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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2014

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-34180

FLUIDIGM CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**77-0513190**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

7000 Shoreline Court, Suite 100
South San Francisco, California 94080
(Address of principal executive offices) (Zip Code)

(650) 266-6000
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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 Rule 12b-2 of the Exchange Act.

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of April 30, 2014, there were 28,060,958 shares of the Registrant's common stock outstanding.

FLUIDIGM CORPORATION

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

FLUIDIGM CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)

	March 31, 2014	December 31, 2013
	(Unaudited)	(Note 2)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 101,024	$ 35,261
Short-term investments	42,123	49,083
Accounts receivable (net of allowances of $54 and $36 at March 31, 2014 and December 31, 2013, respectively)	18,790	10,552
Inventories	13,426	8,148
Prepaid expenses and other current assets	3,450	1,540
Total current assets	178,813	104,584
Long-term investments	15,130	1,942
Property and equipment, net	9,377	6,818
Developed technology, net	110,600	—
Goodwill	104,245	—
Other non-current assets	6,558	3,571
Total assets	$ 424,723	$ 116,915
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 8,001	$ 4,353
Accrued compensation and related benefits	4,198	5,485
Other accrued liabilities	8,206	5,392
Deferred revenue, current portion	5,331	2,721
Total current liabilities	25,736	17,951
Convertible notes, net	195,249	—
Deferred tax liability, net	31,708	—
Deferred revenue, net of current portion	3,711	1,899
Other non-current liabilities	888	651
Total liabilities	257,292	20,501
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value, 10,000 shares authorized, no shares issued and outstanding at March 31, 2014 and December 31, 2013	—	—
Common stock: $0.001 par value, 200,000 shares authorized at March 31, 2014 and December 31, 2013; 28,016 and 25,811 shares issued and outstanding as of March 31, 2014 and December 31, 2013, respectively	28	26
Additional paid-in capital	440,921	354,465
Accumulated other comprehensive loss	(757)	(730)
Accumulated deficit	(272,761)	(257,347)
Total stockholders' equity	167,431	96,414
Total liabilities and stockholders' equity	$ 424,723	$ 116,915

See accompanying notes.

FLUIDIGM CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended March 31,	
	2014	2013
Revenue:		
Product revenue	$ 25,449	$ 14,254
License revenue	112	116
Grant revenue	163	165
Total revenue	25,724	14,535
Costs and expenses:		
Cost of product revenue	8,704	4,259
Research and development	7,646	4,197
Selling, general and administrative	15,257	11,146
Acquisition-related expenses	10,696	—
Total costs and expenses	42,303	19,602
Loss from operations	(16,579)	(5,067)
Interest expense	(1,026)	(10)
Gain from sale of investment in Verinata	—	1,777
Other income (expense), net	48	(213)
Loss before income taxes	(17,557)	(3,513)
Benefit from (provision for) income taxes	2,143	(38)
Net loss	$ (15,414)	$ (3,551)
Net loss per share, basic and diluted	$ (0.57)	$ (0.14)
Shares used in computing net loss per share, basic and diluted	26,900	25,242
Comprehensive loss	$ (15,442)	$ (3,555)

See accompanying notes.

FLUIDIGM CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2014	2013
Operating activities		
Net loss	$ (15,414)	$ (3,551)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	920	584
Stock-based compensation expense	3,379	1,255
Acquisition-related share-based awards acceleration expense	2,648	—
Amortization of developed technology	1,400	—
Non-cash charges for sale of inventory revalued at the date of acquisition	517	—
Gain from sale of investment in Verinata	—	(1,777)
Changes in assets and liabilities:		
Accounts receivable, net	(601)	2,933
Inventories	(2,511)	(439)
Prepaid expenses and other current assets	(435)	(410)
Other non-current assets	(3,103)	13
Accounts payable	2,514	1,128
Other current liabilities	(1,415)	(866)
Other non-current liabilities	1,554	246
Net cash used in operating activities	(10,547)	(884)
Investing activities		
Acquisition, net of cash acquired	(113,190)	—
Purchases of investments	(15,003)	(7,414)
Proceeds from sales and maturities of investments	8,775	7,390
Proceeds from sale of investment in Verinata	—	3,117
Purchases of property and equipment	(1,813)	(698)
Net cash (used in) provided by investing activities	(121,231)	2,395
Financing activities		
Proceeds from issuance of convertible notes, net	195,212	—
Proceeds from exercise of stock options	2,287	1,767
Net cash provided by financing activities	197,499	1,767
Effect of foreign exchange rate fluctuations on cash and cash equivalents	42	(112)
Net increase in cash and cash equivalents	65,763	3,166
Cash and cash equivalents at beginning of period	35,261	58,649
Cash and cash equivalents at end of period	$ 101,024	$ 61,815
Supplemental cash flow information:		
Issuance of common stock and options related to acquisition	$ 78,196	$ —

See accompanying notes.

FLUIDIGM CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Description of Business

Fluidigm Corporation (we, our, or us) was incorporated in the State of California in May 1999 to commercialize microfluidic technology initially developed at the California Institute of Technology. In July 2007, we were reincorporated in Delaware. Our headquarters are located in South San Francisco, California. We develop, manufacture, and market life science analytical and preparatory systems for growth markets such as single-cell biology and production genomics. We sell to leading academic institutions, clinical laboratories, and pharmaceutical, biotechnology, and agricultural biotechnology (Ag-Bio) companies worldwide. Our systems are based on proprietary microfluidics and multi-parameter mass cytometry technology, and are designed to significantly simplify experimental workflow, increase throughput, and reduce costs, while providing excellent data quality.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) and following the requirements of the Securities and Exchange Commission (SEC) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. GAAP have been condensed or omitted, and accordingly the balance sheet as of December 31, 2013 has been derived from audited consolidated financial statements at that date but does not include all of the information required by U.S. GAAP for complete financial statements. These financial statements have been prepared on the same basis as our annual financial statements and, in the opinion of management, reflect all adjustments (consisting only of normal recurring adjustments) that are necessary for a fair presentation of our financial information. The results of operations for the three months ended March 31, 2014 are not necessarily indicative of the results to be expected for the year ending December 31, 2014 or for any other interim period or for any other future year.

The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. On an ongoing basis, we evaluate our estimates, including critical accounting policies or estimates related to revenue recognition, income tax provisions, stock-based compensation, inventory valuation, allowances for doubtful accounts and useful lives of long-lived assets. We base our estimates on historical experience and on various relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

The accompanying condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2013 included in our Annual Report on Form 10-K filed with the SEC.

Reclassifications

Certain items previously reported in the condensed consolidated statement of cash flows have been reclassified to conform to the current period presentation. Such reclassifications do not impact previously reported net cash used in operating activities, net cash provided by investing activities, net cash provided by financing activities, or change in cash and cash equivalents.

Net Loss per Share

Our basic and diluted net loss per share is calculated by dividing net loss by the weighted-average number of shares of common stock outstanding for the period. Options to purchase common stock are considered to be potentially dilutive common shares but have been excluded from the calculation of diluted net loss per share as their effect is anti-dilutive for all periods presented.

The following potentially dilutive common shares were excluded from the computation of diluted net loss per share for the interim periods presented because including them would have been anti-dilutive (in thousands):

FLUIDIGM CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(unaudited)

	Three Months Ended March 31,	
	2014	2013
Stock options and restricted stock	3,927	3,731
Convertible notes	3,598	—

Comprehensive Loss

The following is a summary of comprehensive loss (in thousands):

	Three Months Ended March 31,	
	2014	2013
Net loss	$ (15,414)	$ (3,551)
Other comprehensive loss	(28)	(4)
Comprehensive loss	$ (15,442)	$ (3,555)

Comprehensive loss is comprised of net loss, unrealized gains and losses on our investments, and foreign currency translation adjustments.

Investment, at cost

In February 2013, Illumina, Inc. acquired Verinata for $350 million in cash and up to an additional $100 million in milestone payments through 2015. In March 2013, we received cash proceeds of $3.1 million in exchange for our ownership interest in Verinata resulting in a gain of $1.8 million. If the milestone payments become payable in the future, we could receive up to $3.2 million in additional proceeds.

Business Combinations

Assets acquired and liabilities assumed as part of a business acquisition are generally recorded at their fair value at the date of acquisition. The excess of purchase price over the fair value of assets acquired and liabilities assumed is recorded as goodwill. Determining fair value of identifiable assets, particularly intangibles, and liabilities acquired also requires management to make estimates, which are based on all available information and in some cases assumptions with respect to the timing and amount of future revenues and expenses associated with an asset. Accounting for business acquisitions requires management to make judgments as to whether a purchase transaction is a multiple element contract, meaning that it includes other transaction components such as a settlement of a preexisting relationship. This judgment and determination affects the amount of consideration paid that is allocable to assets and liabilities acquired in the business purchase transaction.

Long-lived Assets

Goodwill and intangible assets with indefinite lives are not subject to amortization, but are tested for impairment on an annual basis during the fourth quarter or whenever events or changes in circumstances indicate the carrying amount of these assets may not be recoverable. We first conduct an assessment of qualitative factors to determine whether it is more likely than not that the fair value of our reporting unit is less than its carrying amount. If we determine that it is more likely than not that the fair value of our reporting unit is less than its carrying amount, we then conduct a two-step test for impairment of goodwill. In the first step, we compare the fair value of our reporting unit to its carrying values. If the fair values of our reporting unit exceed the carrying value of the net assets, goodwill is not considered impaired and no further analysis is required. If the carrying values of the net assets exceed the fair values of the reporting unit, then the second step of the impairment test must be performed in order to determine the implied fair value of the goodwill. If the carrying value of the goodwill exceeds the implied fair value, then an impairment loss equal to the difference would be recorded.

Legal Matters

From time to time, we may be subject to various legal proceedings and claims arising in the ordinary course of business. We assess contingencies to determine the degree of probability and range of possible loss for potential accrual in our financial statements. An estimated loss contingency is accrued in the financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

Pursuant to the terms of a patent cross license agreement with Applied Biosystems, LLC (a subsidiary of Life Technologies Corporation, or Life, and now part of Thermo Fisher Scientific), we were obligated to make a $1.0 million payment to Life upon satisfaction of certain conditions. We do not believe that the conditions triggering the payment obligation have been met; however, on October 16, 2013, Life provided notice that the $1.0 million payment was due and payable under the license agreement. We accrued a loss contingency of $1.0 million on September 30, 2013 and on January 30, 2014, we paid Life the amount due while reserving our rights with respect to such matter. Among other reasons, we made the payment to avoid what would have been, in our view, an improper termination of our license to certain Life patent filings under the agreement, which could have subjected our relevant product lines to risks associated with patent infringement litigation.

Recent Accounting Pronouncement

In June 2013, the Financial Accounting Standards Board ratified Emerging Issues Task Force (EITF) Issue 13-C, “Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists” which concludes an unrecognized tax benefit should be presented as a reduction of a deferred tax asset when settlement in this manner is available under the tax law. This guidance is effective for our interim and annual periods beginning January 1, 2014. We do not believe the adoption of this guidance will have a material impact on our consolidated financial statements.

3. Convertible Notes

On February 4, 2014, we closed an underwritten public offering of $201.3 million aggregate principal amount of our 2.75% Senior Convertible Notes due 2034 (Notes) pursuant to an underwriting agreement, dated January 29, 2014. The Notes will accrue interest at a rate of 2.75% per year, payable semi-annually in arrears on February 1 and August 1 of each year, commencing August 1, 2014. The Notes will mature on February 1, 2034, unless earlier converted, redeemed, or repurchased in accordance with the terms of the Notes. The initial conversion rate of the Notes is 17.8750 shares of our common stock, par value $0.001 per share, per $1,000 principal amount of Notes (which is equivalent to an initial conversion price of approximately $55.94 per share). The conversion rate will be subject to adjustment upon the occurrence of certain specified events. Holders may surrender their Notes for conversion at any time prior to the stated maturity date. On or after February 6, 2018 and prior to February 6, 2021, we may redeem any or all of the Notes in cash if the closing price of our common stock exceeds 130% of the conversion price for a specified number of days, and on or after February 6, 2021, we may redeem any or all of the Notes in cash without any such condition. The redemption price of the Notes will equal 100% of the principal amount of the Notes plus accrued and unpaid interest. Holders may require us to repurchase all or a portion of their Notes on each of February 6, 2021, February 6, 2024, and February 6, 2029 at a repurchase price in cash equal to 100% of the principal amount of the Notes plus accrued and unpaid interest. If we undergo a fundamental change, as defined in the terms of the Notes, holders may require us to repurchase the Notes in whole or in part for cash at a repurchase price equal to 100% of the principal amount of the Notes plus accrued and unpaid interest.

We received $195.2 million, net of underwriting discounts, from the issuance of the Notes and incurred $1.1 million in offering-related expenses. We used $126.0 million of the net proceeds to fund the cash portion of the consideration payable by us in connection with our acquisition of DVS Sciences, Inc. (now Fluidigm Sciences Inc.) (See Note 4).

4. Acquisition

On February 13, 2014 (Acquisition Date), we acquired DVS Sciences, Inc. (DVS) primarily to broaden our addressable single-cell biology market opportunity and complement our existing product offerings. DVS develops, manufactures, markets, and sells multi-parameter single-cell protein analysis systems and related reagents and data analysis tools. DVS’s principal market is the life sciences research market consisting of drug development companies, government research centers, and universities worldwide.

The contractual price for the acquisition was $207.5 million, subject to certain adjustments as specified in the merger agreement. The aggregate purchase price was determined to be $199.9 million, as detailed in the table below:

	Estimated Fair Value (in thousands)
Cash	$ 126,048
Issued 1,759,007 shares of Fluidigm common stock	76,805
Acquisition consideration paid at Acquisition Date	202,853
Accelerated stock compensation (1)	(6,690)
Estimated fair value of vested Fluidigm equivalent stock options (2)	4,039
Working capital adjustment	(269)
Aggregate purchase price	**$ 199,933**

(1) As a part of the acquisition, we accelerated vesting of certain DVS stock options and shares of restricted stock, and incurred a $6.7 million expense, based upon the per share consideration paid to holders of shares of DVS common stock as of February 13, 2014. This expense is accounted for as a separate transaction and reflected in the acquisition-related expenses line of the condensed consolidated statements of operations.

