insurance Criteria. Each policy of insurance required under this Section shall: (i) be in a form, and written by an insurer, reasonably acceptable to Landlord, (ii) be maintained at Tenant's sole cost and expense, and (iii) require at least thirty (30) days' written notice to Landlord prior to any cancellation, nonrenewal or modification of insurance coverage. Insurance companies issuing such policies shall have rating classifications of "A" or better and financial size category ratings of "XIII" or better according to the latest edition of the A.M. Best Key Rating Guide. All insurance companies issuing such policies shall be licensed to do business in the State of California. Any deductible amount under such insurance shall not exceed $5,000. Tenant shall provide to Landlord, upon request, evidence that the insurance required to be carried by Tenant pursuant to this Section, including any endorsement affecting the additional insured status, is in full force and effect and that premiums therefore have been paid.

(g) Increase in Amount of Insurance. Tenant shall increase the amounts of insurance as required by any Mortgagee, and, not more frequently than once every three (3) years, as recommended by Landlord's insurance broker, if, in the opinion of either of them, the amount of insurance then required under this Lease is not adequate. Any limits set forth in this Lease on the amount or type of coverage required by Tenant's insurance shall not limit the liability of Tenant under this Lease.

(h) Insurance Provisions. Each policy of liability insurance required by this Section shall: (i) contain a cross liability endorsement or separation of insureds clause; (ii) provide that it is primary to and not contributing with, any policy of insurance carried by Landlord covering the same loss; (iii) provide that any failure to comply with the reporting provisions shall not affect coverage provided to Landlord, its members, property managers and mortgagees; and (iv) name Landlord, its members, property managers and such other parties in interest as Landlord may from time to time reasonably designate to Tenant in writing, as additional insureds. Such additional insureds shall be provided the same extent of coverage as provided to Tenant under such policies. All endorsements affecting such additional insured status shall be acceptable to Landlord and shall be at least as broad as additional insured endorsement form number CG 20 11 11 85 promulgated by the Insurance Services Office.

(i) Evidence of Coverage. Prior to occupancy of the Premises by Tenant, and not less than thirty (30) days prior to the expiration of any policy thereafter, Tenant shall furnish to Landlord a certificate of insurance reflecting that the insurance required by this Section is in force accompanied by an endorsement showing the required additional insureds satisfactory to Landlord in substance and form. Notwithstanding the requirements of this paragraph, Tenant shall, at Landlord's request, provide to Landlord a certified copy of each insurance policy required to be in force at any time pursuant to the requirements of this Lease or its Exhibits. Tenant's failure to furnish Landlord with such certificates of insurance shall be deemed a material default under this Lease.

13.2 General. Tenant will save Landlord harmless, and will exonerate and indemnify Landlord, from and against any and all claims, liabilities, penalties, damages or expenses (including without limitation reasonable attorneys' fees) asserted against or incurred by Landlord:

(a) on account of or based upon any injury to person, or loss of or damage to property sustained or occurring on the Demised Premises on account of or based upon the act, omission, fault, negligence or misconduct of any person whomsoever (other than Landlord or its agents, contractors or employees);

(b) on account of or based upon any injury to person or loss of or damage to property, sustained or occurring elsewhere (other than on the Demised Premises) in or about the Building (and, in particular, without limiting the generality of the foregoing on or about the elevators, stairways, public corridors, sidewalks, roof, or other appurtenances and facilities used in connection with the Building or Demised Premises) arising out of the use or occupancy of the Building or Demised Premises by Tenant, or any person claiming by, through or under Tenant;

(c) on account of or based upon (including moneys due on account of) any work or thing whatsoever done (other than by Landlord or its contractors, or agents or employees of either) in the Demised Premises during the Term of this Lease and during the period of time, if any, prior to the Term Commencement Date that Tenant may have been given access to the Demised Premises; and

(d) on account of or resulting from the failure of Tenant to perform and discharge any of its covenants and obligations under this Lease;

and, in case any action or proceeding be brought against Landlord by reason of any of the foregoing, Tenant upon notice from Landlord shall at Tenant's expense resist or defend such action or proceeding and employ counsel therefor reasonably satisfactory to Landlord, it being agreed that such counsel as may act for insurance underwriters of Tenant engaged in such defense shall be deemed satisfactory.

13.3 Property of Tenant. In addition to and not in limitation of the foregoing, and subject only to provisions of applicable law, Tenant covenants and agrees that all merchandise, furniture, fixtures and property of every kind, nature and description which may be in or upon the Demised Premises or elsewhere on the Property during the Term of this Lease, shall be at the sole risk and hazard of Tenant, and that if the whole or any part thereof shall be damaged, destroyed, stolen or removed from any cause or reason whatsoever other than the negligence or misconduct of Landlord, no part of said damage or loss shall be charged to, or borne by Landlord.

13.4 Bursting of Pipes, etc. Landlord shall not be liable for any injury or damage to persons or property resulting from fire, explosion, falling plaster or tiles, steam, gas, electricity, electrical disturbance, water, rain or snow or leaks from any part of the Building or from the pipes, appliances or plumbing works or from the roof, street or sub-surface or from any other place or caused by any other cause of whatever nature, unless caused by or due to the negligence of Landlord, its agents, servants or employees; nor shall Landlord or its agents be liable for any such damage caused by other tenants or persons in the Building or caused by operations in construction of any private, public or quasi-public work; nor shall Landlord be liable for any latent defect in the Demised Premises or elsewhere in the Building.

14. ASSIGNMENT, MORTGAGING, SUBLETTING, ETC.

Tenant covenants and agrees that neither this Lease nor the term and estate hereby granted nor any interest herein or therein, will be assigned, mortgaged, pledged, encumbered or otherwise transferred (whether voluntarily or by operation of law), and that neither the Demised Premises, nor any part thereof, will be encumbered in any manner by reason of any act or omission on the part of Tenant, without the prior written consent of Landlord in every case.

In connection with any request by Tenant for such consent, Tenant shall submit to Landlord, in writing, a statement containing the name of the proposed assignee, such information as to its financial responsibility and standing as Landlord may require, and all of the terms and provisions upon which the proposed transaction is to take place. Tenant shall reimburse Landlord promptly, as Additional Rent, for reasonable legal and other expense incurred by Landlord in connection with any request by Tenant for any consent required under the provisions of this Article.

The listing of any name other than that of Tenant, whether on the doors of the Demised Premises or on the Building directory, or otherwise, shall not operate to vest any right or interest

in this Lease or in the Demised Premises or be deemed to be the written consent of Landlord mentioned in this Article, it being expressly understood that any such listing is a privilege extended by Landlord revocable at will by written notice to Tenant.

If this Lease be assigned, Landlord may at any time and from time to time, collect rent and other charges from the assignee, and apply the net amount collected to the Rent and other charges herein reserved, but no such collection shall be deemed a waiver of this covenant, or the acceptance of the assignee as a tenant, or a release of Tenant from the further performance by Tenant of covenants on the part of Tenant herein contained. The consent by Landlord to an assignment shall not in any way be construed to relieve Tenant from obtaining the express consent in writing of Landlord to any further assignment. Tenant shall remain fully and primarily liable for all its obligations hereunder notwithstanding any assignment.

Notwithstanding anything herein to the contrary, Tenant may assign this lease to an Affiliate, meaning, for purposes hereof, a corporation or other entity controlling, controlled by or under common control with Tenant. In addition, Tenant may, without Landlord's consent, sublease any or all of the Demised Premises, and any so-called "subleasing profits" or subrents in excess of the rent reserved herein shall belong to Tenant. Landlord shall, upon request of Tenant, not unreasonably withhold its consent to a nondisturbance agreement for the benefit of any such subtenants.

15. MISCELLANEOUS COVENANTS

15.1 Rules and Regulations. Tenant and Tenant's servants, employees, agents, visitors and licensees will faithfully observe such Rules and Regulations as are attached hereto as Exhibit C and made a part hereof or as Landlord hereafter at any time or from time to time may make and may communicate in writing to Tenant and which in the reasonable judgment of Landlord shall be necessary for the reputation, safety, care or appearance of the Property, or the preservation of good order therein, or the operation or maintenance of the Property, or the equipment thereof, or the comfort of tenants or others in the Building, provided, however, that in the case of any conflict between the provisions of this Lease and any such Rules and Regulations, the provisions of this Lease shall control, and provided further that nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce such Rules and Regulations or the terms, covenants or conditions in any other lease as against any other tenant and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its servants, employees, agents, visitors, invitees or licensees. Notwithstanding Paragraph 22 of Exhibit C, Landlord shall be required to arrange for extermination of vermin within the Building pursuant to Section 7.7.

15.2 Access to Premises. Tenant shall: (i) permit Landlord to erect, use and maintain pipes, ducts and conduits in and through the Demised Premises, provided the same do not materially reduce the floor area or materially adversely affect the appearance thereof; (ii) permit the Landlord and any Mortgagee to have free and unrestricted access to and to enter upon the Demised Premises at all reasonable hours for the purposes of inspection or of making repairs, replacements or improvements in or to the Demised Premises or the Building or equipment (including, without limitation, sanitary, electrical, heating, air conditioning or other systems) or

of complying with all laws, orders and requirements of governmental or other authority or of exercising any right reserved to Landlord by this Lease (including the right during the progress of any such repairs, replacements or improvements or while performing work and furnishing materials in connection with compliance with any such laws, orders or requirements to take upon or through, or to keep and store within, the Demised Premises all necessary materials, tools and equipment); and (iii) permit Landlord, at reasonable times, to show the Demised Premises during ordinary business hours to any Mortgagee, prospective purchaser of any interest of Landlord in the Property, prospective Mortgagee, or prospective assignee of any Mortgage, and during the period of twelve months next preceding the Termination Date to any person contemplating the leasing of the Demised Premises or any part thereof. If during the last three (3) months of the Term, Tenant shall have removed all of Tenant's property therefrom, Landlord may immediately enter and alter, renovate and redecorate the Demised Premises, without elimination or abatement of rent, or incurring liability to Tenant for any compensation, and such acts shall have no effect upon this Lease. If Tenant shall not be personally present to open and permit any entry into the Demised Premises at any time when for any reason an entry therein shall be necessary or permissible, Landlord or Landlord's agents must nevertheless be able to gain such entry by contacting a responsible representative of Tenant, whose name, address and telephone number shall be furnished by Tenant. Provided that Landlord shall not be obligated to employ labor at so-called "over-time" or other premium pay rates, Landlord shall exercise its rights of access to the Demised Premises permitted under any of the terms and provisions of this Lease in such manner as to minimize to the extent practicable interference with Tenant's use and occupation of the Demised Premises. If an excavation shall be made upon land adjacent to the Demised Premises or shall be authorized to be made, Tenant shall afford, to the person causing or authorized to cause such excavation (subject to the same provisions applicable hereunder in the case of work to be performed by Landlord), license to enter upon the Demised Premises for the purpose of doing such work as said person shall deem necessary to preserve the Building from injury or damage and to support the same by proper foundations without any claim for damage or indemnity against Landlord, or diminution or abatement of Rent.

15.3 Accidents to Sanitary and other Systems. Tenant shall give to Landlord prompt notice of any fire or accident in the Demised Premises or in the Building and of any damage to, or defective condition in, any part or appurtenance of the Building's sanitary, electrical, heating and air conditioning or other systems located in, or passing through, the Demised Premises.

15.4 Signs, Blinds and Drapes. Tenant shall not place any signs on the exterior of the Building or on or in any window, public corridor or door visible from the exterior of the Demised Premises. No drapes or blinds may be put on or in any window nor may any Building drapes or blinds be removed by Tenant.

15.5 Estoppel Certificate. Tenant shall at any time and from time to time upon not less than ten (10) days' prior notice by Landlord or by a Mortgagee to Tenant, execute, acknowledge and deliver to the party making such request a statement in writing certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), and the dates to which Rent has been paid in advance, if any, and stating whether or not to the best knowledge of the signer of such certificate Landlord is in default in performance of any covenant, agreement, term,

provisions or condition contained in this Lease and, if so, specifying each such default of which the signer may have knowledge, it being intended that any such statement delivered pursuant hereto may be relied upon by any prospective purchaser of any interest in the Property, any Mortgagee or prospective Mortgagee, any lessee or prospective lessee thereof, any prospective assignee of any Mortgage, or any other party designated by Landlord. The form of any such estoppel certificate requested by a Mortgagee shall be satisfactory to such Mortgagee.

15.6 Requirements of Law — Fines and Penalties. Tenant at its sole expense shall comply with all laws, rules, orders and regulations of Federal, State, County and Municipal Authorities and with any direction of any public officer or officers, pursuant to law, which shall impose any duty upon Landlord or Tenant with respect to and arising out of Tenant's use or occupancy of the Demised Premises. If Tenant receives notice of any violation of law, ordinance, order or regulation applicable to the Demised Premises, it shall give prompt notice thereof to Landlord. Without limiting the generality of the foregoing, Tenant shall be responsible for compliance with requirements imposed by the Americans with Disabilities Act relative to the Demised Premises, including without limitation all such requirements applicable to removing barriers, furnishing auxiliary aids and ensuring that, whenever alterations are made, the affected portions of the Demised Premises are readily accessible to and usable by individuals with disabilities.