(2) In conjunction with the acquisition, we assumed all outstanding DVS stock options and unvested shares of restricted stock and converted, as of the Acquisition Date, the unvested stock options outstanding under the DVS stock option plan into unvested stock options to purchase approximately 143,000 shares of Fluidigm common stock and approximately 186,000 shares of restricted Fluidigm common stock, retaining the original vesting schedules. The fair value of all converted share-based awards was $14.6 million, of which $4.0 million was attributed to the pre-combination service period and was included in the calculation of purchase price. The remaining fair value will be recognized over the awards' remaining vesting periods subsequent to the acquisition. The fair value of the Fluidigm equivalent share-based awards as of the Acquisition Date was estimated using the Black-Scholes valuation model.

Approximately 885,000 shares of Fluidigm common stock, with a fair value of $38.6 million, representing 50.3030% of the shares otherwise payable to the former stockholders of DVS, was deposited into escrow. These shares comprise a portion of the merger consideration and will be held in escrow to secure indemnification obligations under the merger agreement, if any, for a period of 13 to 18 months following the Acquisition Date, subject to any then pending indemnification claims.

Prior to the closing of the acquisition, we closed an underwritten public offering of $201.3 million aggregate principal amount of our Notes (See Note 3) to fund a portion of the cash consideration payable in connection with the acquisition. The results of DVS's operations have been included in the condensed consolidated financial statements for the period from February 13, 2014 to March 31, 2014.

As of March 31, 2014, the accounting for the Acquisition is preliminary due to the ongoing analysis of the developed technology relating to intellectual property rights acquired in connection with the acquisition, associated royalty obligations pursuant to third-party license agreements, and certain tax liabilities. Upon completion of this analysis and during the measurement period, we may record adjustments to the estimated amounts recorded.

Net Assets Acquired

The transaction has been accounted for using the acquisition method of accounting which requires that assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date. The following table summarizes the assets acquired and liabilities assumed as of the Acquisition Date:

	Allocation of purchase price (in thousands)
Cash and cash equivalents	$ 8,405
Accounts receivable, net	7,698
Inventories	3,489
Prepaid expenses and other current assets	1,482
Property and equipment, net	1,202
Developed technology	112,000
Goodwill	104,245
Other non-current assets	88
Total assets acquired	238,609
Accounts payable	(1,114)
Accrued compensation and related benefits	(761)
Other accrued liabilities	(1,204)
Deferred revenue, current portion	(1,844)
Tax payable	(45)
Deferred tax liability	(32,079)
Deferred revenue, net of current portion	(1,629)
Net assets acquired	**$ 199,933**

The following table is a summary of the fair value estimate of the identifiable intangible asset and its useful life:

	Useful Life	Estimated Fair Value (in thousands)
Developed technology	10 years	112,000

The $104.2 million of goodwill recognized as part of the transaction is attributable primarily to expected synergies and other benefits from the acquisition and is not expected to be deductible for income tax purposes.

Acquisition Costs

Acquisition-related expenses were $10.7 million for the three months ended March 31, 2014 and primarily included accelerated vesting of certain DVS restricted stock and options, and consulting, legal, and investing banking fees. These costs are included within the acquisition-related expenses line of the condensed consolidated statements of operations.

Actual and Pro Forma Results

The amounts of total revenue and net loss of DVS included in our condensed consolidated statement of operations from the Acquisition Date to March 31, 2014 are as follows:

	Acquisition Date to March 31, 2014 (in thousands)
Total revenue	$ 2,828
Net loss	$ (1,597)

The unaudited pro forma results presented below include the effects of the DVS acquisition as if it had been consummated as of January 1, 2013. The pro forma results below include adjustments related to depreciation and amortization to reflect the fair value of acquired property and equipment and identifiable intangible assets, stock-based compensation, and the associated income

tax impacts. Share-based compensation associated with accelerated vesting and acquisition related costs, which are not expected to occur in future quarters, are not reflected in the pro forma calculation. The pro forma information does not necessarily reflect the actual results of operations had the acquisition been consummated at the beginning of the fiscal reporting period indicated nor is it indicative of future operating results. The pro forma information does not include any adjustment for (i) potential revenue enhancements, cost synergies or other operating efficiencies that could result from the acquisition. or (ii) transaction or integration costs relating to the acquisition.

	March 31, 2013 (in thousands)	March 31, 2014 (in thousands)
Unaudited pro forma total revenue	$ 18,735	$ 29,509
Unaudited pro forma net loss	$ (10,297)	$ (18,986)

5. Goodwill and Intangible Assets

Goodwill

Upon the acquisition of DVS, we acquired $104.2 million of goodwill. There were no changes in goodwill balance between the Acquisition Date and March 31, 2014.

Intangible Assets

The following table provides details of our intangible assets related to the DVS acquisition as of March 31, 2014 (in thousands, except years):

	Gross	Accumulated Amortization	Net	Useful Life (years)
Developed technology	$ 112,000	$ (1,400)	$ 110,600	10

We recognized $1.4 million in intangible asset amortization expense during the quarter ended March 31, 2014. The estimated future amortization expense of intangible assets as of March 31, 2014 is as follows (in thousands):

	Amount
2014 (remainder of year)	$ 8,400
2015	11,200
2016	11,200
2017	11,200
2018	11,200
Thereafter	57,400
	$ 110,600

6. Inventories

Inventories consist of the following (in thousands):

	March 31, 2014	December 31, 2013
Raw materials	$ 5,467	$ 2,650
Work-in-process	1,900	1,627
Finished goods	6,059	3,871
	$ 13,426	$ 8,148

7. Fair Value of Financial Instruments

As a basis for considering fair value, we follow 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 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 us to develop our own assumptions.

Our cash equivalents, which include money market funds, are classified as Level I because they are valued using quoted market prices. Our investments are generally classified as Level II because their value is based on valuations using significant inputs derived from or corroborated by observable market data. Depending on the security, the income and market approaches are used in the model driven valuations. Inputs of these models include recently executed transaction prices in securities of the issuer or comparable issuers and yield curves.

The following table sets forth our financial instruments that were measured at fair value by level within the fair value hierarchy (in thousands):

	March 31, 2014				December 31, 2013			
	Level I	Level II	Level III	Total	Level I	Level II	Level III	Total
Assets								
Money market funds	$ 77,490	$ —	$ —	$ 77,490	$ 17,547	$ —	$ —	$ 17,547
U.S. government and agency securities	—	57,253	—	57,253	—	51,025	—	51,025
Total assets measured at fair value	$ 77,490	$ 57,253	$ —	$ 134,743	$ 17,547	$ 51,025	$ —	$ 68,572

The following is a summary of investments at March 31, 2014 (in thousands):

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
U.S. government and agency securities	$ 57,239	$ 20	$ (6)	$ 57,253

The contractual maturity dates of $42.1 million of our investments are within one year from March 31, 2014. The contractual maturity dates of our remaining securities are less than eighteen months from March 31, 2014.

The following is a summary of our cash and cash equivalents (in thousands):

	March 31, 2014	December 31, 2013
Cash	$ 23,534	$ 17,714
Money market funds	77,490	17,547
Cash and cash equivalents	$ 101,024	$ 35,261

8. Line of Credit

A bank line of credit, as amended, provides us with the ability to borrow up to $10.0 million, of which $6.0 million is available on a non-formula basis, subject to certain covenants and other restrictions. The balance of $4.0 million is available based on eligible receivables. The line of credit expires in December 2014 and is collateralized by our assets, excluding our intellectual property, and bears interest at a rate equal to the greater of (i) 3.75% or (ii) the prime rate plus 0.50% per year. At March 31, 2014, there was no outstanding balance on the line of credit. On May 9, 2014, we entered into a modification agreement with the lender to amend and waive certain financial covenants under the financing agreement, effective as of March 31, 2014. Except to the extent specifically amended pursuant to the modification agreement, the financing agreement remains in full force and effect. We are in compliance with all applicable covenants under the financing agreement.

9. Commitments and Contingencies

Operating Leases

On April 9, 2013, we entered into an amendment (the Amendment) to the lease agreement dated September 4, 2010 (as amended, the Lease) relating to the lease of office and laboratory space at our headquarters located at 7000 Shoreline Court, South San Francisco, California. The Amendment provided for an expansion of the premises covered under the Lease, effective April 1, 2014; an extension of the term of the Lease to April 30, 2020 with an option to renew for an additional five years; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The Amendment also provided for an allowance of approximately $0.7 million for tenant improvements, which, to the extent not used by March 31, 2015, will be used to offset base rent obligations, and an additional allowance of approximately $0.5 million for tenant improvements, which, if used, will be repaid in equal monthly payments with interest at a rate of 9% per annum over the remaining term of the Lease.

On October 14, 2013, Fluidigm Singapore accepted an offer of tenancy (Lease) from HSBC Institutional Trust Services (Singapore) Limited, as trustee of Ascendas Real Estate Investment Trust (Landlord), relating to the lease of a facility located at Block 5008, Ang Mo Kio Avenue 5, TECHplace II, Singapore 569874. Pursuant to the terms of the Lease, Fluidigm Singapore took possession of the facility commencing on March 3, 2014 for a term of 99 months, and the Lease and rental obligations thereunder will commence on June 3, 2014. The Lease also provides Fluidigm Singapore with an option to renew the Lease for an additional 60 months at the then prevailing market rent, and on similar terms as the existing Lease, and a right of first refusal on certain additional space in the building beginning June 2, 2014 until June 1, 2015. The leases for Fluidigm Singapore's existing facilities terminate on August 31, 2014. Fluidigm Singapore intends to consolidate its manufacturing operations in the new space in the third quarter of 2014.

In connection with our acquisition of DVS (See Note 4), we assumed the operating leases for facilities in Sunnyvale, California and Markham, Ontario, Canada, which expire in January 2016 and July 2016, respectively. The Canada lease includes an option to renew the lease for an additional five years at the then prevailing market rent, and on similar terms as the existing lease. We recognize rent expense on a straight-line basis over the non-cancelable lease term. Rent expense for the period February 13, 2014 to March 31, 2014 was $44,000. The total operating lease obligations for the assumed operating leases in Sunnyvale, California and Markham, Ontario, Canada are $716,000 as of March 31, 2014.

10. Stock-Based Compensation

During the three months ended March 31, 2014, we granted to certain employees options to purchase 352,000 shares of common stock with exercise prices ranging from $44.07 to $47.55 per share. These options had a total grant date fair value of $9.2 million that will be recognized as expense over their respective 4-year vesting periods. We also granted 285,000 restricted stock units to certain employees with fair market values ranging from $42.43 to $47.55 per share. These restricted stock units had a total grant date fair value of $13.2 million that will be recognized as expense over the respective 4-year vesting periods.

We recognized stock-based compensation expense of $3.4 million and $1.3 million during the three months ended March 31, 2014 and 2013, respectively. As of March 31, 2014, we had $25.2 million and $20.1 million of unrecognized stock-based compensation costs related to stock options and restricted stock units, respectively, which are expected to be recognized over a weighted average period of 2.9 years and 3.9 years, respectively.

In conjunction with the DVS acquisition, we assumed all outstanding DVS stock options and unvested shares of restricted stock. (See Note 4.) As of March 31, 2014, we had $2.2 million and $7.0 million of unrecognized stock-based compensation costs related to these stock options and restricted stock, respectively, which are expected to be recognized over a weighted average period of 2.0 years and 0.8 years, respectively.

11. Income Taxes

Income taxes are primarily comprised of state and foreign income taxes. The provision or benefit for income taxes for the periods presented differs from the 34% U.S. Federal statutory rate primarily due to maintaining a valuation allowance for U.S. losses and tax assets, which we do not consider to be realizable. Income tax expense primarily consists of amounts payable in foreign jurisdictions. As a result of the intangible assets arising from the DVS acquisition (See Note 4), we recorded foreign and California deferred tax liabilities of $30.0 million and $2.0 million, respectively. The related valuation allowance associated with our California deferred tax assets was released and recorded as an income tax benefit in the quarter ended March 31, 2014.

12. Information About Geographic Areas

We operate in one reporting segment, which is the development, manufacturing, and commercialization of life science analytical and preparatory systems consisting of instruments and consumables for academic institutions, clinical laboratories, and pharmaceutical, biotechnology, and Ag-Bio companies in growth markets, such as single-cell biology and production genomics.

The following table presents our product revenue by geography based on the billing address of our customers for each period presented (in thousands):

	Three Months Ended March 31,	
	2014	2013
United States	$ 11,238	$ 6,919
Europe	6,382	3,501
Japan	4,354	1,499
Asia-Pacific	2,092	1,915
Other	1,383	420
Total	$ 25,449	$ 14,254

Our license and grant revenues are primarily generated in the United States.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read together with our condensed consolidated financial statements and the notes to those statements included elsewhere in this Form 10-Q. This Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act, that are based on our management's beliefs and assumptions and on information currently available to our management. The forward-looking statements are contained principally in the section entitled "Risk Factors" and this Management's Discussion and Analysis of Financial Condition and Results of Operations. Forward-looking statements include information concerning our possible or assumed future cash flow, revenue, sources of revenue and results of operations, operating and other expenses, unit sales, business strategies, financing plans, expansion of our business, competitive position, industry environment, potential growth opportunities, and the effects of competition. Forward-looking statements include statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in Part II, Item 1A, "Risk Factors," elsewhere in this Form 10-Q, and in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our management's beliefs and assumptions only as of the date of this Form 10-Q.

Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. You should read this Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect.

"Fluidigm," the Fluidigm logo, "BioMark," "Access Array," "C_1," "CyTOF," "EP1," "SNPtype," and "DELTAgene" are trademarks or registered trademarks of Fluidigm Corporation. Other service marks, trademarks, and trade names referred to in this Form 10-Q are the property of their respective owners.

In this Form 10-Q, "we," "us" and "our" refer to Fluidigm Corporation and its subsidiaries.

Overview

We develop, manufacture, and market life science analytical and preparatory systems for growth markets such as single-cell biology and production genomics. We sell to leading academic institutions, clinical laboratories, and pharmaceutical, biotechnology, and agricultural biotechnology, or Ag-Bio, companies worldwide. Our systems are based on proprietary microfluidics and multi-parameter mass cytometry technology, and are designed to significantly simplify experimental workflow, increase throughput, and reduce costs, while providing excellent data quality. We have sold approximately 1,000 systems to customers in over 30 countries worldwide.

We have launched several product lines since 2006, including systems for gene expression analysis, genotyping, digital polymerase chain reaction, or digital PCR, single nucleotide polymorphism genotyping, or SNP genotyping, target enrichment, high-throughput gene expression analysis, targeted single-cell gene expression analysis, and single-cell sample preparation. In May 2011, we launched assay products for gene expression and genotyping, and primers for targeted next-generation DNA sequencing. Our systems utilize one or more integrated fluidic circuits, or IFCs, designed for particular applications and include specialized instrumentation and software, as well as assays and other reagents for certain applications. Additionally, pursuant to our acquisition of DVS Sciences, Inc. (now Fluidigm Sciences Inc.), or DVS, on February 13, 2014, we now also develop, manufacture, market, and sell multi-parameter single-cell protein analysis systems and related reagents and data analysis tools.

We distribute our systems through our direct sales force and support organizations located in North America, Europe, and Asia-Pacific, and through distributors or sales agents in several European, Latin American, Middle Eastern, and Asia-Pacific countries. Our manufacturing operations are primarily located in Singapore and Canada. Our facility in Singapore manufactures our genomics analytical and preparatory instruments, several of which are assembled at facilities of our contract manufacturers in Singapore, with testing and calibration of the assembled products performed at our Singapore facility. All of our IFCs for commercial sale and some IFCs for our research and development purposes are also fabricated at our Singapore facility. Our proteomics analytical instruments are manufactured at our facility in Canada, and our assays and reagents for commercial sale and IFCs for our research and development purposes are manufactured at our facilities in South San Francisco and Sunnyvale, California.

Our total revenue grew from $52.3 million in 2012 to $71.2 million in 2013, and for the three months ended March 31, 2014, our total revenue was $25.7 million. We have incurred significant net losses since our inception in 1999 and, as of March 31, 2014, our accumulated deficit was $272.8 million.

Critical Accounting Policies, Significant Judgments and Estimates

Our condensed consolidated financial statements and the related notes included elsewhere in this Form 10-Q are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, 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 accounting estimates may 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 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.

Except as otherwise disclosed, there have been no material changes in our critical accounting policies and estimates in the preparation of our condensed consolidated financial statements during the three months ended March 31, 2014 compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2013, as filed with the SEC on March 12, 2014.

Results of Operations

Revenue

We generate revenue from sales of our products, license agreements, and government grants. Our product revenue consists of sales of instruments and related services, and consumables, including IFCs, assays, and other reagents. We have entered into license agreements and have received government grants to conduct research and development activities.

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

	Three Months Ended March 31,	
	2014	2013
Revenue:		
Instruments	$ 15,107	$ 7,905
Consumables	10,342	6,349
Product revenue	25,449	14,254
License revenue	112	116
Grant revenue	163	165
Total revenue	$ 25,724	$ 14,535

The following table presents our product revenue by geography and as a percentage of total product revenue by geography based on the billing address of our customers for each period presented ($ in thousands):

	Three Months Ended March 31,			
	2014		2013	
United States	$ 11,238	44%	$ 6,919	49%
Europe	6,382	25%	3,501	25%
Japan	4,354	17%	1,499	10%
Asia-Pacific	2,092	8%	1,915	13%
Other	1,383	6%	420	3%
Total	$ 25,449	100%	$ 14,254	100%

Our customers include academic research institutions, clinical laboratories, and pharmaceutical, biotechnology, and Ag-Bio companies worldwide. Total revenue from our five largest customers in each of the periods presented comprised 19% and 21% of our total revenue in the three months ended March 31, 2014 and 2013, respectively.

Comparison of the Three Months Ended March 31, 2014 and March 31, 2013

Total Revenue

Total revenue increased by $11.2 million, or 77%, to $25.7 million for the three months ended March 31, 2014, compared to $14.5 million for the three months ended March 31, 2013.

Product Revenue

Product revenue increased by $11.2 million, or 79%, to $25.4 million for the three months ended March 31, 2014, compared to $14.3 million for the three months ended March 31, 2013.

Instrument revenue increased by $7.2 million, or 91%, primarily driven by increased unit sales of our preparatory systems, which include our C_1 Single-Cell Auto Prep System; to a lesser extent, increases in unit sales of our BioMark HD System; and unit sale contributions from our recently acquired CyTOF 2 system. Higher sales of service offerings, including service related to CyTOF 2 systems, and higher average selling prices of our instrument systems also contributed to the increase in instrument revenue. The revenue increase was slightly offset by lower unit sales of our Access Array System and lower accessory sales.

Consumables revenue increased by $4.0 million, or 63%, primarily due to growth in overall IFC unit volume, driven mainly by increased sales to production genomics customers. Annualized IFC pull-through for our genomics analytical systems was slightly above our historical range of $40,000 to $50,000 per system and within our expected range of $15,000 to $25,000 per system for genomics preparatory systems. Annualized IFC pull-through for our proteomics analytical systems was within our historical range of $50,000 to $70,000 per system. To a lesser extent, sales from our recently acquired antibody consumables, and higher sales of our assays and reagents also contributed to the overall increases in consumables revenue.

We expect total unit sales of both instruments and consumables to increase over time as we continue our efforts to grow our customer base, expand our geographic market coverage, and launch new products. However, we expect the average selling prices of our products to fluctuate over time based on market conditions, product mix, and currency fluctuations.

Grant Revenue

Grant revenue consists of a grant from California Institute for Regenerative Medicine, or CIRM. Our CIRM grant was awarded in 2011 in the amount of $1.9 million to be earned over a three-year period. The CIRM grant revenue is recognized as the related research and development services are performed and costs associated with the grants are recognized as research and development expense during the period incurred.

Grant revenue was $0.2 million for each of the three months ended March 31, 2014 and 2013.

Cost of Product Revenue

The following table presents our cost of product revenue and product margin for each period presented (in thousands, other than percentages):

	Three Months Ended March 31,	
	2014	2013
Cost of product revenue	$ 8,704	$ 4,259
Product margin	66%	70%

Cost of product revenue includes manufacturing costs incurred in the production process, including component materials, labor and overhead, installation, packaging, and delivery costs. In addition, cost of product revenue includes royalty costs for licensed technologies included in our products, warranty, service, provisions for slow-moving and obsolete inventory, and stock-based compensation expense. Costs related to license and grant revenue are included in research and development expense.

Cost of product revenue increased by $4.4 million, or 104%, to $8.7 million for the three months ended March 31, 2014. Overall cost of product revenue as a percentage of related revenue was 34% and 30% for the three months ended March 31, 2014 and 2013, respectively.

Non-cash charges resulting from the acquisition of DVS increased the cost of product revenue as a percentage of related revenue by approximately 7 percentage points. These charges included amortization of developed technology and step-up in the basis of acquired inventory.

The unfavorable impact of these charges was partially offset by lower IFC costs resulting from higher production volumes related to higher sales volumes and inventory build-up in preparation for the transition of our Singapore manufacturing operations to a new site. In addition, instrument margins improved mainly due to favorable average unit sales prices; a higher mix of C_1 Single-Cell Auto Prep Systems, which have a higher margin compared to other instruments; and lower freight and service costs as a percentage of revenues.

Operating Expenses

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

	Three Months Ended March 31,	
	2014	2013
Research and development	$ 7,646	$ 4,197
Selling, general and administrative	15,257	11,146
Total operating expenses	$ 22,903	$ 15,343

Research and Development

Research and development expense consists primarily of personnel and independent contractor costs, prototype and material 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 enhancing our technologies and supporting development and commercialization of new and existing products and services.

Research and development expense increased $3.4 million, or 82%, to $7.6 million for the three months ended March 31, 2014, compared to $4.2 million for the three months ended March 31, 2013. The acquisition of DVS contributed approximately $2.0 million. The remainder of the increase was attributable to headcount and other compensation-related costs of $1.0 million; and an increase in facility expenses of $0.2 million. We incurred these costs to support our development and commercialization of new and existing products and services.

We believe that our continued investment in research and development is essential to our long-term competitive position and these expenses may 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 $4.1 million, or 37%, to $15.3 million for the three months ended March 31, 2014, compared to $11.1 million for the three months ended March 31, 2013. The increase related to the acquisition of DVS was $1.5 million. We also had higher headcount and other compensation-related costs of $1.4 million, an increase in legal and accounting fees of $0.7 million; and an increase in sales and marketing activities of $0.1 million. The increase was primarily driven by expansion of our worldwide commercial capabilities, and to a lesser extent, general and administrative expense to support our growth.

We expect selling, general and administrative expense to increase in 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 our expanding global footprint and the overall growth in our business.

Acquisition-Related Expenses

Acquisition-related expenses were $10.7 million for the three months ended March 31, 2014 and primarily included accelerated vesting of certain DVS restricted stock and options, and consulting, legal, and investing banking fees.

Interest Expense and Other Income and Expense, Net

We have incurred interest expense and amortization of debt discount related to our long-term debt. The following table presents interest expense and other income and expense items for each period presented (in thousands):

	Three Months Ended March 31,	
	2014	2013
Interest expense	$ (1,026)	$ (10)
Gain from sales of investment in Verinata	—	1,777
Other income (expense), net	48	(213)

On February 4, 2014, we closed an underwritten public offering of $201.3 million aggregate principal amount of our 2.75% Senior Convertible Notes due 2034, or the Notes. The Notes will accrue interest at a rate of 2.75% per year, payable semi-annually in arrears on February 1 and August 1 of each year, commencing August 1, 2014. The Notes will mature on February 1, 2034, unless earlier converted, redeemed, or repurchased in accordance with the terms of the Notes. As a result of the issuance of the Notes, we expect interest expense to be higher in future quarters as the expense will accrue over the full quarter as opposed to the partial quarter in the first quarter of 2014.

Interest expense increased by $1.0 million for the three months ended March 31, 2014 compared to the three months ended March 31, 2013 related to the Notes, including amortization of underwriting commission and other debt related costs.

Other income, net increased by $0.3 million for the three months ended March 31, 2014 compared to other expense, net of $213,000 for the three months ended March 31, 2013. In 2013, the loss was due primarily to an unfavorable rate change in the Japanese Yen against the U.S. dollar, which did not recur in the current period.

In February 2013, Illumina, Inc. acquired Verinata Health, Inc. (Verinata) for $350 million in cash and up to an additional $100 million in milestone payments through 2015. In March 2013, we received cash proceeds of $3.1 million in exchange for our ownership interest in Verinata, resulting in a gain of $1.8 million. If the milestone payments become payable in the future, we could receive up to $3.2 million in additional proceeds. The $1.8 million gain we recognized did not include any amounts that may be received upon the achievement of future milestones.

Liquidity and Capital Resources

Sources of Liquidity

As of March 31, 2014, our principal sources of liquidity consisted of $101.0 million of cash and cash equivalents and $57.3 million of investments. As of March 31, 2014, our working capital totaled $158.4 million.

The following table presents our cash flow summary for each period presented (in thousands):

	Three Months Ended March 31,	
	2014	2013
Cash flow summary		
Net cash used in operating activities	$ (10,547)	$ (884)
Net cash (used in) provided by investing activities	(121,231)	2,395
Net cash provided by financing activities	197,499	1,767
Net increase in cash and cash equivalents	65,763	3,166

Net Cash Used in Operating Activities

We derive cash flows from operations primarily from cash collected from the sale of our products, license 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 this may continue in the future.

Net cash used in operating activities was $10.5 million for the three months ended March 31, 2014, compared to $0.9 million for the three months ended March 31, 2013, an increase of $9.7 million. Cash used for working capital purposes increased by $3.9 million, driven primarily by higher accounts receivable and inventory, partially offset by increase in accounts payable. Our net loss, adjusted for non-cash and non-operating items and deferred revenue, for the three months ended March 31, 2014 increased by $5.8 million, compared to the same period in 2013 primarily due to acquisition-related expenses of $6.5 million.

Net Cash (Used In) Provided by Investing Activities

Our primary investing activities consist of purchases, sales, and maturities of our short-term and long-term investments, and capital expenditures for manufacturing, laboratory, and computer equipment and software to support our expanding infrastructure and work force. We expect to continue to expand our manufacturing capability, including improvements in manufacturing productivity, and expect to incur additional costs for capital expenditures related to these efforts in future periods. In addition, we expect to continue to incur costs for capital expenditures for demonstration units and loaner equipment to support our sales and service efforts, and computer equipment and software to support our growth.

Net cash used in investing activities was $121.2 million during the three months ended March 31, 2014. Net cash used in investing activities primarily consisted of $113.2 million related to the acquisition of DVS, net of acquired cash of $8.4 million, and excluding $4.1 million attributed to the acceleration of DVS share-based awards and classified as cash used in operating activities; purchases of investments of $15.0 million; and capital expenditures of $1.8 million primarily to support growth in our manufacturing operations; partially offset by proceeds from sales and maturities of investments of $8.8 million.