15.7 Tenant's Acts — Effect on Insurance. Tenant shall not do or permit to be done any act or thing upon the Demised Premises or elsewhere in the Building which will invalidate or be in conflict with any insurance policies covering the Building and the fixtures and property therein and shall not do, or permit to be done, any act or thing upon the Demised Premises which shall subject Landlord to any liability or responsibility for injury to any person or persons or to property by reason of any business or operation being conducted on the Demised Premises or for any other reason. Tenant at its own expense shall comply with all applicable provisions of the California Health and Safety Code and all regulations promulgated thereunder and with all rules, orders, regulations or requirements of the underwriter(s) of the fire and other hazard insurance for the Property and the Demised Premises and shall not (i) do, or permit anything to be done, in or upon the Demised Premises, or bring or keep anything therein, except as now or hereafter permitted by the City of South San Francisco Fire Department, or other authority having jurisdiction, and then only in such quantity and manner of storage as will not increase the rate for any insurance applicable to the Building, or (ii) use the Demised Premises in a manner which shall increase such insurance rates on the Building or on property located therein, over that applicable when Tenant first took occupancy of the Demised Premises hereunder. If by reason of failure of Tenant to comply with the provisions hereof the insurance rate applicable to any policy of insurance shall at any time thereafter be higher than it otherwise would be, then Tenant shall reimburse Landlord for that part of any insurance premiums thereafter paid by Landlord, which shall have been charged because of such failure by Tenant.

15.8 Miscellaneous. Tenant shall not suffer or permit the Demised Premises or any fixtures, equipment or utilities therein or serving the same, to be overloaded, damaged or defaced.

16. DAMAGE BY FIRE, ETC.

In the event of loss of, or damage to, the Demised Premises or the Building by fire or other casualty, the rights and obligations of the parties hereto shall be as follows:

(a) If the Demised Premises, or any part thereof, shall be damaged by fire or other casualty, Tenant shall give prompt notice thereof to Landlord, and Landlord, upon receiving such notice, shall proceed promptly and with due diligence, subject to unavoidable delays, to repair, or cause to be repaired, such damage. If the Demised Premises or any part thereof shall be rendered untenantable by reason of such damage, whether to the Demised Premises or to the Building, Yearly Fixed Rent shall proportionately abate for the period from the date of such damage to the date when such damage shall have been repaired.

(b) If, as a result of fire or other casualty, the whole or a substantial portion of the Building is rendered untenantable, Landlord, within ninety (90) days from the date of such fire or casualty, may terminate this Lease by notice to Tenant, specifying a date not less than thirty (30) nor more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. If Landlord does not so elect to terminate this Lease, then Landlord shall (to the extent that insurance proceeds, net of any portion thereof retained by a Mortgagee, are made available for such purpose) proceed with diligence to repair the damage to the Demised Premises and all facilities serving the same, if any, which shall have occurred, and the Yearly Fixed Rent shall meanwhile proportionately abate, all as provided in Paragraph (a) of this Section. However, if such damage is not repaired and the Demised Premises restored to substantially the same condition as they were prior to such damage within nine (9) months from the date of such damage, Tenant within thirty (30) days from the expiration of such nine (9) month period or from the expiration of any extension thereof by reason of unavoidable delays as hereinafter provided, may terminate this Lease by notice to Landlord, specifying a date not more than sixty (60) days after the giving of such notice on which the Term of this Lease shall terminate. The period within which the required repairs may be accomplished shall be extended by the number of days, not to exceed one hundred eighty (180) days, lost as a result of unavoidable delays, which term shall be defined to include all delays referred to in Article 24.

(c) If the Demised Premises shall be rendered untenantable by fire or other casualty during the last two (2) years of the Term of this Lease, Landlord may terminate this Lease effective as of the date of such fire or other casualty upon notice to Tenant given within ninety (90) days after such fire or other casualty.

(d) Landlord shall not be required to repair or replace any of Tenant’s business machinery, equipment, cabinet work, furniture, personal property or other installations (all of which shall, however, be restored by Tenant within thirty (30) days after Landlord shall have completed any repair or restoration required under the terms of this Article), and no damages, compensation or claim shall be payable by Landlord for inconvenience, loss of business or annoyance arising from any repair or restoration of any portion of the Demised Premises or of the Building.

(e) The provisions of this Article shall be considered an express agreement governing any instance of damage or destruction of the Building or the Demised Premises by fire or other casualty, and any law now or hereafter in force providing for such a contingency in the absence of express agreement shall have no application.

(f) In the event of any termination of this Lease pursuant to this Article, the Term of this Lease shall expire as of the effective termination date as fully and completely as if such date were the date originally fixed herein for the end of the Term of this Lease. Tenant shall have access to the Demised Premises for a period of fifteen (15) days after the date of termination in order to remove Tenant's personal property.

(g) Landlord's Architect's certificate, given in good faith, shall be deemed conclusive of the statements therein contained and binding upon Tenant with respect to the performance and completion of any repair or restoration work undertaken by Landlord pursuant to this Article or Article 18.

17. WAIVER OF SUBROGATION

In any case in which Tenant shall be obligated under any provision of this Lease to pay to Landlord any loss, cost, damage, liability, or expense suffered or incurred by Landlord, Landlord shall allow to Tenant as an offset against the amount thereof the net proceeds of any insurance collected by Landlord for or on account of such loss, cost, damage, liability or expense, provided that the allowance of such offset does not invalidate or prejudice the policy or policies under which such proceeds were payable.

In any case in which Landlord shall be obligated under any provision of this Lease to pay to Tenant any loss, cost, damage, liability or expense suffered or incurred by Tenant, Tenant shall allow to Landlord as an offset against the amount thereof (i) the net proceeds of any insurance collected by Tenant for or on account of such loss, cost, damage, liability, or expense, provided that the allowance of such offset does not invalidate the policy or policies under which such proceeds were payable and (ii) if such loss, cost, damage, liability or expense shall have been caused by a peril against which Tenant has agreed to procure insurance coverage under the terms of this Lease, the amount of such insurance coverage, if not actually procured by Tenant.

The parties hereto shall each endeavor to procure an appropriate clause in, or endorsement on, any fire or extended coverage insurance policy covering the Demised Premises and the Building and personal property, fixtures and equipment located thereon or therein, pursuant to which the insurance companies waive subrogation or consent to a waiver of right of recovery, and having obtained such clauses and/or endorsements of waiver of subrogation or consent to a waiver of right of recovery each party hereby agrees that it will not make any claim against or seek to recover from the other for any loss or damage to its property or the property of others resulting from fire or other perils covered by such fire and extended coverage insurance; provided, however, that the release, discharge, exoneration and covenant not to sue herein contained shall be limited by the terms and provisions of the waiver of subrogation clauses and/or endorsements or clauses and/or endorsements consenting to a waiver of right of recovery and shall be co-extensive therewith. If either party may obtain such clause or endorsement only

upon payment of an additional premium, such party shall promptly so advise the other party and shall be under no obligation to obtain such clause or endorsement unless such other party pays the premium.

18. CONDEMNATION — EMINENT DOMAIN

In the event that the whole or any part of the Building shall be taken or appropriated by eminent domain or shall be condemned for any public or quasi-public use, or (by virtue of any such taking, appropriation or condemnation) shall suffer any damage (direct, indirect or consequential) for which Landlord or Tenant shall be entitled to compensation then (and in any such event) this Lease and the Term hereof may be terminated at the election of Landlord by a notice in writing of its election so to terminate which shall be given by Landlord to Tenant within sixty (60) days following the date on which Landlord shall have received notice of such taking, appropriation or condemnation. In the event that more than fifty percent (50%) of the floor area of the Demised Premises or a substantial part of the means of access thereto within the perimeter of the Property so as to substantially interfere with the use of the Demised Premises shall be so taken, appropriated or condemned, then (and in any such event) this Lease and the Term hereof may be terminated at the election of Tenant by a notice in writing of its election so to terminate which shall be given by Tenant to Landlord within sixty (60) days following the date on which Tenant shall have received notice of such taking, appropriation or condemnation. Tenant hereby waives the benefits of California Code of Civil Procedure Section 12165.130.

Upon the giving of any such notice of termination (either by Landlord or Tenant) this Lease and the Term hereof shall terminate on or retroactively as of the date on which Tenant shall be required to vacate any part of the Demised Premises or shall be deprived of a substantial part of the means of access thereto, provided, however, that Landlord may in Landlord's notice elect to terminate this Lease and the Term hereof retroactively as of the date on which such taking, appropriation or condemnation became legally effective. In the event of any such termination, this Lease and the Term hereof shall expire as of the effective termination date as fully and completely as if such date were the date originally fixed herein for the end of the Term of this Lease. If neither party (having the right so to do) elects to terminate Landlord will, with reasonable diligence and at Landlord's expense, restore the remainder of the Demised Premises, or the remainder of the means of access thereto, as nearly as practicably may be to the same condition as obtained prior to such taking, appropriation or condemnation in which event (i) a just proportion of the Yearly Fixed Rent, according to the nature and extent of the taking, appropriation or condemnation and the resulting permanent injury to the Demised Premises and the means of access thereto, shall be permanently abated, and (ii) a just proportion of the remainder of the Yearly Fixed Rent, according to the nature and extent of the taking, appropriation or condemnation and the resultant injury sustained by the Demised Premises and the means of access thereto, shall be abated until what remains of the Demised Premises and the means of access thereto shall have been restored as fully as may be for permanent use and occupation by Tenant hereunder. Except for any award specifically reimbursing Tenant for moving or relocation expenses, there are expressly reserved to Landlord all rights to compensation and damages created, accrued or accruing by reason of any such taking, appropriation or condemnation, in implementation and in confirmation of which Tenant does hereby acknowledge that Landlord shall be entitled to receive and retain all such compensation

and damages, grants to Landlord all and whatever rights (if any) Tenant may have to such compensation and damages, and agrees to execute and deliver all and whatever further instruments of assignment as Landlord may from time to time request. In the event of any taking of the Demised Premises or any part thereof for temporary use, (i) this Lease shall be and remain unaffected thereby, and (ii) Tenant shall be entitled to receive for itself any award made for such use, provided, that if any taking is for a period extending beyond the Term of this Lease, such award shall be apportioned between Landlord and Tenant as of the Termination Date.

19. DEFAULT

19.1 Events of Default. Occurrence of any of the following events shall constitute an Event of Default under this Lease: (a) Tenant shall neglect or fail to perform or observe any of the Tenant's covenants herein, including (without limitation) the covenants with regard to the payment when due of Rent; or (b) Tenant shall be involved in financial difficulties as evidenced by an admission in writing by Tenant of Tenant's inability to pay its debts generally as they become due, or by the making or offering to make a composition of its debts with its creditors; or (c) Tenant shall make an assignment or trust mortgage, or other conveyance or transfer of like nature, of all or a substantial part of its property for the benefit of its creditors; or (d) the leasehold hereby created shall be taken on execution or by other process of law and shall not be revested in Tenant within sixty (60) days thereafter; or (e) a receiver, sequester, trustee or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or a substantial part of Tenant's property and such appointment shall not be vacated within sixty (60) days; or (f) any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganization, arrangements, compositions or other relief from creditors, and, in the case of any such proceeding instituted against it, if Tenant shall fail to have such proceeding dismissed within thirty (30) days or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding; or (g) any event shall occur or any contingency shall arise whereby this Lease, or the term and estate thereby created, would (by operation of law or otherwise) devolve upon or pass to any person, firm or corporation other than Tenant, except as expressly permitted under Article 14 hereof; or (h) Tenant shall vacate all or substantially all of the Demised Premises.

19.2 Remedies Available upon Default. Upon the occurrence of an Event of Default, Landlord shall have the following remedies, which shall not be exclusive but shall be cumulative and shall be in addition to any other remedies now or hereafter allowed by law:

(c) Landlord may terminate Tenant's right to possession of the Premises at any time by written notice to Tenant. Tenant expressly acknowledges that in the absence of such written notice from Landlord, no other act of Landlord, including re-entry into the Premises, efforts to relet the Premises, reletting of the Premises for Tenant's account, storage of Tenant's personal property and trade fixtures, acceptance of keys to the Premises from Tenant or exercise of any other rights and remedies under this Section, shall constitute an acceptance of Tenant's surrender of the Premises or constitute a termination of this Lease or of Tenant's right to possession of the Premises. Upon such termination in writing of Tenant's right to possession of the Premises, as herein provided, this Lease shall terminate and Landlord shall be entitled to recover damages from Tenant as provided in California Civil Code Section 1951.2 and any other applicable existing or future Law providing for

recovery of damages for such breach, including the worth at the time of award of the amount by which the rent which would be payable by Tenant hereunder for the remainder of the Term after the date of the award of damages, including Additional Rent as reasonably estimated by Landlord, exceeds the amount of such rental loss as Tenant proves could have been reasonably avoided, discounted at the discount rate published by the Federal Reserve Bank of San Francisco for member banks at the time of the award plus one percent (1%).

(d) Landlord shall have the remedy described in California Civil Code Section 1951.4 (Landlord may continue this Lease in effect after Tenant's breach and abandonment and recover rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations).

(e) Landlord may immediately, or at any time thereafter, without notice, cure said Event of Default for the account of Tenant. If Landlord at any time is compelled to pay or elects to pay any sum of money, or do any act which will require the payment of any sum of money, by reason of the failure of Tenant to comply with any provision hereof, or if Landlord is compelled to or does incur any expense, including without limitation reasonable attorneys' fees, in instituting, prosecuting and/or defending any action or proceeding arising by reason of any default of Tenant hereunder, Tenant shall on demand pay to Landlord by way of reimbursement the sum or sums so paid by Landlord with all interest, costs and damages together with interest at the Interest Rate for the period such sums remain outstanding.

(f) Landlord may remove all of Tenant's property from the Premises, and such property may be stored by Landlord in a public warehouse or elsewhere at the sole cost and for the account of Tenant. If Landlord does not elect to store any or all of Tenant's property left in the Premises, Landlord may consider such property to be abandoned by Tenant, and Landlord may thereupon dispose of such property in the manner and as prescribed by California Civil Code Section 1980 *et seq.* Any proceeds realized by Landlord on the disposal of any such property shall be applied first to offset all expenses of storage and sale, then credited against Tenant's outstanding obligations to Landlord under this Lease, and any balance remaining after satisfaction of all obligations of Tenant under this Lease shall be delivered to Tenant.

(e) The damages recoverable by Landlord pursuant to this Section shall in all events include reimbursement of any concessions made by Landlord in connection with the leasing of the Demised Premises to Tenant, including without limitation (a) abated Rent, (b) allowances or improvements in excess of any Building standard work, (c) sums paid to any former landlord of Tenant under a so-called "take-over", lease assumption or similar agreement and (d) signing bonuses and other incentive payments.

19.3 Grace Period. Notwithstanding anything to the contrary in this Article contained, Landlord agrees not to take any action to terminate this Lease (a) for default by Tenant in the payment when due of Rent, if Tenant shall cure such default within five (5) days after written notice thereof given by Landlord to Tenant, or (b) for default by Tenant in the performance of any other covenant, if Tenant shall cure such default within a period of thirty (30) days after written notice thereof given by Landlord to Tenant (except where the nature of the default is such that remedial action should appropriately take place sooner, as indicated in such written notice),

or with respect to covenants other than to pay a sum of money within such additional period as may reasonably be required to cure such default if (because of governmental restrictions or any other cause beyond the reasonable control of Tenant) the default is of such a nature that it cannot be cured within such thirty (30)-day period, provided, however, (1) that there shall be no extension of time beyond such thirty (30)-day period for the curing of any such default unless, not more than ten (10) days after the receipt of the notice of default, Tenant in writing (i) shall specify the cause on account of which the default cannot be cured during such period and shall advise Landlord of its intention duly to institute all steps necessary to cure the default and (ii) shall as soon as may be reasonable duly institute and thereafter diligently prosecute to completion all steps necessary to cure such default and, (2) that no notice of the opportunity to cure a default need be given, and no grace period whatsoever shall be allowed to Tenant, if the default is incurable or if the covenant or condition the breach of which gave rise to the default had, by reason of a breach on a prior occasion, been the subject of a notice hereunder to cure such default.

20. END OF TERM — ABANDONED PROPERTY

Upon the expiration or other termination of the Term of this Lease, Tenant shall peaceably quit and surrender to Landlord the Demised Premises and all alterations and additions thereto which Tenant is not entitled or required to remove under the provisions of this Lease, broom clean in good order, repair and condition excepting only reasonable use and wear and damage by fire or other casualty for which, under other provisions of this Lease, Tenant has no responsibility of repair or restoration. Tenant's obligation to observe or perform this covenant shall survive the expiration or other termination of the Term of this Lease. If the last day of the Term of this Lease or any renewal thereof falls on a day other than a Business Day, this Lease shall expire on the Business Day immediately preceding. Tenant shall pay twice the amount of Rent applicable to each month (or fraction thereof) during which Tenant remains in possession of any part of the Demised Premises in violation of the foregoing covenants, without prejudice to eviction and any other remedy available to Landlord on account thereof.

Any personal property in which Tenant has an interest which shall remain in the Building or on the Demised Premises after the expiration or termination of the Term of this Lease shall be conclusively deemed to have been abandoned, and may be disposed of in such manner as Landlord may see fit; provided, however, notwithstanding the foregoing, that Tenant will, upon request of Landlord made not later than ten (10) days after the expiration or termination of the Term hereof, promptly remove from the Building any such personal property or, if any part thereof shall be sold, that Landlord may receive and retain the proceeds of such sale and apply the same, at its option, against the expenses of the sale, the cost of moving and storage, any arrears of Rent payable hereunder by Tenant to Landlord and any damages to which Landlord may be entitled under Article 19 hereof or pursuant to law, with the balance if any, to be paid to Tenant.

21. RIGHTS OF MORTGAGEES

21.1 (Intentionally omitted)

21.2 Entry and Possession. Upon entry and taking possession of the Property by a Mortgagee, for the purpose of foreclosure or otherwise, such Mortgagee shall have all the rights of Landlord, and shall be liable to perform all the obligations of Landlord arising and accruing during the period of such possession by such Mortgagee.

21.3 Right to Cure. No act or failure to act on the part of Landlord which would entitle Tenant under the terms of this Lease, or by law, to be relieved of Tenant's obligations hereunder or to terminate this Lease, shall result in a release or termination of such obligations or a termination of this Lease unless (i) Tenant shall have first given written notice of Landlord's act or failure to act to first Mortgagees of record, if any, and to any other Mortgagees of whom Tenant has been given written notice, specifying the act or failure to act on the part of Landlord which could or would give basis to Tenant's rights; and (ii) such Mortgagees, after receipt of such notice, have failed or refused to correct or cure the condition complained of within a reasonable time thereafter, but nothing contained in this paragraph shall be deemed to impose any obligation on any such Mortgagees to correct or cure any such condition. "Reasonable time" as used above means and includes a reasonable time to obtain possession of the Land and Building if any such Mortgagee elects to do so and a reasonable time to correct or cure the condition if such condition is determined to exist.

21.4 Prepaid Rent. No Rent shall be paid more than thirty (30) days prior to the due dates thereof and, as to a first Mortgagee of record and any other Mortgagees of whom Tenant has been given written notice, payments made in violation of this provision shall (except to the extent that such Rent is actually received by such Mortgagee) be a nullity as against such Mortgagee and Tenant shall be liable for the amount of such payments to such Mortgagee.

21.5 Continuing Offer. The covenants and agreements contained in this Lease with respect to the rights, powers and benefits of a Mortgagee (particularly, without limitation thereby, the covenants and agreements contained in this Article) constitute a continuing offer to any person, corporation or other entity, which by accepting or requiring an assignment of this Lease or by entry or foreclosure assumes the obligations herein set forth with respect to such Mortgagee; every such Mortgagee is hereby constituted a party to this Lease as an obligee hereunder to the same extent as though its name was written hereon as such; and such Mortgagee shall be entitled to enforce such provisions in its own name.

21.6 Subordination. Notwithstanding the foregoing provisions of this Article, Tenant agrees, at the request of Landlord or any Mortgagee, to execute and deliver promptly any certificate or other instrument which Landlord or such Mortgagee may request subordinating this Lease and all rights of Tenant hereunder to any Mortgage, and to all advances made under such Mortgage and/or agreeing to attorn to such Mortgagee in the event that it succeeds to Landlord's interest in the Property.

21.7 Limitations on Liability. Nothing contained in the foregoing Section 21.6 or in any such non-disturbance agreement or non-disturbance provision shall however, affect the prior rights of the holder of any Mortgage with respect to the proceeds of any award in condemnation or of any fire insurance policies affecting the Building, or impose upon any such holder any liability (i) for the erection or completion of the Building, or (ii) in the event of damage or

destruction to the Building or the Demised Premises by fire or other casualty, for any repairs, replacements, rebuilding or restoration except such repairs, replacements, rebuilding or restoration as can reasonably be accomplished from the net proceeds of insurance actually received by, or made available to, such holder, or (iii) for any default by Landlord under the Lease occurring prior to any date upon which such holder shall become Tenant's landlord, or (iv) for any credits, offsets or claims against the Rent as a result of any acts or omissions of Landlord committed or omitted prior to such date, or (v) for return of any security deposit or other funds unless the same shall have been received by such holder, and any such agreement or provision may so state.

22. QUIET ENJOYMENT

Landlord covenants that if, and so long as, Tenant keeps and performs each and every covenant, agreement, term, provision and condition herein contained on the part and on behalf of Tenant to be kept and performed, Tenant shall quietly enjoy the Demised Premises from and against the claims of all persons claiming by, through or under Landlord subject, nevertheless, to the covenants, agreements, terms, provisions and conditions of this Lease and to all Mortgages to which this Lease is subject and subordinate.

Without incurring any liability to Tenant, Landlord may permit access to the Demised Premises and open the same, whether or not Tenant shall be present, upon any demand of any receiver, trustee, assignee for the benefit of creditors, sheriff, marshall or court officer entitled to, or reasonably purporting to be entitled to, such access for the purpose of taking possession of, or removing Tenant's property or for any other lawful purpose (but this provision and any action by Landlord hereunder shall not be deemed a recognition by Landlord that the person or official making such demand has any right or interest in or to this Lease, or in or to the Demised Premises), or upon demand of any representative of the fire, police, building, sanitation or other department of the city, county, state or federal governments.

23. ENTIRE AGREEMENT — WAIVER — SURRENDER

23.1 Entire Agreement. This Lease and the Exhibits made a part hereof contain the entire and only agreement between the parties and any and all statements and representations, written and oral, including previous correspondence and agreements between the parties hereto, are merged herein. Tenant acknowledges that all representations and statements upon which it relied in executing this Lease are contained herein and that Tenant in no way relied upon any other statements or representations, written or oral. Any executory agreement hereafter made shall be ineffective to change, modify, discharge or effect an abandonment of this Lease in whole or in part unless such executory agreement is in writing and signed by the party against whom enforcement of the change, modification, discharge or abandonment is sought. Nothing herein shall prevent the parties from agreeing to amend this Lease and the Exhibits made a part hereof as long as such amendment shall be in writing and shall be duly signed by both parties.

23.2 Waiver by Landlord. The failure of Landlord to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease, or any of the Rules and Regulations promulgated hereunder, shall not prevent a subsequent act, which would have

originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. The failure of Landlord to enforce any of such Rules and Regulations against Tenant and/or any other tenant or subtenant in the Building shall not be deemed a waiver of any such Rules and Regulations. No provisions of this Lease shall be deemed to have been waived by Landlord unless such waiver be in writing signed by Landlord. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly rent herein stipulated shall be deemed to be other than on account of the stipulated rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such rent or pursue any other remedy in this Lease provided.

23.3 Surrender. No act or thing done by Landlord during the term hereby demised shall be deemed an acceptance of a surrender of the Demised Premises, and no agreement to accept such surrender shall be valid, unless in writing signed by Landlord. No employee of Landlord or of Landlord's agents shall have any power to accept the keys of the Demised Premises prior to the termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord's agents shall not operate as a termination of the Lease or a surrender of the Demised Premises. In the event that Tenant at any time desires to have Landlord underlet the Demised Premises for Tenant's account, Landlord or Landlord's agents are authorized to receive the keys for such purposes without releasing Tenant from any of the obligations under this Lease, and Tenant hereby relieves Landlord of any liability for loss of or damage to any of Tenant's effects in connection with such underletting.

24. INABILITY TO PERFORM — EXCULPATORY CLAUSE

Except as otherwise expressly provided in this Lease, this Lease and the obligations of Tenant to pay Rent hereunder and perform all other covenants, agreements, terms, provisions and conditions hereunder on the part of Tenant to be performed shall in no way be affected, impaired or excused because Landlord is unable to fulfill any of its obligations under this Lease or is unable to supply or is delayed in supplying any service expressly or impliedly to be supplied or is unable to make or is delayed in making any repairs, replacements, additions, alterations, improvements or decorations or is unable to supply or is delayed in supplying any equipment or fixtures if Landlord is prevented or delayed from doing so by reason of any cause whatsoever beyond Landlord's reasonable control, including but not limited to governmental preemption in connection with a national emergency or by reason of any rule, order or regulation of any department or subdivision thereof of any governmental agency or by reason of strikes, labor troubles, shortages of labor or materials or conditions of supply and demand which have been or are affected by war, hostilities or other similar or dissimilar emergency. In each such instance of inability of Landlord to perform, Landlord shall exercise reasonable diligence to eliminate the cause of such inability to perform.

Tenant shall neither assert nor seek to enforce any claim for breach of this Lease against any of Landlord's assets other than Landlord's interest in the Building of which the Demised Premises are a part and in the rents, issues and profits thereof, and Tenant agrees to look solely to

such interest for the satisfaction of any liability of Landlord under this Lease, it being specifically agreed that in no event shall Landlord (which term shall include, without limitation any of the officers, trustees, directors, partners, beneficiaries, joint venturers, members, stockholders or other principals or representatives, disclosed or undisclosed, of Landlord or any managing agent) ever be personally liable for any such liability. This paragraph shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord or to take any other action which shall not involve the personal liability of Landlord to respond in monetary damages from Landlord's assets other than the Landlord's interest in said real estate, as aforesaid. In no event shall Landlord ever be liable for consequential damages.

25. BILLS AND NOTICES

Any notice, consent, request, bill, demand or statement hereunder by either party to the other party shall be in writing and, if received at Landlord's or Tenant's Address, shall be deemed to have been duly given when either delivered or served personally or mailed in a postpaid envelope, deposited in the United States mails addressed to the respective party at its Address as stated in Article 1 or if any Address for notices shall have been duly changed as hereinafter provided, if mailed as aforesaid to the party at such changed Address. Either party may at any time change the Address for such notices, consents, requests, bills, demands or statements by delivering or mailing, as aforesaid, to the other party a notice stating the change and setting forth the changed Address, provided such changed Address is within the United States.

All bills and statements for reimbursement or other payments or charges due from Tenant to Landlord hereunder shall be due and payable in full thirty (30) days, unless herein otherwise provided, after submission thereof by Landlord to Tenant. Tenant's failure to make timely payment of any amounts indicated by such bills and statements, whether for work done by Landlord at Tenant's request, reimbursement provided for by this Lease or for any other sums properly owing by Tenant to Landlord, shall be treated as a default in the payment of Rent, in which event Landlord shall have all rights and remedies provided in this Lease for the nonpayment of Rent.

26. SUCCESSORS AND ASSIGNS

The covenants, agreements, terms, provisions and conditions of this Lease shall bind and benefit the successors and assigns of the parties hereto with the same effect as if mentioned in each instance where a party hereto is named or referred to, except that no violation of the provisions of Article 14 hereof shall operate to vest any rights in any successor or assignee of Tenant and that the provisions of this Article shall not be construed as modifying the conditions of limitation contained in Article 19 hereof.