Net cash provided by investing activities was $2.4 million during the three months ended March 31, 2013. Net cash provided by investing activities primarily consisted of proceeds from sales and maturities of investments of $7.4 million and proceeds from sale of investment in Verinata of $3.1 million, partially offset by purchases of investments of $7.4 million and purchases of capital equipment of $0.7 million to support growth in our commercial and manufacturing operations.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $197.5 million during the three months ended March 31, 2014 and consists of net proceeds of $195.2 million from the issuance of senior convertible notes and proceeds received in connection with the exercise of options for our common stock of $2.3 million.

Net cash provided by financing activities was $1.8 million during the three months ended March 31, 2013 from proceeds received in connection with the exercise of options for our common stock.

Capital Resources

At March 31, 2014, our working capital was $158.4 million, including cash, cash equivalents, and investments of $158.3 million. On February 4, 2014, we closed an underwritten public offering of approximately $201.3 million aggregate principal amount of our 2.75% Senior Convertible Notes due 2034, or the Notes. We received cash proceeds of $195.2 million, net of underwriting discounts. Debt issuance costs were approximately $1.1 million. We used $126.0 million of the net proceeds to fund the cash portion of the consideration payable by us in connection with our acquisition of DVS.

We have a bank line of credit agreement that is collateralized by our assets, excluding intellectual property, and provides us the ability to draw up to $10.0 million, of which $6.0 million is available on a non-formula basis, subject to certain covenants and other restrictions. The balance of $4.0 million is available based on eligible receivables. At March 31, 2014, we had no borrowing outstanding under the bank line of credit.

We are estimating capital expenditures to be higher in 2014 primarily for leasehold improvements at our new Singapore manufacturing facility.

We believe our existing cash, cash equivalents, and investments will be sufficient to meet our working capital and capital expenditure needs for at least the next 18 months. However, we may experience lower than expected cash generated from operating activities or greater than expected capital expenditures, cost of revenue, or operating expenses, and we may need to raise additional capital to expand the commercialization of our products, expand and fund our operations, further our research and development activities, or acquire or invest in a business. 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 associated with litigation or disputes relating to intellectual property rights or otherwise, 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, and the effect of competing technological and market developments. In the future, we may acquire businesses or technologies from third parties, and we may decide to raise additional capital through debt or equity financing to the extent we believe this is necessary to successfully complete these acquisitions. We currently have no material commitments or agreements relating to any such acquisitions.

If we require additional funds in the future, 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, research and development, or other resources devoted to our products or cease operations.

Off-Balance Sheet Arrangements

As of March 31, 2014, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated under the Exchange Act.

Contractual Obligations and Commitments

On April 9, 2013, we entered into an amendment (the Amendment) to the lease agreement dated as of September 4, 2010 (as amended, the Lease) relating to the lease of office and laboratory space at our headquarters located at 7000 Shoreline Court, South San Francisco, California. The Amendment provided for an expansion of the premises covered under the Lease, effective as of April 1, 2014; an extension of the term of the Lease to April 30, 2020 with an option to renew for an additional five years; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The Amendment also provided for an allowance of approximately $0.7 million for tenant improvements, which, to the extent not used by March 31, 2015, will be used to offset base rent obligations, and an additional allowance of approximately $0.5 million for tenant improvements, which, if used, will be repaid in equal monthly payments with interest at a rate of 9% per annum over the remaining term of the Lease.

Fluidigm Singapore Pte. Ltd. (Fluidigm Singapore), our wholly-owned subsidiary, is currently party to leases for manufacturing and office space in Singapore, which were scheduled to terminate on September 30, 2014 as previously disclosed. On May 6, 2014, Fluidigm Singapore and the landlord of the existing manufacturing and office space in Singapore agreed to terminate the leases on August 31, 2014. On October 14, 2013, Fluidigm Singapore accepted an offer of tenancy (the Lease) from HSBC Institutional Trust Services (Singapore) Limited, as trustee of Ascendas Real Estate Investment Trust (the Landlord), relating to the lease of a facility located at Block 5008, Ang Mo Kio Avenue 5, TECHplace II, Singapore 569874. Pursuant to the Lease, we took possession of the facility commencing on March 3, 2014 for a term of 99 months. Aggregate gross rent (including service charges) due under the Lease will be SG$6.4 million (approximately US$5.1 million using the March 31, 2014 exchange rate). The Lease also provides Fluidigm Singapore with an option to renew the Lease for an additional 60 months at the then prevailing market rent, and on similar terms as the existing Lease, and a right of first refusal on certain additional space in the building beginning June 2, 2014 until June 1, 2015. Fluidigm Singapore intends to relocate its Singapore facilities to its new manufacturing and office space located at Block 5008, Ang Mo Kio Avenue 5 TECHplace II, Singapore in the third quarter of 2014.

In connection with our acquisition of DVS (See Note 4), we assumed the operating leases for facilities in Sunnyvale, California and Markham, Ontario, Canada, which expire in January 2016 and July 2016, respectively. The Canada lease includes an option to renew the lease for an additional five years at the then prevailing market rent, and on similar terms as the existing lease. We recognize rent expense on a straight-line basis over the non-cancelable lease term. The total operating lease obligations for the assumed operating leases in Sunnyvale, California and Markham, Ontario, Canada are $716,000 as of March 31, 2014.

Item 3. 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 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 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 currency denominated cash, receivables and payables as of March 31, 2014 would not have been material. 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 $101.0 million at March 31, 2014. These amounts were held primarily in cash on deposit with banks and cash equivalents. We had $57.3 million in investments at March 31, 2014 held primarily in U.S. government and agency securities. The contractual maturity dates of $42.1 million of our U.S. government and agency securities are within one year from March 31, 2014. The contractual maturity dates of our remaining U.S. government and agency securities are less than eighteen months from March 31, 2014. Cash and cash equivalents and investments are held for working capital purposes. 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 the periods presented, our interest income would not have been materially affected.

Fair Value of Financial Instruments

We do not have material exposure to market risk with respect to investments. We do not use derivative financial instruments for speculative or trading purposes. However, we may adopt specific hedging strategies in the future.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2014. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2014, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the three months ended March 31, 2014 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. However, during the quarter ended March 31, 2014, we completed our acquisition of DVS Sciences Inc. (now Fluidigm Sciences Inc.), or DVS, which is now our wholly-owned subsidiary and a "significant subsidiary" as defined by Rule 1-02 of Regulation S-X promulgated by the Securities and Exchange Commission. We are in the process of integrating DVS's operations with our operations, including integration of financial reporting processes and procedures and internal controls over financing reporting. In the course of integrating DVS's financial reporting processes and procedures with ours, we may

implement changes to financial reporting processes and procedures and internal controls over financing reporting and will disclose any such changes if material as required by the rules of the SEC.

Limitations on the Effectiveness of Controls

Control systems, no matter how well conceived and operated, are designed to provide a reasonable, but not an absolute, level of assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Because of the inherent limitations in any control system, misstatements due to error or fraud may occur and not be detected.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

We are not currently engaged in any material legal proceedings.

Item 1A. Risk Factors.

We operate in a rapidly changing environment that involves numerous uncertainties and risks. The following risks and uncertainties may have a material and adverse effect on our business, financial condition or results of operations. You should consider these risks and uncertainties carefully, together with all of the other information included or incorporated by reference in this Form 10-Q. If any of the risks or uncertainties we face were to occur, the trading price of our securities could decline, and you may lose all or part of your investment.

On February 13, 2014, we completed the acquisition of DVS Sciences, Inc., or DVS (now Fluidigm Sciences Inc., or Fluidigm Sciences), which develops, manufactures, markets, and sells multi-parameter single-cell protein analysis systems. For purposes of the risk factors below, Fluidigm Sciences refers to Fluidigm Sciences and its wholly-owned Canadian subsidiary, Fluidigm Canada Inc., or Fluidigm Canada (formerly DVS Sciences Inc.).

Risks Related to Fluidigm's Business and Strategy

Emerging market opportunities may not develop as quickly as we expect, limiting our ability to successfully market and sell our products, or our product development and strategic plans relating to such markets may change and our entry into these emerging markets may be delayed, if it occurs at all.

The application of our technologies to single-cell biology (across genomics and proteomics) and production genomics applications are emerging market opportunities. We believe these opportunities will take several years to develop or mature and we cannot be certain that these market opportunities will develop as we expect. For example, we launched our C_1 Single-Cell Auto Prep System in June 2012, which applies our technology to, among other things, improve single-cell analytic workflow for single-cell genomics. The future growth of the single-cell biology market and the success of our products depend on many factors beyond our control, including recognition and acceptance by the scientific community, and the growth, prevalence, and costs of competing methods of genetic and protein analysis. If the market for single-cell biology and production genomics do not develop as we expect, our business may be adversely affected. Additionally, our success in these emerging markets may depend to a large extent on our ability to successfully market and sell products using our technologies. If we are not able to successfully market and sell our products, or to achieve the revenue or margins we expect, our operating results may be harmed and we may not recover our product development and marketing expenditures. In addition, our product development and strategic plans may change, which could delay or impede our entry into emerging markets.

Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and results of operations have varied in the past and may continue to vary significantly from quarter-to-quarter. For example, in 2011 and 2012, we experienced higher sales in the fourth quarter than in the first quarter of the next fiscal year. In addition, revenue from sales of our instruments relative to sales of our consumables may fluctuate or deviate significantly from expectations. The variability in our quarterly results of operations, including revenue from sales of our instruments relative to our consumables, may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors that are difficult to forecast, including: fluctuations in demand for our products; changes in customer budget cycles and capital spending; seasonal variations in customer operations; tendencies among some customers to defer purchase decisions to the end of the quarter; the large unit value of our systems; changes in our pricing and sales policies or the pricing and sales policies of our competitors; our ability to design, manufacture and deliver products to our customers in a timely and cost-effective manner; quality control or yield problems in our manufacturing operations; our ability to timely obtain adequate quantities of the components used in our products; new product introductions and enhancements by us and our competitors; unanticipated increases in costs or expenses; our complex, variable and, at times, lengthy sales cycle; global economic conditions; and fluctuations in foreign currency exchange rates. Additionally, we have certain customers who have historically placed large orders in multiple quarters during a calendar year. A significant reduction in orders from one or more of these customers could adversely affect our revenue and operating results, and if these customers defer or cancel purchases or otherwise alter their purchasing patterns, our quarter-to-quarter financial results could be significantly impacted.

The foregoing factors, as well as other factors, could materially and adversely affect our quarterly and annual results of operations. In addition, a significant amount of our operating expenses are relatively fixed due to our manufacturing, research and development, and sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. 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, which could significantly decrease the price of our common stock.

We have incurred losses since inception, and we may 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 $15.4 million, $16.5 million, $19.0 million, and $22.5 million during the three months ended March 31, 2014 and years 2013, 2012, and 2011, respectively. As of March 31, 2014, we had an accumulated deficit of $272.8 million. These losses have resulted principally from costs incurred in our research and development programs, and from our manufacturing costs and selling, general, and administrative expenses. We may continue to incur substantial operating and net losses and negative cash flow from operations. We expect that our selling, general, and administrative expenses will continue to 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 revenue 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.

Actual results relating to Fluidigm Sciences (formerly DVS Sciences, Inc.) may differ from any guidance issued by us concerning future revenue and revenue growth of Fluidigm Sciences or the anticipated impact of the acquisition on the operating results of the combined company, and these differences could be material.

We cannot provide assurances with respect to the future revenues or revenue growth rates we may realize as a result of our acquisition of DVS and sales of its CyTOF mass spectrometer and associated consumables for the proteomics market. Fluidigm Sciences' revenues increased substantially through fiscal 2013, but we recently reduced our revenue expectations for 2014 and do not expect revenue from sales of Fluidigm Sciences' proteomics products to grow, if at all, at the same rates experienced in recent periods. We currently expect 2014 revenues from sales of our proteomics products to be less than our 2013 revenues. In addition, although its revenues have grown on an annual basis in recent years, Fluidigm Sciences has experienced substantial quarter-to-quarter variations in levels of demand and revenue growth for its instruments and consumables, and we expect that these variances may continue in the future. Additional risks and uncertainties that could cause actual results from our proteomics product line to differ materially from currently anticipated results include, but are not limited to, risks relating to our ability to successfully integrate Fluidigm Sciences; our ability to commercialize Fluidigm Sciences products; market acceptance of Fluidigm Sciences products; our ability to successfully launch new products and applications in Fluidigm Sciences' target markets; competition; our sales, marketing and distribution capabilities; our planned sales, marketing, and research and development activities; reduction in research and development spending or changes in budget priorities by customers; interruptions or delays in the supply of components or materials for, or manufacturing of, Fluidigm Sciences' products, which in certain cases are purchased through sole and single source suppliers; seasonal variations in customer operations; unanticipated increases in costs or expenses; risks associated with international operations; and the other risks identified in this report. Other unknown or unpredictable factors also could harm our results. Consequently, actual results or developments from our proteomics product line that are currently anticipated by us may not be realized or, even if substantially realized, may not have the expected consequences to, or effects on, us. Any failure to meet any proteomics guidance that we have provided or may provide in the future could have a material adverse effect on the trading price or volume of our stock.

We have made certain assumptions relating to our recent acquisition which may prove to be materially inaccurate.

We have made certain assumptions relating to the acquisition of DVS, which assumptions may be inaccurate, including as the result of the failure to realize the expected benefits of the acquisition, failure to realize expected revenue growth rates, higher than expected operating, transaction and integration costs, as well as general economic and business conditions that adversely affect the combined company following the acquisition. These assumptions relate to numerous matters, including:

- projections of Fluidigm Sciences' revenue growth, if any, and future revenues;
- the amount of goodwill and intangibles that will result from the acquisition;
- certain other purchase accounting adjustments that we expect will be recorded in our financial statements in connection with the acquisition;
- our ability to maintain, develop and deepen relationships with customers of Fluidigm Sciences; and
- other financial and strategic risks of the acquisition.