If in connection with or as a consequence of the sale, transfer or other disposition of the real estate (Land and/or Building, either or both, as the case may be) of which the Demised Premises are a part Landlord ceases to be the owner of the reversionary interest in the Demised Premises, Landlord shall be entirely freed and relieved from the performance and observance thereafter of all covenants and obligations hereunder accruing thereafter on the part of Landlord

to be performed and observed, it being understood and agreed in such event (and it shall be deemed and construed as a covenant running with the land) that the person succeeding to Landlord's ownership of said reversionary interest shall thereupon and thereafter assume, and perform and observe, any and all of such covenants and obligations of Landlord.

27. MISCELLANEOUS

27.1 Separability. If any provision of this Lease or portion of such provision or the application thereof to any person or circumstance is for any reason held invalid or unenforceable, the remainder of the Lease (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

27.2 Captions. The captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Lease nor the intent of any provisions thereof.

27.3 Broker. Each party represents and warrants that it has not directly or indirectly dealt, with respect to the leasing of space in the Building, with any broker or had its attention called to the Demised Premises or other space to let in the Building, by any broker other than the Broker (if any) listed in Article 1 whose commission shall be the responsibility of Landlord. Each party agrees to exonerate and save harmless and indemnify the other against any claims for a commission by any other broker, person or firm, with whom such party has dealt in connection with the execution and delivery of this Lease or out of negotiations between Landlord and Tenant with respect to the leasing of other space in the Building.

27.4 Governing Law. This Lease is made pursuant to, and shall be governed by, and construed in accordance with, the laws of the State of California.

27.5 Assignment of Lease and/or Rents. With reference to any assignment by Landlord of its interest in this Lease and/or the Rent payable hereunder, conditional in nature or otherwise, which assignment is made to or held by a bank, trust company, insurance company or other institutional lender holding a Mortgage on the Building, Landlord and Tenant agree:

(a) that the execution thereof by Landlord and acceptance thereof by such Mortgagee shall never be deemed an assumption by such Mortgagee of any of the obligations of the Landlord hereunder, unless such Mortgagee shall, by written notice sent to the Tenant, specifically otherwise elect; and

(b) that, except as aforesaid, such Mortgagee shall be treated as having assumed the Landlord's obligations hereunder only upon foreclosure of such Mortgagee's Mortgage and the taking of possession of the Demised Premises after having given notice of its intention to succeed to the interest of the Landlord under this Lease.

27.6 Memorandum of Lease. Neither party shall record this Lease; provided, however, that either party shall at the request of the other, execute and deliver a recordable memorandum of this Lease setting forth the parties to this Lease, a description of the Demised Premises and the term of this Lease for recordation in the Official records of the County of San Mateo.

27.7 (omitted)

27.8 (omitted)

27.9 Arbitration of Certain Matters. At the election of either party, if any dispute as to the allocation of real estate taxes or operating expenses under Section 6.2, the abatement of Yearly Fixed Rent pursuant to Article 16 or the abatement of Yearly Fixed Rent pursuant to Article 18 remains unresolved 30 days after written complaint by Tenant has been delivered to Landlord as to an allocation, reduction, apportionment or abatement made or proposed by Landlord, the matter may be submitted to binding arbitration pursuant to California Code of Civil Procedure Section 1280 *et seq*.

IN WITNESS WHEREOF, Landlord and Tenant have caused this instrument to be executed under seal, all as of the day and year first above written.

MOUNTAIN COVE TECH CENTER, L.L.C.

By _____
John Finney

By /s/ Mike Finney
Mike Finney
Its Managers

MJ RESEARCH COMPANY, INC.

By _____
John Finney
Its President

EXHIBIT A

PLAN OF DEMISED PREMISES

[Diagram depicting the entire land and building in South San Francisco.]

EXHIBIT A-1

PLANS AND SPECIFICATIONS FOR LANDLORD'S WORK

None.

EXHIBIT B

CLEANING SCHEDULE

I. Premises

Daily on Business Days:

a. Empty all waste receptacles and ash trays and remove waste materials from the Premises.

b. Sweep and dust mop all uncarpeted areas using a dust-treated mop.

c. Vacuum all rugs and carpeted areas.

d. Hand dust and wipe clean with treated cloths all horizontal cleared surfaces including desk tops, office equipment, window sills, door ledges, chair rails and counter tops, within normal reach.

e. Wash clean all water fountains.

f. Upon completion of cleaning, all lights will be turned off and doors locked, leaving the Premises in an orderly condition.

Quarterly

Render high dusting not reached in daily cleaning to include:

a. Dusting all pictures, frames, charts, graphs and similar wall hangings.

b. Dusting all vertical surfaces, such as walls, partitions, doors and ducts.

c. Dusting of all pipes, ducts and high moldings.

II. Lavatories

Daily on Business Days:

a. Sweep and damp mop floors.

b. Clean all mirrors, powder shelves, dispensers and receptacles, bright work, flushometers, pipes and toilet seats.

c. Wash both sides of all toilet seats.

d. Wash all basins, bowls and urinals.

e. Dust and clean all powder room fixtures.

f. Empty and clean paper towel and sanitary disposal receptacles.

g. Remove waste paper and refuse.

h. Refill tissue holders, soap dispensers, towel dispensers, vending sanitary dispensers; materials to be furnished by Landlord.

i. A sanitizing solution will be used in all lavatory cleaning.

Monthly:

a. Machine scrub lavatory floors.

b. Wash all partitions and tile walls in lavatories.

III. Main Lobby, Elevators, Building Exterior and Corridors

Daily on Business Days:

a. Sweep and wash or spray buff all marble floors.

b. Sweep all entrance mats.

c. Clean elevators, wash or vacuum floors, wipe down walls and doors.

d. Spot clean any metal work surrounding building entrance doors.

Monthly:

All resilient tile floors in public areas to be treated equivalent to spray buffing.

IV. Window Cleaning

The outside of exterior wall windows will be washed once every three months, weather permitting, and the inside of exterior wall windows will be washed every six months.

V. Tenants requiring services in excess of those described above shall request same through Landlord, at Tenant’s expense.

EXHIBIT C

RULES AND REGULATIONS

1. The sidewalks, entrances, passages, courts, elevators, vestibules, stairways, corridors or halls of the Building shall not be obstructed or encumbered or used for any purpose other than ingress and egress to and from the premises demised to any tenant or occupant.

2. No awnings or other projections shall be attached to the outside walls or windows of the Building without the prior consent of Landlord. No curtains, blinds, shades, or screens shall be attached or hung in, or used in connection with, any window or door of the premises demised to any tenant or occupant, without the prior consent of Landlord. Such awnings, projections, curtains, blinds, shades, screens, or other fixtures must be of a quality type, design and color, and attached in a manner, approved by Landlord.

3. No sign, advertisement, object, notice or other lettering shall be exhibited, inscribed, painted or affixed on any part of the outside or inside of the premises demised to any tenant or occupant or of the Building without the prior consent of Landlord. Interior signs on doors and directory tables, if any, shall be of a size, color and style approved by Landlord.

4. The sashes, sash doors, skylights, windows, and doors that reflect or admit light and air into the halls, passageways or other public places in the Building shall not be covered or obstructed, nor shall any bottles, parcels, or other articles be placed on any window sills.

5. No show cases or other articles shall be put in front of or affixed to any part of the exterior of the Building, nor placed in the halls, corridors, vestibules or other parts of the Building.

6. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags, or other substances shall be thrown therein.

7. No tenant or occupant shall mark, paint, drill into, or in any way deface any part of the Building or the premises demised to such tenant or occupant. No boring, cutting or stringing of wires shall be permitted, except with the prior consent of the Landlord, and as Landlord may direct. No tenant or occupant shall install any resilient tile or similar floor covering in the premises demised to such tenant or occupant except in a manner approved by Landlord.

8. No bicycles, vehicles or animals of any kind shall be brought into or kept in or about the premises demised to any tenant. Bicycles may be stored in racks, if any, furnished for such purpose by Landlord in a common area of the Property. No cooking shall be done or permitted in the Building by any tenant without the approval of Landlord. No tenant shall cause or permit any unusual or objectionable odors to emanate from the Premises demised to such tenant.

9. Without the prior consent of Landlord, no space in the Building shall be used for manufacturing, or for the sale of merchandise, goods or property of any kind at auction.

10. No tenant shall make, or permit to be made, any unseemly or disturbing noises or disturb or interfere with other tenants or occupants of the Building or neighboring buildings or premises whether by the use of any musical instrument, radio, television set or other audio device, unmusical noise, whistling, signing, or in any other way. Nothing shall be thrown out of any doors or windows.

11. Each tenant must, upon the termination of its tenancy, restore to Landlord all keys of stores, storage areas, offices and toilet rooms, either furnished to, or otherwise procured by, such tenant.

12. All removals from the Building, or the carrying in or out of the Building or the premises demised to any tenant, of any sales, freight, furniture, or bulky matter of any description must take place at such time and in such manner as Landlord or its agents may determine, from time to time. Landlord reserves the right to inspect all freight to be brought into the Building and to exclude from the Building all freight which violates any of the Building Rules or the provisions of such tenant's lease.

13. No tenant shall use or occupy, or permit any portion of the premises demised to such tenant to be used or occupied, as an office for a public stenographer, messenger service or typist, or as a barber or manicure shop, or as an employment bureau. No tenant or occupant shall engage or pay any employees in the Building, except those actually working for such tenant or occupant in the Building, nor advertise for laborers giving an address at the Building.

14. No tenant or occupant shall purchase spring water, ice, food, beverage, lighting maintenance, cleaning towels or other like service, from any company or person not approved by Landlord, such approval not unreasonably to be withheld.

15. Landlord shall have the right to prohibit any advertising by any tenant or occupant which, in Landlord's opinion, tends to impair the reputation of the Building or its desirability as a building for offices, and upon notice from Landlord, such tenant or occupant shall refrain from or discontinue such advertising.

16. Landlord reserves the right to exclude from the Building, between the hours of 6:00 p.m. and 8:00 a.m. on Business Days and otherwise at all hours, all persons who do not present a pass to the building signed by the Landlord. Landlord will furnish passes to persons for whom any tenant requests such passes. Each tenant shall be responsible for all persons for whom it requests such passes and shall be liable to Landlord for all wrongful acts of such persons.

17. Each tenant, before closing and leaving the premises demised to such tenant at any time, shall see that all entrance doors are locked and windows closed.

18. Each tenant shall, at its expense, provide artificial light in the premises demised to such tenant for Landlord's agency, contractors, and employees while performing janitorial or other cleaning services and making repairs or alterations in said premises.

19. No premises shall be used, or permitted to be used, for lodging or sleeping, or for any immoral or illegal purpose.

20. There shall not be used in the Building, either by any tenant or occupant or by their agents or contractors, in the delivery or receipt of merchandise, freight or other matter, any hand trucks or other means of conveyance except those equipped with rubber tires, rubber side guards and such other safeguards as Landlord may require.

21. Canvassing, soliciting and peddling in the Building are prohibited and each tenant and occupant shall co-operate in seeking their prevention.

22. If the premises demised to any tenant become infested with vermin, such tenant, at its sole cost and expense, shall cause its premises to be exterminated from time to time, to the satisfaction of Landlord, and shall employ such exterminators therefor as shall be approved by Landlord.

23. No premises shall be used, or permitted to be used, at any time, without the prior approval of Landlord, as a store for the sale or display of goods, wares or merchandise of any kind, or as a restaurant, shop, booth, bootblack or other stand, or for the conduct of any business or occupation which predominantly involves direct patronage of the general public in the premises demised to such tenant, or for manufacturing or for other similar purpose.

24. No tenant shall move, or permit to be moved, into or out of the Building or the premises demised to such tenant, any heavy or bulky matter, without the specific approval of Landlord. If any such matter requires special handling, only a person holding a Master Rigger's license shall be employed to perform such special handling. No tenant shall place, or permit to be placed, on any part of the floor or floors of the premises demised to such tenant, a load exceeding the floor load per square foot which such floor was designed to carry and which is allowed by law. Landlord reserves the right to prescribe the weight and position of safes and other heavy matter, which must be placed so as to distribute the weight.

25. The requirements of tenants will be attended to only upon application at the office of the Building. Building employees shall not be required to perform, and shall not be requested by any tenant or occupant to perform, any work outside of their regular duties, unless under specific instructions from the office of the managing agent of the Building.

Please quote our reference when replying
Our Ref: JTC(L) 8339/859 Vol 1

JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

customer service hotline 1 800 568 7000
main line (65) 6560 0056
facsimile (65) 6565 5301
website www.jtc.gov.sg

25 July 2005

FLUIDIGM SINGAPORE PTE. LTD.
39 ROBINSON ROAD
#07-01 ROBINSON POINT
SINGAPORE(068911)

By Local Urgent Mail
(Attention: MR PAUL WYATT)

Dear Sirs,

OFFER OF TENANCY FOR FLATTED FACTORY SPACE

1 We are pleased to offer a tenancy of the Premises subject to the covenants, terms and conditions in the annexed Memorandum of Tenancy No. **27.09** ("the MT") and in this letter (collectively called "the Offer").

2 2.1 The Premises :

Private Lot **A2045700** also known as Unit **#07-3532/3534/3536/3538** ("the Premises") in **BLK 1026 TAI SENG AVENUE** ("the Building") in the **TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413** as delineated and edged in red on the plan attached to the Offer.

2.2 Term of Tenancy :

3 years ("the Term") with effect from **1 October 2005** ("the Commencement Date").

2.3 Tenancy:

(a) Your due acceptance of the Offer in accordance with Clause 3 of this letter shall, together with the Offer, constitute a binding tenancy agreement ("the Tenancy").

(b) In the event of any inconsistency or conflict between any covenant, term or condition of this letter and the MT, the relevant covenant, term or condition in this letter shall prevail.

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2.4 Area :

Approximately **1385 square metres** ("the Area").

2.5 Rent :

(a) Discounted rate of **$9.22** per square metre per month on the Area, for so long as you shall occupy by way of tenancy an aggregate floor area of 1,000 to 4,999 square metres in the Building or in the various flatted factories belonging to us; and

(b) Normal rate of **$9.50** per square metre per month on the Area, in the event that the said aggregate floor area occupied is at any time reduced to below *1,000* square metres (when the discount shall be totally withdrawn) with effect from the date of reduction in the said aggregate floor area,

("Rent") to be paid without demand and in advance without deduction on the 1st day of each month of the year (i.e. 1st of January, February, March, etc.). After your first payment is made in accordance with Clause 3 of this letter and the attached Payment Table, the next payment shall be made on **01 March 2005**.

2.6 Service Charge :

$2.25 per square metre per month ("Service Charge") on the Area as charges for services rendered by us, payable by way of additional and further rent without demand on the same date and in the same manner as the Rent, subject to our revision from time to time and in any case such revision to be to a rate no higher than that charged to other tenants in the Building.

2.7 Security Deposit/Banker's Guarantee :

Ordinarily we would require a tenant to lodge with us a security deposit equivalent to **three (3) months'** rent and service charge. However, as an off-budget measure and as payment by GIRO has been made a condition with which you must comply under clause 3 of this letter, you shall, at the time of your acceptance of the Offer, place with us a deposit equivalent to **one (1) month's** Rent (at the discounted rate) and Service Charge ("Security Deposit") as security against any breach of the covenants, terms and conditions in the Tenancy, as follows :

(a) The Security Deposit may be in the form of cash or acceptable Banker's Guarantee in the form attached (effective from **1 August 2005** to **31 December 2008**), or such other form of security as we may in our reasonable discretion permit or accept.

(b) The Security Deposit shall be maintained at the same sum throughout the Term and shall be repayable to you without interest, or returned to you for cancellation within 30 days, after the termination of the Term (by expiry or otherwise) or expiry of the Banker's Guarantee, as the case may be, subject to appropriate deductions or payment to us for damages or other sums due under the Tenancy.

(c) Subject to Clause 2.6, if the Service Charge is increased, or any deductions are made from the Security Deposit, you shall immediately pay the amount of such increase or make good the deductions so that the Security Deposit shall at all times be equal to **one (1) month's** Rent (at the normal or discounted rate, as the case may be) and Service Charge.

(d) If at any time during the Term, your GIRO payment is discontinued, then you shall place with us, within two (2) weeks of the date of discontinuance of your GIRO payment, the additional sum equivalent to **two (2) months'** Rent and Service Charge, so that the Security Deposit shall at all times be equal to three (3) months' Rent (at the normal or discounted rate, as the case may be) and Service Charge for the remaining period of the Term.

(e) If at any time during the Term the off-budget measure is withdrawn you shall, if required in writing by us, also pay to us the additional sum equivalent to **two (2) months'** Rent and Service Charge, so that the Security Deposit shall at all times be equal to **three (3) months'** Rent (at the normal or discounted rate, as the case may be) and Service Charge for the remaining period of the Term.

2.8 Mode of Payment :

(a) Your first payment to be made with your letter of acceptance in accordance with Clause 3 of this letter and the attached Payment Table shall be by non-cash mode (eg, Cashier's Order, cheque).

(b) Thereafter during the Term, you shall pay Rent, Service Charge and GST by Interbank GIRO or any other mode to be determined by us.

(c) We enclose the GIRO authorization form for your completion.

2.9 Authorised Use :

You shall use the Premises for the purpose of **manufacture of elastomeric microfluidic chips with carriers, including associated research and development activities** only and such other purposes as may be agreed in writing by the Landlord and Tenant ("the Authorised Use").

2.10 Approvals :

The Tenancy is subject to approvals being obtained from the relevant governmental and statutory authorities.

2.11 Possession of Premises :

(a) Subject to your acceptance of the Offer, keys to the Premises shall be made available to you within the period of two (2) months prior to the Commencement Date.

(b) From the date you accept the keys to the Premises ("Possession Date") until the Commencement Date, you shall be deemed a licensee upon the same covenants, terms and conditions as in the Tenancy.

(c) If you proceed with the Tenancy after the Commencement Date, the licence fee payable from the Possession Date to the Commencement Date shall be waived ("Rent-Free Period"). Should you fail to so proceed, you shall:

(c1) remove everything installed by you;

(c2) reinstate the Premises to its original state and condition; and

(c3) pay us a sum equal to the prevailing market rent payable for the period from the Possession Date up to the date the installations are removed and reinstatement completed to our reasonable satisfaction,

without prejudice to any other rights and remedies we may have against you under the Tenancy or at law.

2.12 Loading Capacity :

(a) **Normal (Ground & Non-ground) Floor Premises :**

You shall comply and ensure compliance with the following restrictions :

(a1) maximum loading capacity of the goods lifts in the Building; and

(a2) maximum floor loading capacity of **10** kiloNewtons per square metre of the Premises on the **07** storey of the Building PROVIDED THAT any such permitted load shall be evenly distributed.

2.13 Take-over of Premises :

(a) **Vacant Possession :**

The Offer is subject to **EEMS Singapore Pte Ltd** returning vacant possession of the Premises by **31 July 2005.**

(b) **Take-over of Fixtures and Fittings :**

If, however, you are taking over the Premises in its existing state and condition, including all the fixtures and fittings installed by or belonging to **EEMS Singapore Pte Ltd** ("the Said Installations") then :

(b1) You shall accept the Premises including the Said Installations in its condition existing at the Commencement Date or the acceptance of the keys to the Premises by you, whichever is the earlier ("the Control Date").

(b2) You shall, within such period of time as the parties agreed upon, at your own cost and expense, ensure that :

(b2.1) the Said Installations have been approved in writing by us and that plans on the Said Installations have been submitted to and approved in writing by us;

(b2.2) the Said Installations comply fully with all our guidelines and requirements (through the Building Control Unit), and those of the relevant governmental and statutory authorities, prevailing at the Control Date;

(b2.3) such or all of the Said Installations not approved by us under (b2.1) or which have failed to comply with (b2.2) are demolished and removed, subject to clauses 2.11, 2.12 and 2.13 of the MT; and

2.14 Option for Renewal of Tenancy :

(a) You may within 3 months before the expiry of the Term make a written request to us for a further term of tenancy of 3 years ("the further term").

(b) We may grant you a further term of tenancy of the Premises subject to the following:

(b1) there shall be no breach of your obligations at the time you make your request for a further term, and at the expiry of the Term;

(b2) the duration of the further term shall be mutually agreed upon;

(b3) the rent payable shall be at a revised rate to be determined by us, having regard to the market rent of the Premises at the time of granting the further term. Our determination of the rent shall be final and conclusive: and

(b4) the tenancy for the further term shall be upon the same covenants, terms and conditions except for the duration, rent, security deposit (which shall be equivalent to three (3) month's rent and service charge instead of two (2) months), and excluding a covenant for renewal of tenancy.

3 **Mode of Due Acceptance :**

The Offer shall lapse if we do not receive the following by **31 July 2005** :

(a) Duly signed letter of acceptance **(in duplicate)** of the Offer, in the form set out in the **Letter of Acceptance** attached. **(Please date as required in your letter of acceptance)**

(b) Payment of the sum set out in the **Payment Table** attached.

(c) Duly completed GIRO authorization form.

4 Please note that payments made prior to your giving us the other items listed above may be cleared by and credited by us upon receipt. However, if those other items are not forthcoming from you within the time stipulated herein, the Offer shall lapse and there shall be no contract between you and us arising hereunder. Any payments received shall then be refunded to you without interest and you shall have no claim of whatsoever nature against us.

5 **Rent-Free Period :**

As the Commencement Date will not be deferred, we advise you to accept the Offer as soon as possible and to collect the keys to the Premises on the scheduled date in order to maximize the Rent-Free Period referred to in Clause 2.11(c) of this letter.

6 **Variation to the Tenancy :**

Any variation, modification, amendment, deletion, addition or otherwise of the Offer shall not be enforceable unless agreed by both parties and reduced in writing by us. No terms or representation or otherwise, whether expressed or implied, shall form part of the Offer other than what is contained herein.

7 **Season Parking :**

Season parking tickets for car parking lots within the Estate can be purchased at our **Contact Centre, The JTC Summit, Level 1, 8 Jurong Town Hall Road Singapore 609434 (Contact Centre Hotline: 1800-5687000)** or applied online via Krypton, JTC's Customer Portal, http://krypton.jtc.gov.sg . Please note that the number of season parking ticket(s) that can be purchased by you will depend on eligibility rules set out by us.

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8 **Electricity Connection:**

Upon your acceptance of the Offer, you are advised to proceed expeditiously to engage a registered electrical consultant to submit two sets each of electrical single-line diagrams and electrical layout plans to and in accordance with the requirements of our **Facilities Management Section, Operations Support Department of our Customer Services Group,** for endorsement before an application is made to SP Services Ltd to open an account for electricity connection.

Please contact the Facilities Management Section at **Blk 25 Kallang Avenue #05-02 Kallang Basin Industrial Estate Singapore 339416** for their requirements.

9 To guide and assist you, we enclose a **Schedule of Statutory Controls** for Flatted Factory Occupants.

Yours faithfully

/s/ Chern Shiong NG

Chern Shiong NG
INDUSTRIAL DEVELOPMENT (HIGH-RISE)
DEPARTMENT
INDUSTRIAL PARKS DEVELOPMENT GROUP JTC
CORPORATION
DID : **68833414**
FAX : **68855900**
Email : **ngcs@jtc.gov.sg**

ENCS:

☑ Payment Table
☑ Specimen Acceptance Form
☑ Schedule of Statutory Controls (SC2)]
☑ GIRO Form(s)
☑ MT No. 27.09
☑ Specimen BG Plan

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PAYMENT TABLE

PREMISES : PRIVATE LOT AT UNIT #07-3532/3534/3536/3538 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

	Amount		+5% GST
Rent at **$9.22 per square metre per month on **1385** square metres for the period **1 February 2006** to **28 February 2006**	$ 12769.70		$ 638.49
**4 months rental free granted from 1 October 2005 to 31 January 2006			
$2.25 per square metre per month on **1385** square metres for the period **1 October 2005** to **31 October 2005**	$ 3116.25		$ 155.81
Total Rent Payable (inclusive of Service Charge)		$ 15885.95	$ 794.30
Security Deposit equivalent to three (3) months' Rent and Service Charge (in cash or Banker's Guarantee provided in accordance with Clause 2.7 of this letter)	$ 47657.85		
Less:			
Equivalent of two (2) month's Rent and Service Charge (re Off-budget Measure and GIRO)	$ 31771.90	$ 15885.95	

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Stamp fee payable on Letter of Acceptance (which we will stamp on your behalf)		
Note: If the Letter is not returned to us within 14 days of the date of the Letter, you will have to pay penalty on the stamp duty which is imposed by Stamp Duty Office of IRAS.	$ 1392.00	
Sub-Total Payable	$ 33163.90	$ 794.30
Add: GST@5%	$ 794.30	
Total Payable inclusive of GST	$ 33958.20	

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MEMORANDUM

OF

TENANCY

NO. 27.09

MT(FF) 27.09 + LO(FF)30.003/09 July 2002
GO+AN+LPN+WCL+TGP/LBL(CTG)/zmy+sr+vfm+at+sl

Index of clauses in Memorandum of Tenancy

EASEMENTS, RIGHTS AND PRIVILEGES

A The full right and liberty for the Tenant and the persons authorised by him (in common with all other persons entitled to the like right), at all times, by day or night to go, pass and repass over and along the main entrance of the Building and the common passageways, landings and stairways and to use the lifts PROVIDED THAT the Tenant shall not cause or permit any obstruction to the common passageways, landings, stairways and other common parts of and accesses to the Building.

B The free and uninterrupted passage and running of water, electricity and gaseous products from and to the Premises through the sewers, drains, water-courses, channels, pipes, shafts, flues, cables and wires which now are or may at any time during the Term be in, under or passing through the Building.

C The right of support and protection for the benefit of the Premises as is now enjoyed from the other premises and all other parts of the Building.

EXCEPTIONS AND RESERVATIONS

BUT RESERVING unto the Landlord and all others to whom the Landlord has granted or may grant :

D The easements, rights and privileges over, along and through the Premises equivalent to those above.

E All other easements, ancillary rights and obligations as are or may be implied by the Land Titles Act.

F The free and uninterrupted passage and running of telecommunication facilities from, through and to the Premises.

G The right of support and protection for the benefit of the other premises and all other parts of the Building as is now enjoyed from the Premises.

H The right to develop, redevelop, erect, alter or in any way deal with or use or let the Building or any other part of the Estate in such manner as shall be approved by the Landlord, the superior lessor or the Authorities notwithstanding that the access of light or air or any easement granted or appertaining to or enjoyed with the Premises may be obstructed or interfered with or that the Tenant might otherwise be entitled to object PROVIDED THAT if the same is undertaken by the Landlord, the Landlord shall endeavour to ensure minimum disruption to the Tenant’s operations.