The carrying value of long-lived and intangible assets may become impaired and result in an impairment charge.

As of March 31, 2014, we had approximately $214.8 million of net intangible assets, net of amortization, and goodwill, all of which relates to the acquisition. In addition, if in the future we acquire additional complementary businesses or technologies, a substantial portion of the value of such assets may be recorded as intangible assets or goodwill. The carrying amounts of

intangible assets and goodwill are affected whenever events or changes in circumstances indicate that the carrying amount of any asset may not be recoverable. Such events or changes might include a significant decline in market share, a significant decline in revenues, a significant increase in losses or decrease in profits, rapid changes in technology, failure to achieve the benefits of capacity increases and utilization, significant litigation arising out of an acquisition or other matters. Adverse events or changes in circumstances may affect the estimated undiscounted future operating cash flows expected to be derived from intangible assets and goodwill. If at any time we determine that an impairment has occurred, we will be required to reflect the impaired value as a charge, resulting in a reduction in earnings in the quarter such impairment is identified and a corresponding reduction in our net asset value. The potential recognition of impairment in the carrying value, if any, could have a material and adverse effect on our financial condition and results of operations.

If our research and product development efforts do not result in commercially viable products within anticipated timelines, if at all, our business and results of operations will be adversely affected.

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 technology. We have developed design rules for the implementation of our technology that 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 our systems rather than in a standard laboratory environment. Furthermore, many such reactions take place within the confines of single cells, which have also demonstrated unexpected behavior when grown and manipulated within microfluidic environments. As a result, research and development efforts may be required to transfer certain reactions and cell handling techniques to our systems. In the past, product development projects have been significantly delayed when we encountered unanticipated difficulties in implementing a process on our systems. 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.

If one or more of our manufacturing facilities become unavailable or inoperable, we will be unable to continue manufacturing our instruments, IFCs, and/or assays and, as a result, our business will be harmed until we are able to secure a new facility.

We manufacture all of our genomics analytical and preparatory instruments and integrated fluidic circuits, or IFCs, for commercial sale at our facility in Singapore, our proteomics analytical instruments for commercial sale at our facility in Canada, and our assays for commercial sale at our facilities in South San Francisco and Sunnyvale, California. No other manufacturing facilities are currently available to us, particularly facilities of the size and scope required by our Singapore and Canada operations. Our facilities and the equipment we use to manufacture our instruments, IFCs, and assays would be costly to replace and could require substantial lead time to repair or replace. Our facilities may be harmed or rendered inoperable by natural or man-made disasters, which may render it difficult or impossible for us to manufacture our products for some period of time. If any of our facilities become unavailable to us, we cannot provide assurances that we will be able to secure a new manufacturing facility on acceptable terms, if at all. The inability to manufacture our products, combined with our limited inventory of 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.

The current leases for our manufacturing facility in Singapore will terminate on August 31, 2014. On October 14, 2013, Fluidigm Singapore Pte. Ltd., or Fluidigm Singapore, our wholly-owned subsidiary, accepted an offer of tenancy relating to the lease of a new manufacturing facility in Singapore, which expires on June 1, 2022. We expect to consolidate our manufacturing operations in the new space in the third quarter of 2014. 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 qualification of the new facility, and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities. If our manufacturing capabilities are impaired by our move, we may not be able to manufacture and ship our products in a timely manner, which would adversely impact our business.

We may experience development or manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We may encounter unforeseen situations in the manufacturing and assembly of our products that would result in delays or shortfalls in our production. For example, we expect to consolidate our Singapore manufacturing operations in a new facility in the third quarter of 2014. Such a move will involve significant expense, and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities. In addition, our production processes and assembly methods may have to change to accommodate any significant future expansion of our manufacturing capacity, which may increase our

manufacturing costs, delay production of our products, reduce our product margin, and adversely impact our business. If our manufacturing activities are adversely impacted by our move, or if we are otherwise unable to keep up with demand for our products by successfully manufacturing, assembling, testing, and shipping our products in a timely manner, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products.

All of our IFCs for commercial sale are manufactured at our facility in Singapore. 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. We have in the past experienced variations in yields due to such factors. A drop in yield can increase our cost to manufacture our IFCs or, in more severe cases, require us to halt the manufacture of our IFCs until the problem is resolved. Identifying and resolving the cause of a drop in yield can require substantial time and resources.

In addition, developing an IFC for a new application may require developing a specific production process for that type of IFC. While all of our IFCs are produced using the same basic processes, significant variations may be 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.

We are dependent on single source suppliers for some of the components and materials used in our products, 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 products. Additionally, several of our instruments are assembled at the facilities of contract manufacturers in Singapore. We do not have long term contracts with our suppliers of these components and materials or our assembly service providers. The loss of the single source suppliers of any of the following components and/or materials would require significant time and effort to locate and qualify an alternative source of supply:

- The IFCs used in our microfluidic systems are fabricated using a specialized polymer, and other specialized materials, that are 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.
- Specialized pneumatic and electronic components for our C_1 Single-Cell Auto Prep System are available from a limited number of sources.
- The electron multiplier included in the CyTOF system, and the nickel sampler cone and certain metal isotopes used with the CyTOF system, are purchased from single source suppliers and are available from a limited number of sources.
- The raw materials for our DELTAgene and SNPtype assays and Access Array Target-Specific primers are available from a limited number of sources.

Our reliance on single source suppliers and assembly service providers also subjects us to other risks that could harm our business, including the following:

- we may be subject to increased component or assembly costs;
- we may not be able to obtain adequate supply or services in a timely manner or on commercially reasonable terms;
- our suppliers or service providers may make errors in manufacturing or assembly of components that could negatively affect the efficacy of our products or cause delays in shipment of our products; and
- our suppliers or service providers may encounter capacity constraints or financial hardships unrelated to our demand for components or services, which could inhibit their ability to fulfill our orders and meet our requirements.

We have in the past experienced quality control and 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, or assembly service providers. Any interruption or delay in the supply of components or materials or assembly of our instruments, or our inability to obtain components, materials, or assembly services 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.

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 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 some competing technologies, our technology is relatively new, and most potential customers have limited knowledge of, or experience with, our products. Prior to adopting our systems, some potential customers may need to devote time and effort to testing and validating our systems. 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, it is important that our systems be perceived as accurate and reliable by the scientific and medical research community as a whole. Historically, a significant part of our sales and marketing efforts has 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 continue to induce leading researchers to use our systems, or if such researchers are unable to achieve and publish or present significant experimental results using our systems, acceptance and adoption of our systems will be slowed and our ability to increase our revenue would 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 academic institutions, clinical laboratories that use our technology to develop tests, and pharmaceutical, biotechnology and agricultural biotechnology, or Ag-Bio, companies that perform analyses for research and commercial purposes. Our success will depend, in part, upon our ability to increase our market share among these customers, attract additional customers outside of these markets, 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 are unfamiliar with the current applications of our systems. Any failure to expand our existing customer base or launch new applications would adversely affect our ability to increase our revenue.

Our business relationships, including customer relationships, may be subject to disruption due to uncertainty associated with our recent acquisition.

Parties with which we or Fluidigm Sciences do business may experience uncertainty associated with the recent acquisition, including with respect to current or future business relationships with us, Fluidigm Sciences, or the combined business. These business relationships may be subject to disruption as customers and others may attempt to negotiate changes in existing business relationships or consider entering into business relationships with parties other than us, Fluidigm Sciences, or the combined business, including our competitors. These disruptions could have a material adverse effect on the businesses, operating results, and financial condition of the combined business.

The life science research and Ag-Bio markets are 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 research companies that design, manufacture, and market instruments and consumables for gene expression analysis, single-cell targeted gene expression or protein analysis , genotyping, polymerase chain reaction, or PCR, digital PCR, other nucleic acid detection, flow cytometry, cell imaging, and additional applications using well established laboratory techniques, as well as newer technologies such as bead encoded arrays, microfluidics, nanotechnology, high-throughput DNA sequencing, microdroplets 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, larger existing installed bases, larger intellectual property portfolios, and greater experience and scale in research and development, manufacturing, and marketing than we do. For example, companies such as Affymetrix, Inc., Agilent Technologies, Inc., Becton, Dickinson and Company, Bio-Rad Laboratories, Inc., Danaher Corporation, Illumina, Inc., Life Technologies Corporation (now part of Thermo Fisher Scientific), LGC Limited, Luminex Corporation, Millipore Corporation, NanoString Technologies, Inc., PerkinElmer, Inc. (through its acquisition of Caliper Life Sciences, Inc.), RainDance Technologies, Inc., Roche Applied Science (a division of Roche Diagnostics Corporation), Sequenom, Inc., Sony Corporation (through its P5 joint venture), Thermo Fisher Scientific Inc., and WaferGen Bio-systems, Inc. have products that compete in certain segments of the market in which we sell our products.

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. Increased competition is likely to result in pricing pressures, which could reduce our profit margins and increase our sales and marketing expenses. In addition, mergers, consolidations, or other strategic transactions between two or more of our competitors, or between our competitor and one of our key customers, could change the competitive landscape and weaken our competitive position, adversely affecting our business.

Our business depends on research and development spending levels of academic, clinical, and governmental research institutions, and pharmaceutical, biotechnology, and Ag-Bio companies, a reduction in which could limit our ability to sell our products and adversely affect our business.

We expect that our revenue in the foreseeable future will be derived primarily from sales of our systems and IFCs to academic institutions, clinical laboratories that use our technology to develop tests, and pharmaceutical, biotechnology, and Ag-Bio companies 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 concerns regarding the federal government budget sequestration, the availability of resources 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 products. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. For example, reductions in capital and operating expenditures by these customers may result in lower than expected sales of our systems and IFCs. These reductions and delays may result from factors that are not within our control, such as:

- changes in economic conditions;
- natural disasters;
- changes in government programs that provide funding to research institutions and companies;
- changes in the regulatory environment affecting life science and Ag-Bio companies engaged in research and commercial activities;
- differences in budget cycles across various geographies and industries;
- market-driven pressures on companies to consolidate operations and reduce costs;
- mergers and acquisitions in the life science and Ag-Bio industries; 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, could materially and adversely affect our operations or financial condition.

We may not be able to develop new products or enhance the capabilities of our existing systems to keep pace with rapidly changing technology and customer requirements, which could have a material adverse effect on our business, revenue, financial condition, and operating results.

Our success depends on our ability to develop new products and applications for our 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 single-cell biology and production genomics, as well as potential markets for our products such as high-throughput DNA sequencing and molecular diagnostics applications, 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 and cost-effective basis. Developing and implementing new technologies will require us to incur substantial development costs and we may not have adequate resources available to 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. While we typically plan improvements to our systems, we may not be able to successfully implement these improvements. 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. In addition, if we introduce enhanced systems but fail to manage product transitions effectively, customers may delay or forgo purchases of our systems and our operating results may be adversely affected by product obsolescence and excess inventory. Even if we successfully implement some or all of these planned improvements, we cannot guarantee that our current and potential customers will find our enhanced systems to be an attractive alternative to existing technologies, including our current products.

Our products could become subject to regulation as medical devices by the U.S. Food and Drug Administration, or FDA, or other regulatory agencies in the future.

Our products are currently labeled, promoted and sold to academic institutions, life sciences laboratories, and pharmaceutical, biotechnology, and Ag-Bio companies for research purposes only, and not as diagnostic tests or medical devices. As products labeled and intended for research use only, they are not subject to regulation as medical devices by the FDA. Products labeled and intended for research use only are not currently subject to regulation as medical devices by comparable agencies of other countries. However, the FDA could disagree with our conclusion that our products are for research use only or deem our current marketing and promotional efforts as being inconsistent with research use only products. In addition, if we change the labeling or promotion of our products in the future to include indications for human diagnostic applications or medical uses, or we have knowledge that our customers are using our products for clinical diagnostic or therapeutic purposes, our products or related applications could be subject to additional regulation as in vitro diagnostic devices, such as under the FDA's pre- and post-market regulations for medical devices. For example, if we wish to label, promote or advertise our products for use in performing clinical diagnostics, we would first need to obtain FDA pre-market clearance or approval (depending on any product's specific intended use and any such modified labeling claims), unless otherwise exempt from clearance or approval requirements. Obtaining FDA clearance or approval can be expensive and uncertain, and generally takes several months to years to obtain, and may require detailed and comprehensive scientific and clinical data. Notwithstanding the expense, these efforts may never result in FDA clearance or approval. Even if we were to obtain regulatory approval or clearance, it may not be for the uses we believe are important or commercially attractive.

Further, the FDA may expand its regulatory oversight of our products or the products of our customers, which could impose restrictions on our ability to market and sell our products. For example, our customers may elect to use our research use only labeled products in their own laboratory developed tests, or LDTs, for clinical diagnostic use. The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against laboratories offering LDTs. However, the FDA could assert jurisdiction over some or all LDTs, which may impact our customers' uses of our products. A significant change in the way that the FDA regulates our products, the use of our products or any LDTs that our customers develop may require us to change our business model in order to maintain compliance with these laws. The FDA held a meeting in July 2010, during which it indicated that it intends to reconsider its policy of enforcement discretion and to begin drafting a new oversight framework for LDTs. Recent comments by FDA Commissioner Margaret Hamburg in June 2013 indicate that the FDA is working on a new risk-based framework to regulate LDTs. We cannot predict the ultimate timing or form of any FDA guidance or regulation on LTDs.