COVENANTS AND CONDITIONS

Definitions

1.1 The following expressions shall have the following meanings:

(a)	"Authorities"	:	all relevant governmental and statutory authorities.
(b)	"Building"	:	the building in which the Premises is situated and of which it forms a part, including but not limited to the common parts and other premises in the building.
(c)	"Carpark"	:	all parking lots, driveways, roads, ramps and loading bays, whether within or outside any building, in the Estate.
(d)	"Commencement Date"	:	as defined in the Tenancy.
(e)	"Estate"	:	the estate in which the Building is situated and of which it forms a part, including but not limited to the Carpark, compounds, grounds, gardens, bin centres, structures, other buildings and drains, cables and pipes above or below ground in the estate.
(f)	"Law"	:	all laws, statutes, legislation, by-laws, rules, orders or regulations now or hereafter in force.
(g)	"Landlord"	:	the Jurong Town Corporation (also known as "JTC Corporation") incorporated under the Jurong Town Corporation Act, its successors-in-title, and assigns.
(h)	"Premises"	:	as defined in the Tenancy.
(i)	"Rent"	:	as defined in the Tenancy.
(j)	"Service Charge"	:	as defined in the Tenancy.
(k)	"Tenant"	:	the Tenant as defined in the Tenancy and includes his personal representatives, successors-in-title, and permitted assigns (if any).

(l) "Tenancy" : the tenancy offer made by the Landlord to the Tenant in respect of the Premises and duly accepted by the Tenant.

(m) "Tenant's Obligations" : covenants, conditions, terms, stipulations and obligations to be observed or performed by the Tenant.
(n) "Term" : as defined in the Tenancy.

Interpretation

1.2 Unless the context otherwise requires:

(a) words importing the singular include the plural and vice versa;

(b) words importing the masculine gender include the feminine gender and vice versa;

(c) the expression "person" includes a body corporate;

(d) reference to a specific Act of Singapore shall include any amendment, revision or replacement made to it from time to time;

(e) where the Tenant consists of two or more persons all Tenant's Obligations shall be deemed to be binding on such persons jointly and severally;

(f) all marginal notes are for ease of reference only and shall not be taken into account in the construction or interpretation of the clause or paragraph to which they refer.

Tenant's Covenants

2 The Tenant covenants with the Landlord as follows:

Rent & Service Charge

2.1 To pay without demand and without deduction the Rent, Service Charge and all other sums charged or imposed upon the Premises or the Tenant by the Landlord in accordance with the Tenancy PROVIDED THAT :

(a) the Landlord shall be at liberty from time to time to revise the amount of Service Charge upon giving a written notice to the Tenant PROVIDED THAT such revision shall not be to a rate higher than that charged to other tenants in the Building; and

(b) the revised Service Charge shall be payable from the date specified in the said notice.

Interest

2.2 To pay interest ("Interest") at the rate of 8.5% per annum on any outstanding amount due and payable under the Tenancy from the due dates until payment in full is accepted by the Landlord PROVIDED THAT :

(a) the Landlord may revise the Interest to a higher rate from time to time at its absolute discretion; and

(b) if the Landlord shall refuse to accept the tender of the outstanding amount because of any breach of the Tenant's Obligations, the Interest shall nevertheless remain due and payable.

Taxes

2.3 To pay the Landlord any increase in property tax, which may be imposed whether by way of an increase in the annual value or an increase in the rate per centum, in the proportion attributable to the Premises as determined by the Landlord in its absolute discretion.

Cost of Documents

2.4 To pay all costs, disbursements, fees and charges, legal or otherwise, including stamp and registration fees in connection with the preparation, stamping and issue of the Tenancy and any prior, accompanying or future documents or deeds, supplementary, collateral or in any way relating to the Tenancy.

Cost of Performance

2.5 To perform and observe all the Tenant's Obligations at his own cost and expense.

Cost of Enforcement

2.6 To pay all costs and fees, legal or otherwise, including costs as between solicitor and client in connection with the enforcement of the Tenant's Obligations.

GST

2.7 To pay, in addition to and together with all taxable sums, the Goods And Services Tax ("GST") at the prevailing rate to the Landlord as collecting agent for the Authorities.

Insurance

2.8 (a) Not to do or suffer to be done anything whereby any insurance for the time being effected on the Premises or the Building may be rendered void or voidable or be in any way affected.

(b) To pay to the Landlord on demand all sums paid by the Landlord by way of increased premium and all costs and expenses incurred by the Landlord in connection with insurance rendered necessary by a breach or non-observance of sub-clause (a) above without prejudice to any other rights and remedies available to the Landlord.

Uniform External Appearance

2.9 Not to alter in any way the external appearance of the Premises including but not limited to the colour and type of all external parts such as doors, windows, grilles and walls without the prior written consent of the Landlord, such consent not to be unreasonably withheld.

Signages

2.10 Not to affix, paint or otherwise exhibit any name plate, banner, advertisement, flag-staff or any other thing except only the name of the Tenant in such places and manner as approved in writing by the Landlord such approval not to be unreasonably withheld or delayed.

Modifications

2.11 Not to do, permit or suffer to be done any of the following without the Landlord's prior written consent such consent not to be unreasonably withheld or delayed:

Tenant's Installations

(a) installation of air-conditioning system, ventilation system, electrical system, telecommunication equipment, plant, machinery, fixtures, fitting or other installations ("Tenant's Installations") in the Premises; and

All installations Fixtures & Fittings

(b) alter, remove, add or in any way interfere or tamper with fixtures, fittings and installations including the Tenant's Installations in the Premises, including but not limited to any existing fire alarm and extinguishing system, ventilation system, air-conditioning system, walls or floor finishes (including any tilings), pipes, wirings, equipment, power and light points and outlets.

Power Surge & Vibration

2.12 (a) Not to install or use any electrical, mechanical or telecommunication equipment, plant, machinery, fixtures, fittings, appliance or installations ("the Equipment") that causes heavy power surge, high frequency voltage and current, noise, vibration or any electrical or mechanical interference or disturbance whatsoever ("the Interference") which:

(a1) may prevent or prevents in any way the service or use of any communication system of the Landlord, other lessees, tenants or occupiers; or

(a2) affects the operation of equipment, plant, machinery, fixtures, fittings, appliances or installations of the Landlord, other lessees,· tenants or occupiers.

(b) To allow the Landlord or any authorised person to inspect at all reasonable times, the Equipment in the Premises to determine the source of the Interference.

(c) To take suitable measures to eliminate or reduce the Interference to the Landlord's reasonable satisfaction, if it is found by the Landlord or such authorised person that the Equipment is causing or contributing to the Interference.

Safety of Building

2.13 (a) Not to do, permit or suffer to be done anything which affects the structure or safety of the Building.

Certificate of Statutory Completion

(b) Not to do, permit or suffer to be done nor omit to do anything which may delay or prevent the issuance of the Certificate of Statutory Completion in respect of the Building.

Thermal Insulation

2.14 Subject to clauses 2.11, 2.12 and 2.13 and the Landlord's prior written consent such consent not to be unreasonably withheld or delayed, to provide thermal insulation to the floor, ceiling and the walls of the Premises if the Tenant's activities results or may result in :

(a) moisture condensation on the floors, ceilings or walls of adjoining premises or common parts of the Building; or

(b) the generation of excessive heat or heat which causes or may cause undue discomfort to the Landlord, its lessees or tenants or the occupiers of any adjoining or neighbouring premises.

Maintenance and Repair

2.15 Subject to clauses 2.11, 2.12 and 2.13, to maintain and in good and tenantable repair and condition, fair wear and tear and damage caused by an event which in the Landlord's reasonable opinion is beyond the Tenant's control, excepted :

(a) the ceilings, doors, windows, glass and all the interior of the Premises including but not limited to walls, soffit, false ceiling, floor and all fixtures and fittings;

(b) the pipes, sumps, grease interceptors and sanitary installations whether in the floor, ceiling, walls or any part of the Premises; and

(c) all party walls, floors and ceilings separating the Premises from other premises in the Building jointly with the adjoining lessees, tenants or occupiers.

Responsibility for Damage

2.16 If the cause of any damage to the Estate can be traced directly or indirectly back to the Tenant's activities :

(a) to reinstate the Estate to the reasonable satisfaction of the Landlord as required by the Landlord in its reasonable discretion and within such time as the Landlord may reasonable stipulate; and

(b) in any event, to pay for all proceedings, costs, expenses, claims, losses, damages, penalties and liabilities arising out of the above including but not limited to such costs and expenses as reasonably determined by the Landlord.

Landlord's Right of Inspection and Repair

2.17 Upon prior reasonable notice to the Tenant, to permit the Landlord, its employees, agents and all persons authorised by it or them, with or without any necessary materials and appliances, at reasonable times during the day or night, to enter upon the Premises to :

(a) view or examine the state and condition of the Premises or the Building including but not limited to all windows,

doors, pipes, ducts, drains, cables and wires;

(b) execute any repairs or works to or in connection with the Building or the Premises which it or they may think fit, including but not limited to installation or replacement of windows, doors, pipes, ducts, drains, cables and wires;

(c) verify, by photographs or other means, that the Tenant's Obligations are observed and performed;

(d) carry out Refurbishment Works referred to in clause 4.5; and

(e) take inventories of equipment, plant, machinery, fixtures, fittings, appliances, installations, goods, materials and articles to verify that the Tenant's Obligations are observed and performed,

Removal of Installations

AND if so reasonable required by the Landlord, to remove any equipment, plant, machinery, installation, fixtures, fittings, appliances, partitions, goods, materials and articles to facilitate the above. The Landlord shall endeavour to ensure minimum disruption to the Tenant's operations.

Emergency

PROVIDED THAT in respect of (c) and (e) above, the Landlord, before performing the works, shall enter into a non-disclosure agreement with the Tenant in the format attached as Annex A **PROVIDED FURTHER THAT** in a situation which in the Landlord's opinion is an emergency or exigency, the Landlord shall have the full right and liberty to enter the Premises immediately, with or without the Tenant's consent, to take such action as the Landlord in its reasonable discretion deems fit.

Cease Activities for Repairs

2.18 To cease activities to such extent and during such hours as the Landlord may specify by reasonable prior written notice to the Tenant for any maintenance or repair work to be executed by the Landlord **PROVIDED THAT** in a situation which in the Landlord's opinion is an emergency or exigency, the Landlord shall be entitled to request the Tenant to cease activities immediately and the Tenant shall comply fully with such request.

No Assignment, Subletting

2.19 (a) Not to demise, assign, charge, create a trust or agency, mortgage, let, sublet, grant a licence or part with or share the possession or occupation of the Premises in whole or in part **PROVIDED THAT** with the Landlord's prior written consent, such consent not to be unreasonably withheld, the Tenant may let, sublet, grant a licence or part with or share the possession or occupation of the Premises in part or assign or novate the Premises in whole.

Sole-proprietor/Partners

(b) Subject to sub-clause (a) above, if the Tenant is a sole-proprietor or comprises of partners carrying on business under a business name registered under the Business Registration Act, not to effect any change in the

constitution or membership of the sole-proprietorship or partnership without the Landlord's prior written consent.

Obstructions

2.20 Not to place, permit or suffer to be placed any object, article or thing in or obstruct the accesses, stairways, passageways, pipes, drains, and other common parts of the Estate.

Disposal of Waste

2.21 To make good and sufficient provision for and to ensure the safe and efficient disposal of all waste, including but not limited to pollutants and refuse, to the reasonable requirements and reasonable satisfaction of the Landlord.

Yield Up at Termination

2.22 (a) At the termination of the Term, by expiry or otherwise :

(a1) to yield up the Premises to the Landlord in good and tenantable repair and condition, fair wear and tear and damage caused by an event which in the Landlord's reasonable opinion is beyond the Tenant's control, excepted;

(a2) (a2.1) to remove all tenant's fixtures and fittings;

(a2.2) to reinstate the Premises; and

(a2.3) if so required by the Landlord, to redecorate by painting the interior of the Premises,

to the reasonable satisfaction of the Landlord,

and in accordance with the Tenant's Obligations.

Permit Viewing

(b) To permit intending tenants and others, authorised by the Landlord or its agents, at reasonable times and by prior appointment with the Tenant, to enter and view the Premises during the three calendar months immediately preceding the determination of the Term.

Compliance with Landlord's Rules & Regulations

2.23 To observe and comply with and ensure observance and compliance with all rules, notices, regulations and stipulations which may, from time to time, be made by the Landlord in respect of the Estate and which have been furnished to the Tenant.

Compliance with Laws

2.24 (a) To comply with the Law and all directions and requirements of the Authorities :

(a1) relating to the Estate (where applicable);

(a2) relating to the use, occupation or otherwise of the Premises; or

(a3) in respect of the observance or performance of the Tenant's Obligations,

whether to be complied with by the Landlord or the Tenant and notwithstanding any consent which the Landlord may grant under any clause in the Tenancy or otherwise.

(b) To inform the Landlord without undue delay in writing of any notice received in relation to sub-clause (a) above.

Head Lease

2.25 To perform and observe the express and implied covenants on the Landlord's part in the head lease made between the President of the Republic of Singapore and the Landlord so far as they are not varied herein.

Hazardous Placement of Objects

2.26 Not to place, permit or suffer to be placed any object, article or thing by any window or balcony or any part of the Premises in a manner which in the Landlord's reasonable opinion may cause or is likely to cause any damage or injury to any property or person.

Nuisance

2.27 Not to do, permit or suffer to be done upon the Premises anything which in the opinion of the Landlord may be or become :

(a) a nuisance, annoyance or cause damage or inconvenience to; or

(b) an interference with the business or quiet or comfort of

the Landlord, its tenants or lessees or the occupiers of any adjoining or neighbouring premises.

Application of Restrictive Covenants

2.28 To comply with all restrictive covenants as set out in the Tenancy or at Law relating to the Premises as if they are also restrictive covenants relating to the Building or the Estate, where the context so admits.