Additionally, on November 25, 2013, the FDA issued Final Guidance "Distribution of In Vitro Diagnostic Products Labeled for Research Use Only." The guidance emphasizes that the FDA will review the totality of the circumstances when it comes to evaluating whether equipment and testing components are properly labeled as RUO. The final guidance states that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA's clearance, approval, and other regulatory requirements if the circumstances surrounding the distribution of the product indicate that the manufacturer knows its product is, or intends for its product to be, offered for clinical diagnostic uses. These circumstances may include written or verbal marketing claims or links to articles regarding a product's performance in clinical applications and a manufacturer's provision of technical support for clinical applications. If the FDA imposes significant changes to the regulation of LDTs, or modifies its approach to our products labeled and intended for research use only, it could reduce our revenue or increase our costs and adversely affect our business, prospects, results of operations or financial condition. In addition, if the FDA determined that our products labeled for research use only were intended, based on a review of the totality of circumstances, for use in clinical investigation or diagnosis, those products could be considered misbranded or adulterated under the Federal Food, Drug, and Cosmetic Act.

We may be required to proactively achieve compliance with certain FDA regulations and to conform our manufacturing operations to the FDA's good manufacturing practice regulations for medical devices, known as the Quality System Regulation, or QSR, as part of our contracts with customers or as part of our collaborations with third parties. In addition, we may voluntarily seek to conform our manufacturing operations to QSR requirements. For clinical diagnostic products that are regulated as medical devices, the FDA enforces the QSR through pre-approved inspections and periodic unannounced inspections of registered manufacturing facilities. If we are subject to QSR requirements, the failure to comply with those requirements or take satisfactory corrective action in response to an adverse QSR inspection could result in enforcement actions, including a public warning letter or an untitled letter, a delay in approving or clearing, or a refusal to approve or clear, our products, a shutdown of manufacturing operations, a product recall, civil or criminal penalties or other sanctions, which could in turn cause our sales and business to suffer.

If we are unable to recruit and retain key executives, scientists and technical support personnel, we may be unable to achieve our goals. We may have difficulty attracting, motivating and retaining executives and other key employees in light of our recent acquisition.

Our performance is substantially dependent on the performance of our senior management, particularly Gajus V. Worthington, our president and chief executive officer. Additionally, to expand our research and product development efforts, we

need key scientists skilled in areas such as molecular and cellular biology, assay development, and manufacturing. We also need highly trained technical support personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively support potential new customers and the expanding needs of current customers. Competition for these people is intense. Because of the complex and technical nature of our systems 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.

The loss of the services of any member of our senior management or our scientific or technical support 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. 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. We do not maintain fixed term employment contracts or significant key man life insurance with any of our employees.

Uncertainty about the effect of the recent acquisition on our employees may have an adverse effect on us and, consequently, the combined business resulting from the acquisition. This uncertainty may impair our ability to attract, retain and motivate key personnel in the months after the merger for the combined entity. Employee retention may be particularly challenging as employees may experience uncertainty about their future roles with the combined business. Additionally, as a result of the acquisition, key Fluidigm Sciences employees became entitled to receive a portion of the acquisition consideration, the payment of which could provide sufficient financial incentive for certain officers and employees to no longer pursue employment with the combined business. In particular, we have identified several key Fluidigm Sciences employees, including key scientific and technical employees, who have been important to the development of Fluidigm Sciences' products and technologies, and we have implemented employment compensation arrangements in connection with the acquisition to ensure these individuals' continued employment with us. We cannot provide assurances that these arrangements will sufficiently incentivize these key employees to remain with us. If key employees depart because of issues relating to the uncertainty and difficulty of integration, financial incentives or a desire not to remain employees of the combined business, we may incur significant costs in identifying, hiring and retaining replacements for departing employees, which could substantially reduce or delay our ability to realize the anticipated benefits of the acquisition.

Any failure to successfully integrate Fluidigm Sciences' business and operations or fully realize potential synergies from the acquisition in the expected time frame would adversely affect our business, operating results, and financial condition.

We do not have a history of acquiring other companies, and the success of our recent acquisition will depend, in part, on our ability to successfully integrate the acquired business and operations and fully realize the anticipated benefits and potential synergies from the combined business. If we are unable to achieve these objectives, the anticipated benefits and potential synergies from the acquisition may not be realized fully or at all, or may take longer to realize than expected. Any failure to timely realize these anticipated benefits would have a material adverse effect on our business, operating results, and financial condition.

We completed our acquisition of DVS in February 2014 and have only begun the integration process. In connection with the integration process, we could experience the loss of key employees, loss of key customers, decreases in revenues and increases in operating costs, as well as the disruption of our ongoing businesses, any or all of which could limit our ability to achieve the anticipated benefits and potential synergies from the acquisition and have a material adverse effect on our business, operating results, and financial condition.

We will incur significant acquisition-related integration costs in connection with the acquisition.

We have developed and are executing on a plan to integrate the operations of Fluidigm Sciences with our business. In connection with the integration, we anticipate that we will incur certain non-recurring charges; however, we cannot identify the timing, nature and amount of all such charges as of the date of this report. These integration costs will be charged as an expense in the period incurred and could materially affect our results of operations in the period in which such charges are recorded. Although we believe that the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of the business, will offset incremental acquisition-related costs over time, this net benefit may not be achieved in the near term, or at all.

If we are unable to integrate future acquisitions successfully, our operating results and prospects could be harmed.

In addition to our recent acquisition, we may make additional acquisitions to improve our product offerings or expand into new markets. Our future acquisition strategy will depend on our ability to identify, negotiate, complete, and integrate acquisitions and, if necessary, to obtain satisfactory debt or equity financing to fund those acquisitions. Mergers and acquisitions are inherently risky, and any transaction we complete may not be successful. Our acquisition of DVS was our first acquisition of another company. Any merger or acquisition we may pursue would involve numerous risks, including but not limited to the following:

- difficulties in integrating and managing the operations, technologies, and products of the companies we acquire;
- diversion of our management's attention from normal daily operation of our business;
- our inability to maintain the key business relationships and the reputations of the businesses we acquire;
- our inability to retain key personnel of the acquired company;
- uncertainty of entry into markets in which we have limited or no prior experience and in which competitors have stronger market positions;
- our dependence on unfamiliar affiliates and customers of the companies we acquire;
- insufficient revenue to offset our increased expenses associated with acquisitions;
- our responsibility for the liabilities of the businesses we acquire, including those which we may not anticipate; and
- our inability to maintain internal standards, controls, procedures, and policies.

We may be unable to secure the equity or debt funding necessary to finance future acquisitions on terms that are acceptable to us. If we finance acquisitions by issuing equity or convertible debt securities, our existing stockholders will likely experience dilution, and if we finance future acquisitions with debt funding, we will incur interest expense and may have to comply with financial covenants and secure that debt obligation with our assets.

Adverse conditions in the global economy and disruption of financial markets may significantly harm our revenue, profitability, and results of operations.

The global credit and financial markets have in recent years experienced volatility and disruptions, including diminished liquidity and credit availability, increased concerns about inflation and deflation, and the downgrade of U.S. debt and exposure risks on other sovereign debts, decreased consumer confidence, lower economic growth, volatile energy costs, increased unemployment rates, and uncertainty about economic stability. Volatility and disruption of financial markets could limit our customers' ability to obtain adequate financing or credit to purchase and pay for our products in a timely manner or to maintain operations, which could result in a decrease in sales volume that could harm our results of operations. General concerns about the fundamental soundness of domestic and international economies may also cause our customers to reduce their purchases. Changes in governmental banking, monetary, and fiscal policies to address liquidity and increase credit availability may not be effective. Significant government investment and allocation of resources to assist the economic recovery of sectors which do not include our customers may reduce the resources available for government grants and related funding for life science, Ag-Bio, and clinical research and development. Continuation or further deterioration of these financial and macroeconomic conditions could significantly harm our sales, profitability and results of operations.

We generate a substantial portion of our revenue internationally and are subject to various risks relating to such international activities, which could adversely affect our sales and operating performance. In addition, any disruption or delay in the shipping or off-loading of our products, whether domestically or internationally, may have an adverse effect on our financial condition and results of operations.

During the three months ended March 31, 2014 and years 2013, 2012, and 2011, approximately 56%, 48%, 47%, and 47%, respectively, of our product revenue was generated from sales to customers located outside of the United States. We believe that a significant percentage of our future revenue will come from international sources as we expand our international operations and develop opportunities in other countries. Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws;
- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, data privacy requirements, labor laws and anti-competition regulations;
- 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;
- unstable economic, political, and regulatory conditions;
- 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.

In addition, a majority of our product sales are currently denominated in U.S. dollars and fluctuations in the value of the U.S. dollar relative to foreign currencies could decrease demand for our products and adversely impact our financial performance. For example, 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, or 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.

We rely on shipping providers to deliver products to our customers globally. Labor, tariff or World Trade Organization-related disputes, piracy, physical damage to shipping facilities or equipment caused by severe weather or terrorist incidents, congestion at shipping facilities, inadequate equipment to load, dock and offload our products, energy-related tie-ups, or other factors could disrupt or delay shipping or off-loading of our products domestically and internationally. Such disruptions or delays may have an adverse effect on our financial condition and results of operations.

If we are unable to manage our anticipated growth effectively, our business could be harmed.

The rapid growth of our business has placed a significant strain on our managerial, operational, and financial resources and systems. 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 facilities located in Singapore, Canada, and California, are sufficient to meet our short-term manufacturing needs. The current leases for our facilities in Singapore will terminate on August 31, 2014. On October 14, 2013, Fluidigm Singapore accepted an offer of tenancy relating to the lease of a new manufacturing facility in Singapore, which expires on June 1, 2022. We expect to consolidate our manufacturing operations in the new space in the third quarter of 2014. 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 qualification of our new facility, and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities. If our ability to utilize the new facility for manufacturing operations is delayed, we may not be able to meet demand for our microfluidic systems, which could adversely impact our business. We cannot provide assurances that we will be able to secure a lease on a different manufacturing facility on acceptable terms and on a timely basis, if at all, to meet our future manufacturing needs.

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

Our systems utilize novel and complex technology 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 systems, these risks may increase. We generally provide warranties that our systems will meet performance expectations and will be free from defects. We also provide warranties relating to other parts of our systems. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, including our systems, IFCs, and assays, we depend upon third parties for the supply of various components, many of which require a significant degree of technical expertise to produce. In addition, we purchase certain products from third-party suppliers for resale. If our suppliers fail to produce components to specification or provide defective products to us for resale and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers 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.

In addition, certain of our products are marketed for use with products sold by third parties. For example, our Access Array System is marketed as compatible with all major next-generation DNA sequencing instruments. If such third-party products are not produced to specification, are produced in accordance with modified specifications, or are defective, they may not be compatible with our products. In such case, the reliability and performance of our products may be compromised.

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

To use our products, our BioMark and CyTOF systems 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, our BioMark and CyTOF systems 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. Although we sell reagents for use with certain of our products, our customers may purchase these reagents directly from third-party 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 over the formulation of reagents sold by third-party suppliers, and the performance of our products might be adversely affected if the formulation of these reagents is 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, our BioMark System involves real-time quantitative PCR, or qPCR. Leading suppliers of reagents for real-time qPCR reactions include Life Technologies Corporation (now part of Thermo Fisher Scientific) and Roche Applied Science, who are our direct competitors, and their licensees. These real-time qPCR 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 supply agreements for these real-time qPCR 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 have limited experience in marketing, selling, and distributing our products, and if we are unable to expand our direct sales and marketing force or distribution capabilities to adequately address our customers' needs, our business may be adversely affected.

We have limited experience in marketing, selling, and distributing our products. We may not be able to market, sell, and distribute our products effectively enough to support our planned growth. We sell our products primarily through our own sales force and through distributors in certain territories. Our future sales will depend in large part on our ability to develop and substantially 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 revenue and profitability.

In addition, we may continue to enlist one or more sales representatives and distributors 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 representatives and distributors, 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 representatives and distributors, are not successful, our technologies and products may not gain market acceptance, which would materially and adversely impact our business operations.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be impaired, which could adversely affect our business and our stock price.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, 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 may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Additionally, on February 13, 2014 we completed our acquisition of DVS, which is now our wholly-owned subsidiary and a "significant subsidiary" as defined by Rule 1-02 of Regulation S-X promulgated by the Securities and Exchange Commission. DVS was a private company and was not required to maintain internal controls over financial reporting to the same degree as public companies subject to the Sarbanes- Oxley Act. We are in the process of integrating DVS's operations with ours, including integration of financial reporting processes and procedures and internal controls over financing reporting. In the course of integration, we may identify internal control deficiencies or material weaknesses that require remediation.

Our compliance with Section 404 requires 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 continue to evaluate our need for additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we do not comply with the requirements of Section 404, or if we or our independent registered public accounting firm identify 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, or NASDAQ, the SEC or other regulatory authorities, which would require additional financial and management resources.

Risks associated with a company-wide implementation of an enterprise resource planning, or ERP, system may adversely affect our business and results of operations or the effectiveness of internal control over financial reporting.

We have been implementing a company-wide ERP system to handle the business and financial processes within our operations and corporate functions. ERP implementations are complex and time-consuming projects that involve substantial expenditures on system software and implementation activities that can continue for several years. ERP implementations also require transformation of business and financial processes in order to reap the benefits of the ERP system. Our business and results of operations may be adversely affected if we experience operating problems and/or cost overruns during the ERP implementation process, or if the ERP system and the associated process changes do not give rise to the benefits that we expect. Additionally, if we do not effectively implement the ERP system as planned or if the system does not operate as intended, it could adversely affect the effectiveness of our internal controls over financial reporting.

Our future capital needs are uncertain and we may need to raise additional funds in the future, which may cause dilution to stockholders or may be upon terms that are not favorable to us.

We believe that our existing cash and cash equivalents 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 for various purposes, including:

- expanding the commercialization of our products;
- funding our operations;
- furthering our research and development; and
- acquiring other businesses or assets and licensing technologies.

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 cannot assure you that we will be able to obtain additional 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, 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 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. If we undergo one or more ownership changes, our ability to utilize NOLs could be 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.

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 depends 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. 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. Our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be sufficient to protect our proprietary technology and gain or keep our competitive advantage. 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. 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, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. 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;
- The patents of others may have an adverse effect on our business; and
- Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies.

To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, our competitive position and our business could be adversely affected.

We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, coverage and validity of others' proprietary rights, or to defend against third party claims of intellectual property infringement, any of which could be time-intensive and costly and may adversely impact our business or stock price.

Litigation may be necessary for us to enforce our patent and proprietary rights, determine the scope, coverage, and validity of others' proprietary rights, and/or defend against third party claims of intellectual property infringement against us as well as against our suppliers, distributors, customers, and other entities with whom we do business. Litigation could result in substantial legal fees and could adversely affect the scope of our patent protection. The outcome of any litigation or other proceeding is inherently uncertain and 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. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins or financial position. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products.

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 impeding our entry into such markets or as a means to extract substantial license and royalty payments from us. Our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. Numerous significant intellectual property issues have been litigated, and will likely continue to be litigated, between existing and new participants in our existing and targeted markets. For example, some of our products provide for the testing and analysis of genetic material, and patent rights relating to genetic materials remain a developing area of patent law. A recent U.S. Supreme Court decision held, among other things, that claims to isolated genomic DNA occurring in nature are not patent eligible, while claims relating to synthetic DNA may be patent eligible. We expect the ruling will result in additional litigation in our industry. In addition, third parties may assert that we are employing their proprietary technology without authorization. For example, on June 4, 2008 we received a letter from Applied Biosystems, Inc., a wholly-owned subsidiary of Life Technologies Corporation (now part of Thermo Fisher Scientific and collectively referred to as Life), 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. In June 2011, we resolved this dispute by entering into license agreements with Life which, among other matters, granted us a non-exclusive license to the '934 patent and its foreign counterparts.

Our customers have been sued for various claims of intellectual property infringement in the past, and we expect that our customers will be involved in additional litigation in the future. In particular, our customers may become subject to lawsuits claiming that their use of our products infringes third-party patent rights, and we could become subject to claims that we contributed to or induced our customer's infringement. 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.

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, which would have an adverse effect on our business.

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including our core IFC and multi-layer soft lithography technologies. 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.

Our rights to use the technology we license are subject to the negotiation and continuation of those licenses. 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. 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 and the license is terminated, we might be barred from marketing, producing, and selling some or all of our products, which would have an adverse effect on our business. For example, pursuant to the terms of a license agreement entered into with Life in June 2011, we were obligated to make a $1.0 million payment to Life upon satisfaction of certain conditions. On October 16, 2013, Life provided notice that the $1.0 million payment was due and payable under the license agreement. We believe that at least one of the conditions of the milestone payment remains unmet; however, we paid Life the amount due while reserving our rights with respect to such matter to, among other reasons, avoid what

would have been, in our view, an improper termination of our license to certain Life patent filings under the agreement, which could have subject our relevant product lines to risks associated with patent infringement litigation.

Fluidigm Sciences licenses core intellectual property rights covering its products under agreements with several third parties. Termination of or disputes relating to any of these license agreements would have a material adverse effect on our business, operating results, and financial condition and could result in our inability to sell Fluidigm Sciences' flow cytometry products and otherwise to realize the benefits associated with the acquisition.

The intellectual property rights covering Fluidigm Sciences' products depend in substantial part on license agreements with third parties, in particular MDS, Inc., or MDS, and also with other third parties such as Nodality, Inc., or Nodality. The licensed intellectual property rights of MDS as well as MDS's rights and obligations under the license agreement between Fluidigm Canada and MDS were subsequently assigned to and are now held by PerkinElmer Health Sciences, Inc., or PerkinElmer. Under the PerkinElmer license agreement, Fluidigm Canada received an exclusive, royalty bearing, worldwide license to certain patents that are now owned by PerkinElmer in the field of ICP-based flow cytometry, including the analysis of elemental tagged materials in connection therewith, and a non-exclusive license for reagents outside the field of ICP-based flow cytometry. Fluidigm Canada was also party to an interim license agreement, now expired, under which Nodality granted Fluidigm Canada a worldwide, non-exclusive, research use only, royalty bearing license to certain cytometric reagents, instruments, and other products. Fluidigm Canada and Nodality are currently in negotiations with respect to reinstating the license agreement and we cannot provide assurances that we will be able to reinstate or secure a new license agreement on acceptable terms, if at all. In addition, Fluidigm Sciences is party to additional in-license agreements with parties such as Stanford University that relate to significant intellectual property rights, and Fluidigm Sciences' business and product development plans anticipate and will substantially depend on future in-license agreements with additional third parties, some of which are currently in the early discussion phase.

In-licensed intellectual property rights that are fundamental to the business being operated present numerous risks relating to ownership and enforcement of intellectual property rights. For example, under the PerkinElmer license, Fluidigm Canada is not granted any right, and we do not have any right to bring enforcement actions with respect to the patents licensed from PerkinElmer, which could materially impair our ability to preclude competitors and other third parties from activities that we consider to infringe on our exclusively licensed rights. In other cases such as with Nodality, all or a portion of the license rights granted may be limited for research use only, and in the event we attempt to expand into diagnostic applications, we would be required to negotiate additional rights, which may not be available to us on commercially reasonable terms, if at all.

In addition, Fluidigm Sciences' licensors may generally terminate the applicable license agreement for uncured material breaches or if Fluidigm Sciences becomes insolvent, makes an assignment for the benefit of creditors, or has a petition in bankruptcy filed against it. In the case of Nodality, the existing license recently has expired and our acquisition of Fluidigm Sciences could adversely affect Fluidigm Sciences' ability to negotiate a definitive license on the currently anticipated terms. Termination of material license agreements for any reason, including as a result of failure to obtain a required consent to assignment or as a result of an inability to negotiate a new or extended license where required, would result in a material loss of rights by us and Fluidigm Sciences and would be expected to have a material adverse effect on our business, operating results, and financial condition. In particular, any such termination could prevent us from manufacturing and selling Fluidigm Sciences' products unless we can negotiate new license terms or develop or acquire alternative intellectual property rights that cover or enable similar functionality. While we do not believe that any existing material in-license agreements require the consent of the licensor in order for us to rely on these licenses, the question is not free from doubt, and one or more of Fluidigm Sciences' licensors could contend that the failure to obtain their consent constituted a breach or default under the applicable license agreement or require the negotiation of a new license. In particular, in May 2014, we received a written notice of PerkinElmer's position that the license agreement between Fluidigm Canada and PerkinElmer requires, as a result of the acquisition, that PerkinElmer consent to negotiate a commercially reasonable license to Fluidigm. We expect negotiations with PerkinElmer to ensue.

In the case of a dispute over these or other terms of the applicable license agreements with any of Fluidigm Sciences' licensors, including with respect to the license with PerkinElmer, we cannot provide assurances that we will be able to negotiate a new or amended license on commercially reasonable terms, if at all. Our potential dispute with PerkinElmer as well as any other disputes between us and one of Fluidigm Sciences' existing licensors concerning the terms or conditions of the applicable license agreement, including with respect to its continued application following the acquisition, could result, among other risks, in substantial management distraction at a time when our management needs to focus on the integration of Fluidigm and Fluidigm Sciences; increased expenses associated with litigation or efforts to resolve disputes; substantial customer uncertainty concerning the direction of our proteomics product line; potential infringement claims against us and/or our customers, which could include efforts by a licensor to enjoin sales of Fluidigm Sciences products; customer requests for indemnification by Fluidigm; and, in the event of an adverse determination, our inability to operate the business of Fluidigm Sciences as currently operated or at all. Any of these factors would be expected to have a material adverse effect on our business, operating results, and financial condition and could result in a substantial decline in our stock price.

We are subject to certain manufacturing restrictions related to licensed technologies that were developed with the financial assistance of U.S. governmental grants.

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 are subject to domestic manufacturing requirements. 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. All of our microfluidic systems revenue is dependent upon the availability of our IFCs, which incorporate technology developed with U.S. government grants. All of our instruments, including microfluidic systems, and IFCs for commercial sale are manufactured at our facility in Singapore. 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 have assisted the licensors of these technologies with the analysis of the domestic manufacturing requirement, and, in December 2008, the sole licensor subject to the requirement applied for a waiver of the domestic manufacturing requirement with respect to the relevant patents licensed to us by this licensor. In July 2009, the funding government agency granted the requested waiver of the domestic manufacturing requirement for a three-year period commencing in July 2009. In June 2012, the licensor requested a continued waiver of the domestic manufacturing requirement with respect to the relevant patents, but the government agency has not yet taken any action in response to this request. If the government agency does not grant the requested waiver or the government fails to grant additional waivers of such requirement that may be sought in the future, then the U.S. government could exercise its march-in rights with respect to the relevant patents licensed to us. In addition, the license agreement under which the relevant patents are licensed to us contains provisions that obligate us to comply with this domestic manufacturing requirement. We are not currently manufacturing instruments and IFCs in the United States that incorporate the relevant licensed technology. If our lack of compliance with this provision constituted a material breach of the license agreement, the license of the relevant patents could be terminated or we could be compelled to relocate our manufacturing of microfluidic systems and IFCs to the United States to avoid or cure a material breach of the license agreement. Any of the exercise of march-in rights, the termination of our license of the relevant patents or the relocation of our manufacturing of microfluidic systems and IFCs to the United States could materially adversely affect our business, operations and financial condition.

Fluidigm Sciences is subject to certain obligations and restrictions relating to technologies developed in cooperation with Canadian government agencies.

Some of Fluidigm Sciences' Canadian research and development is funded in part through government grants and by government agencies. The intellectual property developed through these projects is subject to rights and restrictions in favor of government agencies and Canadians generally. In most cases the government agency retains the right to use intellectual property developed through the project for non-commercial purposes and to publish the results of research conducted in connection with the project. This may increase the risk of public disclosure of information relating to Fluidigm Sciences' intellectual property, including confidential information, and may reduce its competitive advantage in commercializing intellectual property developed through these projects. In certain projects Fluidigm Sciences has also agreed to use commercially reasonable efforts to commercialize intellectual property in Canada, or more specifically in the province of Ontario, for the economic benefit of Canada and the province of Ontario. These restrictions will limit its choice of business and manufacturing locations, business partners and corporate structure and may, in certain circumstances, restrict its ability to achieve maximum profitability and cost efficiency from the intellectual property generated by these projects. In one instance, a dispute with the applicable government funded entity may require mediation, which could lead to unanticipated delays in our commercialization efforts to that project. One of Fluidigm Sciences' Canadian government funded projects is also subject to certain limited "march-in" rights in favor of the government of the Province of Ontario, under which Fluidigm Sciences may be required to grant a license to its intellectual property, including background intellectual property developed outside the scope of the project, to a responsible applicant on reasonable terms in circumstances where the government determines that such a license is necessary in order to alleviate emergency or extraordinary health or safety needs or for public use. In addition, Fluidigm Sciences must provide reasonable assistance to the government in obtaining similar licenses from third parties required in connection with the use of its intellectual property. Instances in which the government of the Province of Ontario has exercised similar "march-in" rights are rare; however, the exercise of such rights could materially adversely affect Fluidigm Sciences' business, operations and financial condition.

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 or other institutions or third parties with whom such employees may have been previously affiliated.

Many of our employees were previously employed at universities or other life science or Ag-Bio companies, including our competitors or potential competitors. Although no claims against us are currently pending, Fluidigm Sciences has in the past received notices from third parties alleging potential disclosures of confidential information. We may become subject to claims that our employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their

former employers or other third parties or institutions with whom Fluidigm Sciences employees may have been previously affiliated. 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. A loss of key research personnel 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

Our stock price may fluctuate significantly, particularly if holders of substantial amounts of our stock attempt to sell, and holders may have difficulty selling their shares based on current trading volumes of our stock. In addition, numerous other factors could result in substantial volatility in the trading price of our stock.

Our stock is currently traded on NASDAQ, but we can provide no assurance that we will be able to maintain an active trading market on NASDAQ or any other exchange in the future. The trading volume of our stock tends to be low relative to our total outstanding shares, and we have several stockholders, including affiliated stockholders, who hold substantial blocks of our stock. As of March 31, 2014, we had 28,015,938 shares of common stock outstanding, and stockholders holding at least 5% of our stock, individually or with affiliated persons or entities, collectively beneficially owned or controlled approximately 45% of such shares. Sales of large numbers of shares by any of our large stockholders could adversely affect our trading price, particularly given our relatively small historic trading volumes. If stockholders holding shares of our common stock sell, indicate an intention to sell, or if it is perceived that they will sell, substantial amounts of their common stock in the public market, the trading price of our common stock could decline. Moreover, if there is no active trading market or if the volume of trading is limited, holders of our common stock may have difficulty selling their shares.

In addition, the trading price of our common stock 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 or communications by us or our competitors relating to, among other things, new commercial products, technological advances, significant contracts, commercial relationships, capital commitments, acquisitions or sales of businesses, and/or misperceptions in or speculation by the market regarding such announcements or communications;
- 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, Ag-Bio, and clinical research sectors;
- failure to complete significant sales;
- manufacturing disruptions that could occur if we were unable to successfully expand our production in our current or an alternative facility;
- any future sales of our common stock or other securities in connection with raising additional capital or otherwise;
- any major change to the composition of our board of directors or management; and
- general economic conditions and slow or negative growth of our markets.

The stock market in general, and market prices for the securities of technology-based companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

If securities or industry analysts publish unfavorable research about our business or cease to cover our business, our stock price and/or trading volume could decline.

The trading market for our common stock may rely, in part, on the research and reports that equity research analysts publish about us and our business. We do not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Our directors, executive officers, and large stockholders have substantial control over and could limit your ability to influence the outcome of key transactions, including changes of control.

As of March 31, 2014, our current executive officers, directors, stockholders holding at least 5% of our outstanding stock, and their respective affiliates, collectively beneficially owned or controlled approximately 45% of the outstanding shares of our common stock. Accordingly, these executive officers, directors, large stockholders, and their respective affiliates, acting as a group, can 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 may have the effect of delaying or preventing a change of control or changes in our management, including provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 10,000,000 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 three year 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 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 stockholders' sole source of gain for the foreseeable future.