Indemnity

2.29 To be responsible :

(a) for all loss, injury or damage whatsoever to any person or to the Building or the Estate, and any moveable or immovable property, arising directly or indirectly out of or in connection with :

(a1) the occupation or use of the Premises; or

(a2) any act or omission (whether with or without the Landlord's consent), neglect or default of the Tenant, the Tenant's employees, agents, authorised persons or visitors; and

(b) in respect of any act, matter or thing done, omitted to be done, permitted or suffered to be done, in contravention of the Tenant's Obligations,

AND to fully indemnify and keep indemnified the Landlord against all proceedings, costs, expenses, claims, losses, damage, penalties and liabilities arising out of the above PROVIDED THAT the Tenant's **liability to the Landlord, if** any, is limited to direct damages suffered by the Landlord and shall not include indirect, economic or consequential loss or damages.

Landlord's Covenants

3 The Landlord covenants with the Tenant as follows :

Quiet Enjoyment

3.1 Subject to the Tenant performing and observing all the Tenant's Obligations, the Tenant may peaceably and quietly hold and enjoy the Premises without any unlawful interruption or disturbance from or by the Landlord.

General Services

3.2 (a) To keep the exterior and roof of the Building and the lifts, entrances, passageways, staircases, common toilets and other conveniences intended for the use of the Tenant in repair and in sanitary and clean condition.

(b) To keep the stairs and passageways leading to the Premises and the lifts and toilets sufficiently lit.

Property Tax

3.3 To pay property tax payable in respect of the Premises PROVIDED THAT if the rate of such property tax shall be increased whether by way of an increase in the annual value or an increase in the rate percent, then the Tenant shall pay such increase as provided under Clause 2.3.

Insurance of Building

3.4 To keep the Building insured against loss or damage by fire and in the event of such loss or damage (unless resulting from some act or default of the Tenant, the Tenant's employees, agents, authorised persons or visitors) to rebuild and reinstate the damaged part of the Building PROVIDED THAT such insurance shall not include the contents in the Building nor loss due to the Premises being rendered out of commission.

4 The Landlord and Tenant agree to the following :

Forfeiture of Tenancy

4.1 The Landlord is entitled to forfeit the Tenancy by entering the Premises or any part thereof, if :

(a) the Rent, Service Charge, or any other sums due under or by virtue of the Tenancy, or any part thereof is unpaid for fourteen (14) days after becoming payable (whether the same is formally demanded or not);

(b) the Tenant is in breach of any of the Tenant's Obligations and the Landlord has given to the Tenant prior written notice specifying the breach and the Tenant has failed to rectify the breach within such period as set out in such notice;

(c) any writ of seizure and sale or its equivalent made in respect of the Premises is enforced by sale or by entry into possession;

(d) the Tenant enters into liquidation, whether compulsory or voluntary (save for the purpose of reconstruction or amalgamation);

(e) a bankruptcy petition is filed or a bankruptcy order is made against the Tenant;

(f) the Tenant makes an assignment for the benefit of the Tenant's creditors;

(g) the Tenant enters into any arrangement with its creditors by composition or otherwise; or

(h) the Tenant suffers any distress, attachment or execution on or against the Tenant's goods,

PROVIDED THAT the above is without prejudice to the Landlord's other rights and remedies in respect of any breach of the Tenant's Obligations.

Service of Notices

4.2 Any written notice shall be sufficiently served if effected :

(a) on the Landlord by registered post to its business address;

(b) on the Tenant by registered or ordinary post to or by leaving or affixing it at the business address or the Premises NOTWITHSTANDING THAT it is returned by the post office undelivered;

(c) by facsimile to the party to be served and the service shall be deemed to be made on the day of transmission if transmitted before 4 p.m. on a working day or 12 noon on a Saturday, but otherwise on the following working day; or

(d) on the Solicitor for the party in the manner provided in this clause.

Service of Process

4.3 Any process, by writ, summons or otherwise, shall be sufficiently served if effected on :

(a) the Landlord by registered post to its business address;

(b) the Tenant by registered post to or by leaving or affixing it at the business address or the Premises NOTWITHSTANDING THAT it is returned by the post office undelivered; or

(c) the Solicitor for the party in the manner provided in this clause.

Business Address

4.4 The business address for the purposes of clauses 4.2 and 4.3 shall be :

(a) the business address of the Solicitor (if any) who is acting for the party in the matter or proceedings in connection with which the service of the notice or process in question is to be effected;

(b) if the Tenant is a sole-proprietor or comprises of partners carrying or formerly carrying on business under a business name registered under the Business Registration Act, the principal or last known place of business; or

(c) in the case of a body corporate, the registered or principal office of the body.

Refurbishment Works

4.5 (a) The Tenant accepts the Premises with full knowledge that refurbishment and upgrading works are being or may be carried out in the Estate ("Refurbishment Works").

(b) The Tenant shall remove, relocate or modify, temporarily or permanently, every installation, fixture, fitting, device, equipment and article outside the Premises which are installed by the Tenant as the Landlord may specify for the purpose of :

(b1) permitting the Landlord, its employees, agents or authorised persons to properly carry out the Refurbishment Works; or

(b2) improving the appearance or aesthetics of the Building.

PROVIDED THAT the Landlord shall endeavour to ensure minimum disruption to the Tenant's operations.

Consents

4.6 Wherever it is provided in the Tenancy that the Tenant shall not do an act or thing without the Landlord's prior written consent, the Landlord may in its reasonable discretion :

(a) refuse to grant consent without giving any reason, and without refunding any administrative fee paid; or

(b) if it grants consent, in addition to the terms and conditions expressly provided (if any) in the relevant clause, impose reasonable terms and conditions including but not limited to any payment of monies, fees or deposit to the Landlord in accordance with prevailing rates or computation applicable to other tenants in the Building, and the restrictions in Section 17 of the Conveyancing and Law of Property Act shall not apply.

Landlord's Self-Help

4.7 (a) In the event of any breach of any of the Tenant's Obligations, the Landlord, in addition to its rights of forfeiture and any other rights and remedies, shall have reasonable discretion to :

(a1) repair, rectify or make good anything done or omitted to be done by the Tenant or perform any act which the Tenant is to perform under the Tenancy;

(a2) demolish, remove, relocate or modify and confiscate any equipment, plant, machinery, fixtures, fittings, appliances, installations, obstructions, partitions, goods materials, articles or structures including but not limited to grilles, doors, gates, or tilings erected, constructed or substituted by the Tenant in the Premises or at the stairways, passageways or other common parts of the Building;

(a3) reinstate the Landlord's fixtures or fittings with such materials as the Landlord may reasonably elect; or

(a4) carry out such other remedial measures as the Landlord reasonably thinks necessary.

Nothing in this clause shall be deemed to place on the Landlord an obligation to exercise the above rights.

(b) For the purpose of enabling the Landlord to exercise the above rights, the Tenant shall grant to the Landlord, its employees, agents and all persons authorised by it or them the right of entry with or without materials and appliances at reasonable times.

(c) The Tenant shall pay to the Landlord :

(c1) the reasonable costs of all such works and materials used by the Landlord together with such costs and expenses as reasonably determined by the Landlord; and

(c2) if the Tenant yields up the Premises at the termination of the Term, by expiry or otherwise without reinstating it to the standard required under the Tenancy, the sum equivalent to the Rent, Service Charge, tax or other sums which the Landlord would have been entitled to receive from the Tenant had the period within which such reinstatement works are effected by the Landlord been added to the Term,

and the same shall be recoverable from the Tenant as a debt.

Non-Waiver

4.8 The following shall not prejudice nor waive the Landlord's rights or remedies in respect of any breach of the Tenant's Obligations :

(a) any failure or omission of the Landlord to exercise any of its rights as Landlord under the Tenancy or Law;

(b) any receipt or acceptance of any Rent, Service Charge or other sums by the Landlord; or

(c) any waiver, expressed or implied by the Landlord of any other breach of the same or any other Tenant's Obligations,

PROVIDED THAT the Landlord shall be under no obligation to enforce or impose any covenants, conditions or terms against any lessees or tenants of any premises comprised in the Estate.

Landlord's Works

4.9 If required by Law or in the event of Refurbishment Works or any breach of any Tenant's Obligations, the Landlord undertakes any work affecting the Premises, the Landlord may reinstate the Premises :

(a) to the original state the Premises was in at the Commencement Date so far as possible fair wear and tear excepted; or

(b) If it deems fit, with such materials and finishing of similar quality.

The Tenant shall bear all the reasonable costs and expenses for the reinstatement work. If the Landlord deems in its reasonable discretion that such costs and expenses are to be borne by more than one person, the Landlord's apportionment shall be binding and conclusive and the Tenant agrees to pay his share as determined by the Landlord.

Exemption of Liability

4.10 The Landlord shall not be liable to the Tenant or his employees, agents, authorised persons or visitors, or his or their property in respect of any :

(a) interruption in the services provided by the Landlord by reason of any :

(a1) repair, maintenance, damage or Refurbishment Works; or

(a2) mechanical or other defect or breakdown including but not limited to breakdown in electricity, gas and water supply, pumps and lifts;

(b) act, omission, default, misconduct or negligence of the Landlord, its employees, agents and all persons authorised by it or them in connection with :

(b1) the performance or purported performance of any service which the Landlord provides;

(b2) the carrying out or purported carrying out of the Refurbishment Works;

(b3) the exercise or purported exercise of the Landlord's rights under clause 2.17 or 4.9 or self-help under clause 4.7; or

(b4) any accident, injury, loss or damage to the Tenant or his employees, agents, authorised persons or visitors, or his or their property;

(c) loss, damage, injury, liability, claim, penalty, proceedings, cost, expense, or inconvenience that may be suffered by the Tenant or his employees, agents, authorised persons or visitors, or his or their property resulting from or in connection with :

(c1) any breakage of or defect in any pipes, wires or other apparatus of the Landlord used in or about the Building;

(c2) any subsidence or cracking of the ground floor slabs, production floor slabs or apron slabs of the Premises or the Building; or

(c3) any defect, inherent or otherwise in the Premises or the Building.

unless, only in respect of 4.10 (a) and 4.10 (c) above, any loss or damage suffered by the Tenant is caused by the gross negligence or willful misconduct of the Landlord PROVIDED THAT the Landlord's liability, if any, is limited to direct damages suffered by the Tenant and shall not include indirect, economic or consequential loss or damages.

Distress Act

4.11 For the purpose of the Distress Act, the Service Charge shall be deemed to be rent recoverable in the manner provided in the said Act.

Severability

4.12 If at any time any provision or any part of a provision of the Tenancy is or becomes illegal, invalid or unenforceable in any respect, the remaining provisions or parts of the provision (to the extent that they are severable from such illegal, invalid or unenforceable provisions or part of the provision) shall in no way be affected or impaired thereby.

Third Party Rights

4.13 A person who is not a party to the Tenancy shall have no right under the Contracts (Rights of Third Parties) Act to enforce any of the covenants, terms or conditions of the Tenancy.

Governing Jurisdiction and Law

4.14 The Tenancy shall be interpreted in accordance with the laws of Singapore and any legal proceedings, actions or claims arising from or in connection with the Tenancy shall be commenced in and heard before the courts of Singapore and the Tenant agrees to submit itself to the jurisdiction of the courts of Singapore.

27 July 2005

INDUSTRIAL DEVELOPMENT (HIGH-RISE) DEPARTMENT
JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

Attn : Chern Shiong NG

ACCEPTANCE OF OFFER OF TENANCY FOR THE PREMISES AT UNIT # 07-3532/3534/3536/3538 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

1. We refer to your letter of offer and eStatement letter, both dated **25 July 2005** for the Tenancy and hereby confirm our acceptance of all the covenants, terms and conditions of the Offer and the eStatement letter.

2. We are currently opting to pay by GIRO, thus we enclose herewith a cheque for the amount of **$ 33958.20** as confirmation of our acceptance.

3. We have enclose herewith a duly completed GIRO authorization form.

4. We are fully aware that the Tenancy is subject to necessary approvals and clearances from the relevant governmental and statutory authorities (including but not limited to Pollution Control Department of the National Environment Agency and the Public Utilities Board). We shall be responsible to obtain and comply with such approvals and clearances.

5. We understand and agree that we will only be able to view our Statement of Accounts (SA) in Krypton and confirm that the following email addresses are the authorized recipients to receive the email notification to view our SA or eStatement in Krypton.

   Email address 1 : Grace.Yow@Fluidigm.com
   Email address 2 : Jim.Neesen@Fluidigm.com

6. We have enclosed a completed application for EASY access code.

Yow Mai Chan
Name of authorized signatory :
Designation: General Manager

For and on behalf of :

/s/ Yow Mai Chan
FLUIDIGM SINGAPORE PTE. LTD. :

In the presence of :

/s/ Phoa Cheng Han
Name of witness : PHOA CHENG HAN
NRIC No : 52577445 J

Please quote our reference when replying
Our Ref : JTC(L) 8339/859

1 August 2008

FLUIDIGM SINGAPORE PTE. LTD.
1026 TAI SENG AVENUE
#07-3532
SINGAPORE(534413)

By Local Urgent Mail

(Attention : GRACE YOW)

JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

JTC hotline	1800 568 7000
main line	(65) 6560 0056
facsimile	(65) 6565 5301
website	WWW.jtc.gov.sg

Dear Sirs,

OFFER OF TENANCY FOR FLATTED FACTORY SPACE

1 We are pleased to offer a tenancy of the Premises subject to the covenants, terms and conditions in the annexed Memorandum of Tenancy No. **27.09** ("the MT") and in this letter (collectively called "the Offer").

2 **2.1** **The Premises** :

Private Lot **A2045701** also known as Unit **#02-3536** ("the Premises") in **BLK 1026 TAI SENG AVENUE** ("the Building") in the **TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413** as delineated and edged in red on the plan attached to the Offer.

2.2 **Term of Tenancy** :

3 years ("the Term") with effect from **1 November 2008** ("the Commencement Date").

2.3 **Tenancy**:

(a) Your due acceptance of the Offer in accordance with Clause 3 of this letter shall, together with the Offer, constitute a binding tenancy agreement ("the Tenancy").

(b) In the event of any inconsistency or conflict between any covenant, term or condition of this letter and the MT, the relevant covenant, term or condition in this letter shall prevail.

2.4 **Area** :

Approximately **193 square metres** ("the Area").

2.5 **Rent**:
Discounted Rent

(a) Discounted rate of **$8.00** per square metre per month on the Area, for so long as you shall occupy by way of tenancy an aggregate floor area of 1,000 to 4,999 square metres in the Building or in the various flatted factories belonging to us; and

(b) Normal rate of **$8.25** per square metre per month on the Area, in the event that the said aggregate floor area occupied is at any time reduced to below *1,000* square metres (when the discount shall be totally withdrawn) with effect from the date of reduction in the said aggregate floor area.

("Rent") to be paid without demand and in advance without deduction on the 1st day of each month of the year (i.e. 1st of January, February, March, etc.). After your first payment is made in accordance with Clause 3 of this letter and the attached Payment Table, the next payment shall be made on **01 December 2008** .

2.6 **Service Charge :**

$2.25 per square metre per month ("Service Charge") on the Area as charges for services rendered by us, payable by way of additional and further rent without demand on the same date and in the same manner as the Rent, subject to our revision from time to time.

2.7 Security Deposit/Banker's Guarantee :

Ordinarily we would require a tenant to lodge with us a security deposit equivalent to **three (3) months'** rent and service charge. However, as payment by GlRO has been made a condition with which you must comply under clause 3 of this letter, you shall, at the time of your acceptance of the Offer, place with us a deposit equivalent to **one (1) month's** Rent (at the discounted rate) and Service Charge ("Security Deposit") as security against any breach of the covenants, terms and conditions in the Tenancy, as follows :

(a) The Security Deposit may be in the form of cash or acceptable Banker's Guarantee in the form attached (effective from **1 September 2008** to **31 January 2012**), or such other form of security as we may in our absolute discretion permit or accept.

(b) The Security Deposit shall be maintained at the same sum throughout the Term and shall be repayable to you without interest, or returned to you for cancellation, after the termination of the Term (by expiry or otherwise) or expiry of the Banker's Guarantee, as the case may be, subject to appropriate deductions or payment to us for damages or other sums due under the Tenancy.

(c) If the Rent at the discounted rate is increased to the normal rate, or Service Charge is increased, or any deductions are made from the Security Deposit, you shall immediately pay the amount of such increase or make good the deductions so that the Security Deposit shall at all times be equal to **one (1) month's** Rent (at the normal or discounted rate, as the case may be) and Service Charge.

(d) If at any time during the Term, your GlRO payment is discontinued, then you shall place with us, within two (2) weeks of the date of discontinuance of your GIRO payment, the additional sum equivalent to **two (2) months'** Rent and Service Charge, so that the Security Deposit shall at all times be equal to three (3) months' Rent (at the normal or discounted rate, as the case may be) and Service Charge for the remaining period of the Term.

2.8 Mode of Payment:

(a) Your first payment to be made with your letter of acceptance in accordance with Clause 3 of this letter and the attached Payment Table shall be by non-cash mode (eg, Cashier's Order, cheque).

(b) Thereafter during the Term, you shall pay Rent, Service Charge and GST by Interbank GIRO or any other mode to be determined by us.

(c) You have an existing GIRO account with us, the limit of which has to be increased to cover all the aforesaid payments. Please write to your Banker to authorize the same ("the letter of authorization") and let us have a copy thereof in accordance with the Mode of Due Acceptance.

(d) However, pending finalisation for the GIRO arrangement, you shall pay Rent, Service Charge and GST as they fall due by cheque or Cashier's Order.

2.9 Authorised Use :

You shall use the Premises for the purpose of **manufacture and testing of elastomeric microfluidic and life science instruments, including associated research and development activities** only and for no other purpose whatsoever ("the Authorised Use").

2.10 Approvals :

The Tenancy is subject to approvals being obtained from the relevant governmental and statutory authorities.

2.11 Possession of Premises :

(a) Subject to your acceptance of the Offer, keys to the Premises shall be made available to you within the period of two (2) months before the Commencement Date.

(b) From the date you accept the keys to the Premises ("Possession Date") until the Commencement Date, you shall be deemed a licensee upon the same covenants, terms and conditions as in the Tenancy.

(c) If you proceed with the Tenancy after the Commencement Date, the licence fee payable from the Possession Date to the Commencement Date shall be waived ("Rent-Free Period"). Should you fail to so proceed, you shall :

(cl) remove everything installed by you;

(c2) reinstate the Premises to its original state and condition; and

(c3) pay us a sum equal to the prevailing market rent payable for the period from the Possession Date up to the date the installations are removed and reinstatement completed to our satisfaction,

without prejudice to any other rights and remedies we may have against you under the Tenancy or at law.

2.12 Loading Capacity:

(a) Normal (Ground & Non-ground) Floor Premises:

You shall comply and ensure compliance with the following restrictions :

(al) maximum loading capacity of the goods lifts in the Building; and

(a2) maximum floor loading capacity of **12.5** kiloNewtons per square metre of the Premises on the 02 storey of the Building PROVIDED THAT any such permitted load shall be evenly distributed.

(b) You shall therefore, subject to our prior written consent, provide at your own cost suitable and proper foundation for all machinery, equipment and installation at the Premises.

2.13 Option for Renewal of Tenancy:

(a) You may within 3 months before the expiry of the Term make a written request to us for a further term 3 years.

(b) We may grant you a further term of 3 years of tenancy of the Premises subject to the following :

(bl) there shall be no breach of your obligations at the time you make your request for a further term, and at the expiry of the Term;

(b2) the rent payable shall be at a revised rate to be determined by us, having regard to the market rent of the Premises at the time of granting the further term. Our determination of the rent shall be final and conclusive; and

(b3) the tenancy for the further term shall be upon the same covenants, terms and conditions except for the rent, security deposit (which shall be equivalent to three (3) month's rent and service charge instead of two (2) months), and excluding a covenant for renewal of tenancy.

3 **Mode of Due Acceptance**:

The Offer shall lapse if we do not receive the following by **15 August 2008:**

(a) Duly signed letter of acceptance **(in duplicate)** of the Offer, in the form set out in the **Letter of Acceptance** attached. **(Please date as required in your letter of acceptance)**

(b) Payment of the sum set out in the **Payment Table** attached.

(c) A copy of the letter of authorization from you to your Banker.

4 Please note that payments made prior to your giving us the other items listed above may be cleared by and credited by us upon receipt. However, if those other items are not forthcoming from you within the time stipulated herein, the Offer shall lapse and there shall be no contract between you and us arising hereunder. Any payments received shall then be refunded to you without interest and you shall have no claim of whatsoever nature against us.

5 **Rent-Free Period**:

As the Commencement Date will not be deferred, we advise you to accept the Offer as soon as possible and to collect the keys to the Premises on the scheduled date in order to maximize the Rent-Free Period referred to in Clause 2.11(c) of this letter.

6 **Variation to the Tenancy**:

Any variation, modification, amendment, deletion, addition or otherwise of the Offer shall not be enforceable unless agreed by both parties and reduced in writing by us. No terms or representation or otherwise, whether expressed or implied, shall form part of the Offer other than what is contained herein.

7 **Car-Parking Scheme :**

The carpark for **BLK 1026 TAI SENG AVENUE** is currently managed by **P-PARKING INTERNATIONAL PTE LTD** and you will have to observe and be bound by all the rules and regulations governing the use and operation of the carpark. You are requested to contact :

736B GEYLANG ROAD
SINGAPORE 389647
Tel: 67494119
Fax: 67493689

on your use of the carpark.

8 **Electricity Connection:**

Upon your acceptance of the Offer, you are advised to proceed expeditiously to engage a registered electrical consultant to submit two sets each of electrical single-line diagrams and electrical layout plans to and in accordance with the requirements of our **Facilities Management Section, Operations Support Department of our Customer Services Group,** for endorsement before an application is made to SP Services Ltd to open an account for electricity connection.

Please contact the Facilities Management Section at **The JTC Summit, 8 Jurong Town Hall Road Singapore 609434** for their requirements.

9 To guide and assist you, we enclose a **Schedule of Statutory Controls for Flatted, Ramp-up and Stack-up Factory Customers.**

Yours faithfully

/s/ Daniell WONG

Daniell WONG
INDUSTRIAL CLUSTERS DEVELOPMENT DEPARTMENT
INDUSTRIAL PARKS DEVELOPMENT GROUP
JTC CORPORATION
DID : **68833405**
FAX : **68855901**
Email : **daniellw@jtc.gov.sg**

ENCS:

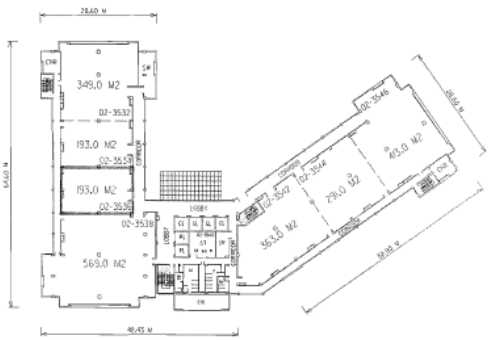
[x] Payment Table
[x] GIRO Form(s)
[x] Specimen BG Plan
[x] Specimen Acceptance Form
[x] MT No. 27.09
[x] **Schedule of Statutory Controls for Flatted, Ramp-up and Stack-up Factory Customers**

PAYMENT TABLE

PREMISES : PRIVATE LOT A2045701 UNIT #02-3536 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

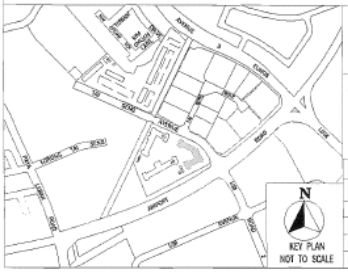
	Amount		+7% GST
Rent at **$8.00** per square metre per month on **193** square metres for the period **1 November 2008** to **30 November 2008**	$ 1544.00		$108.08
$2.25 per square metre per month on **193** square metres for the period **1 November 2008** to **30 November 2008**	$ 434.25		$ 30.40
Total Rent Payable (inclusive of Service Charge)		$1978.25	$138.48
Security Deposit equivalent to three (3) months' Rent and Service Charge (in cash or Banker's Guarantee provided in accordance with Clause 2.7 of this letter)	$ 5934.75		
Less: Equivalent of two (2) month's Rent and Service Charge (re GIRO)	$ 3956.50	$1978.25	

Stamp fee payable on Letter of Acceptance (which we will stamp on your behalf)		
Note: If the Letter is not returned to us within 14 days of the date of the Letter, you will have to pay penalty on the stamp duty which is imposed by Stamp Duty Office of IRAS.	$ 192.00	
Sub-Total Payable	$4148.50	$138.48
Add: GST @ 7%	$ 138.48	
Total Payable inclusive of GST	$4286.98	



2ND STOREY

CnR CONDENSER ROOM
SW SWITCH ROOM
ST STOREROOM
PL PASSENGER LIFT
GL GOODS LIFT
CTR COOLING TOWER ROOM
F FEMALE TOILET
M MALE TOILET
XF EXECUTIVE FEMALE TOILET
XM EXECUTIVE MALE TOILET



JTC CORPORATION

ALLOCATION PLAN

1026 TAI SENG AVENUE

ALLOCATION NO.	A2045701
UNIT NO.	#02-3536
DRAWING NO.	
SCALE	1 : 750
PREPARED BY	Jing Yi
DATE	210496

12 August 2008

INDUSTRIAL DEVELOPMENT (HIGH-RISE) DEPARTMENT
JTC Corporation
The JTC Summit
8 Jurong Town Hall Road
Singapore 609434

Attn : Daniell Wong

ACCEPTANCE OF OFFER OF TENANCY FOR THE PREMISES AT UNIT # 02-3536 BLK 1026 TAI SENG AVENUE TAI SENG INDUSTRIAL ESTATE SINGAPORE 534413

1. We refer to your letter of offer and eStatement letter, both dated **1 August 2008** for the Tenancy and hereby confirm our acceptance of all the covenants, terms and conditions of the Offer and the eStatement letter.

2. We are currently on GIRO, thus we enclose herewith a cheque for the amount of **$ 4,286.98** as confirmation of our acceptance.

3. We are fully aware that the Tenancy is subject to necessary approvals and clearances from the relevant governmental and statutory authorities (including but not limited to Pollution Control Department of the National Environment Agency and the Public Utilities Board). We shall be responsible to obtain and comply with such approvals and clearances.

/s/ Yow Mai Chan, Grace
Yow Mai Chan, Grace
Managing Director

For and on behalf of :

Fluidigm Singapore Pte Ltd
(Reg. No. 200311994M)
Block 1026 Tai Seng Avenue
#07-3532 Singapore 534413
Tel: 6858 7318 Fax: 6282 5531

FLUIDIGM SINGAPORE PTE. LTD. :

In the presence of :

/s/ Tan Suan Hui

Name of witness : TAN SUAN HUI
NRIC No : 50110335J

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated April 12, 2008 (except Note 16, as to which the date is September 16, 2008) in Amendment No. 9 to the Registration Statement (Form S-1 No. 333-150227) and related Prospectus of Fluidigm Corporation for the registration of 6,095,000 shares of its common stock.

/s/ Ernst & Young LLP

Palo Alto, California
September 16, 2008