Risks Related to Our Outstanding 2.75% Senior Convertible Notes due 2034

Our outstanding 2.75% senior convertible notes due 2034 are effectively subordinated to our secured debt and any liabilities of our subsidiaries.

Our outstanding 2.75% senior convertible notes due 2034, which we refer to as our "notes", rank:

- senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the notes;
- equal in right of payment to all of our liabilities that are not so subordinated;
- effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and
- structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

In February 2014, we completed our offering of notes with an aggregate outstanding principal amount of $201.3 million. In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure debt ranking senior in right of payment to the notes will be available to pay obligations on the notes only after the secured debt has been repaid in full from these assets, and the assets of our subsidiaries will be available to pay obligations on the notes only after all claims senior to the notes have been repaid in full. There may not be sufficient assets remaining to pay amounts due on any or all of the notes then outstanding. The indenture governing the notes does not prohibit us from incurring additional senior debt or secured debt, nor does it prohibit our subsidiaries from incurring additional liabilities.

The notes are our obligations only and some of our operations are conducted through, and a portion of our consolidated assets are held by, our subsidiaries.

The notes are our obligations exclusively and are not guaranteed by any of our operating subsidiaries. A portion of our consolidated assets is held by our subsidiaries. Accordingly, our ability to service our debt, including the notes, depends in part on the results of operations of our subsidiaries and upon the ability of such subsidiaries to provide us with cash, whether in the form of dividends, loans or otherwise, to pay amounts due on our obligations, including the notes. Our subsidiaries are separate and distinct legal entities and have no obligation, contingent or otherwise, to make payments on the notes or to make any funds available for that purpose. In addition, dividends, loans or other distributions to us from such subsidiaries may be subject to contractual and other restrictions and are subject to other business and tax considerations.

Recent and future regulatory actions and other events may adversely affect the trading price and liquidity of the notes.

We expect that many investors in, and potential purchasers of, the notes will employ, or seek to employ, a convertible arbitrage strategy with respect to the notes. Investors would typically implement such a strategy by selling short the common stock underlying the notes and dynamically adjusting their short position while continuing to hold the notes. Investors may also implement this type of strategy by entering into swaps on our common stock in lieu of or in addition to short selling the common stock. As a result, any specific rules regulating equity swaps or short selling of securities or other governmental action that interferes with the ability of market participants to effect short sales or equity swaps with respect to our common stock could adversely affect the ability of investors in, or potential purchasers of, the notes to conduct the convertible arbitrage strategy that we believe they will employ, or seek to employ, with respect to the notes. This could, in turn, adversely affect the trading price and liquidity of the notes.

The SEC and other regulatory and self-regulatory authorities have implemented various rules and taken certain actions, and may in the future adopt additional rules and take other actions, that may impact those engaging in short selling activity involving equity securities (including our common stock). Such rules and actions include Rule 201 of SEC Regulation SHO, the adoption by the Financial Industry Regulatory Authority, Inc. and the national securities exchanges of a "Limit Up-Limit Down" program, the imposition of market-wide circuit breakers that halt trading of securities for certain periods following specific market declines, and the implementation of certain regulatory reforms required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Although the direction and magnitude of the effect that Regulation SHO, FINRA, securities exchange rule changes and implementation of the Dodd-Frank Act may have on the trading price and the liquidity of the notes will depend on a variety of factors, many of which cannot be determined at the date of the prospectus, past regulatory actions (such as certain emergency orders issued by the SEC in 2008 prohibiting short sales of stock of certain financial services companies) have had a significant impact on the trading prices and liquidity of convertible debt instruments. Any governmental or regulatory action that restricts the ability of investors in, or potential purchasers of, the notes to effect short sales of our common stock, borrow our common stock or enter into swaps on our common stock or increases the costs of implementing an arbitrage strategy could adversely affect the trading price and the liquidity of the notes.

Volatility in the market price and trading volume of our common stock could adversely impact the trading price of the notes.

The stock market in recent years has experienced significant price and volume fluctuations that have often been unrelated to the operating performance of companies. The market price of our common stock could fluctuate significantly for many reasons, including in response to the risks described in this report, or for reasons unrelated to our operations, such as reports by industry analysts, investor perceptions or negative announcements by our customers, competitors or suppliers regarding their own performance, as well as industry conditions and general financial, economic and political instability. The market price of our common stock could also decline as a result of sales of a large number of shares of our common stock in the market, particularly sales by our directors, executive officers, employees, and significant stockholders, and the perception that these sales could occur may also depress the market price of our common stock. A decrease in the market price of our common stock would likely adversely impact the trading price of the notes. The market price of our common stock could also be affected by possible sales of our common stock by investors who view the notes as a more attractive means of equity participation in us and by hedging or arbitrage trading activity that we expect to develop involving our common stock. This trading activity could, in turn, affect the trading price of the notes.

We may still incur substantially more debt or take other actions which would intensify the risks discussed above.

We currently have a financing arrangement pursuant to which we may incur up to $10 million of revolver borrowings and our subsidiaries may be able to incur substantial additional debt, subject to the restrictions contained in such arrangement or our future debt instruments, some of which may be secured debt. We are not restricted under the terms of the indenture governing the notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indenture governing the notes that could have the effect of diminishing our ability to make payments on the notes when due. Any failure by us or any of our significant subsidiaries to make any payment at maturity of indebtedness for borrowed money in excess of $15 million or the acceleration of any such indebtedness in excess of $15 million would, subject to the terms of the indenture governing the notes, constitute a default under the indenture. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the notes when required.

We may not have the ability to raise the funds necessary to repurchase the notes upon specified dates or upon a fundamental change, and our future debt may contain limitations on our ability to repurchase the notes.

Holders of the notes have the right to require us to repurchase all or a portion of their notes on certain dates or upon the occurrence of a fundamental change at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. We may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of notes surrendered therefor.

In addition, our ability to repurchase the notes may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase notes at a time when the repurchase is required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the notes when required.

Holders of notes are not entitled to any rights with respect to our common stock, but they are subject to all changes made with respect to them to the extent our conversion obligation includes shares of our common stock.

Holders of notes are not entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock) prior to the conversion date with respect to any notes they surrender for conversion, but they are subject to all changes affecting our common stock. For example, if an amendment is proposed to our certificate of incorporation or bylaws requiring stockholder approval and the record date for determining the stockholders of record entitled to vote on the amendment occurs prior to the conversion date with respect to any notes surrendered for conversion, then the holder surrendering such notes will not be entitled to vote on the amendment, although such holder will nevertheless be subject to any changes affecting our common stock.

We have made only limited covenants in the indenture governing the notes, and these limited covenants may not protect your investment.

The indenture governing the notes does not:

- require us to maintain any financial ratios or specific levels of net worth, revenues, income, cash flows or liquidity and, accordingly, does not protect holders of the notes in the event that we experience adverse changes in our financial condition or results of operations;

- limit our subsidiaries' ability to guarantee or incur indebtedness that would rank structurally senior to the notes;
- limit our ability to incur additional indebtedness, including secured indebtedness;
- restrict our subsidiaries' ability to issue securities that would be senior to our equity interests in our subsidiaries and therefore would be structurally senior to the notes;
- restrict our ability to repurchase our securities;
- restrict our ability to pledge our assets or those of our subsidiaries; or
- restrict our ability to make investments or pay dividends or make other payments in respect of our common stock or our other indebtedness.

Furthermore, the indenture governing the notes contains only limited protections in the event of a change of control. We could engage in many types of transactions, such as acquisitions, refinancings or certain recapitalizations, that could substantially affect our capital structure and the value of the notes and our common stock but may not constitute a "fundamental change" that permits holders to require us to repurchase their notes or a "make-whole fundamental change" that permits holders to convert their notes at an increased conversion rate. For these reasons, the limited covenants in the indenture governing the notes may not protect your investment in the notes.

The increase in the conversion rate for notes converted in connection with a make-whole fundamental change or provisional redemption may not adequately compensate you for any lost value of your notes as a result of such transaction or redemption.

If a make-whole fundamental change occurs prior to February 6, 2021 or upon our issuance of a notice of provisional redemption, under certain circumstances, we will increase the conversion rate by a number of additional shares of our common stock for notes converted in connection such events. The increase in the conversion rate for notes converted in connection with such events may not adequately compensate you for any lost value of your notes as a result of such transaction or redemption. In addition, if the price of our common stock in the transaction is greater than $180.00 per share or less than $39.96 per share (in each case, subject to adjustment), no additional shares will be added to the conversion rate. Moreover, in no event will the conversion rate per $1,000 principal amount of notes as a result of this adjustment exceed 25.0250 shares of common stock, subject to adjustment.

Our obligation to increase the conversion rate for notes converted in connection with such events could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness and equitable remedies.

The conversion rate of the notes may not be adjusted for all dilutive events.

The conversion rate of the notes is subject to adjustment for certain events, including, but not limited to, the issuance of certain stock dividends on our common stock, the issuance of certain rights or warrants, subdivisions, combinations, distributions of capital stock, indebtedness, or assets, cash dividends and certain issuer tender or exchange offers. However, the conversion rate will not be adjusted for other events, such as a third-party tender or exchange offer or an issuance of common stock for cash, that may adversely affect the trading price of the notes or our common stock. An event that adversely affects the value of the notes may occur, and that event may not result in an adjustment to the conversion rate.

Some significant restructuring transactions may not constitute a fundamental change, in which case we would not be obligated to offer to repurchase the notes.

Upon the occurrence of a fundamental change, a holder of notes has the right to require us to repurchase the notes. However, the fundamental change provisions will not afford protection to holders of notes in the event of other transactions that could adversely affect the notes. For example, transactions such as leveraged recapitalizations, refinancings, restructurings, or acquisitions initiated by us may not constitute a fundamental change requiring us to repurchase the notes. In the event of any such transaction, the holders would not have the right to require us to repurchase the notes, even though each of these transactions could increase the amount of our indebtedness, or otherwise adversely affect our capital structure or any credit ratings, thereby adversely affecting the holders of notes.

In addition, absent the occurrence of a fundamental change or a make-whole fundamental change as described under changes in the composition of our board of directors will not provide holders with the right to require us to repurchase the notes or to an increase in the conversion rate upon conversion.

We cannot assure you that an active trading market will develop or be maintained for the notes.

We do not intend to apply to list our outstanding convertible notes on any securities exchange or to arrange for quotation on any automated dealer quotation system. In addition, the liquidity of the trading market in the notes and the market price quoted for the notes may be adversely affected by changes in the overall market for this type of security and by changes in our financial

performance or prospects or in the prospects for companies in our industry generally. As a result, we cannot assure you that an active trading market will develop or be maintained for the notes. If an active trading market does not develop or is not maintained, the market price and liquidity of the notes may be adversely affected. In that case you may not be able to sell your notes at a particular time or you may not be able to sell your notes at a favorable price.

Any adverse rating of the notes may cause their trading price to fall.

We do not intend to seek a rating on the notes. However, if a rating service were to rate the notes and if such rating service were to lower its rating on the notes below the rating initially assigned to the notes or otherwise announces its intention to put the notes on credit watch, the trading price of the notes could decline.

Holders of notes may be subject to tax if we make or fail to make certain adjustments to the conversion rate of the notes even though you do not receive a corresponding cash distribution.

The conversion rate of the notes is subject to adjustment in certain circumstances, including the payment of cash dividends. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, you may be deemed to have received a dividend subject to U.S. federal income tax without the receipt of any cash. In addition, a failure to adjust (or to adjust adequately) the conversion rate after an event that increases your proportionate interest in us could be treated as a deemed taxable dividend to you. If a make-whole fundamental change occurs prior to February 6, 2021 or we provide notice of a provisional redemption, under some circumstances, we will increase the conversion rate for notes converted in connection with the make-whole fundamental change or provisional redemption. Such increase may also be treated as a distribution subject to U.S. federal income tax as a dividend. For a non-U.S. holder, any deemed dividend would be subject to U.S. federal withholding tax at a 30% rate, or such lower rate as may be specified by an applicable treaty, which may be set off against subsequent payments on the notes.

Any conversions of the notes will dilute the ownership interest of our existing stockholders, including holders who had previously converted their notes.

Any conversion of some or all of the notes will dilute the ownership interests of our existing stockholders. Any sales in the public market of our common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the notes may encourage short selling by market participants because the conversion of the notes could depress the price of our common stock.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Unregistered Sales of Equity Securities

On January 28, 2014, we entered into an Agreement and Plan of Merger with DVS Sciences, Inc., a Delaware corporation (“DVS US”), Dawid Merger Sub, Inc., a Delaware corporation and our wholly-owned subsidiary (“Merger Sub”), and Shareholder Representative Services LLC, a Colorado limited liability company, as stockholder representative. Pursuant to the terms of the Merger Agreement, on February 13, 2014, Merger Sub merged with and into DVS US (the “Merger”), with DVS US surviving the Merger and becoming our wholly-owned subsidiary. Upon consummation of the Merger, all outstanding shares of capital stock of DVS US were canceled and converted into the right to receive merger consideration consisting of cash and shares of our common stock. In accordance with the Merger Agreement, 1,759,007 shares of our common stock were issued pursuant to exemptions from registration provided by Section 4(a)(2) and/or Regulation S of the Securities Act of 1933, as amended.

Item 6. Exhibits.

Exhibit Number	Description	Incorporated by Reference From Form	Incorporated by Reference From Exhibit Number	Date Filed
2.1	Agreement and Plan of Merger dated January 28, 2014 by and among Fluidigm Corporation, DVS Sciences, Inc., Dawid Merger Sub, Inc. and Shareholder Representative Services LLC	8-K	2.1	1/29/2014
4.1	Indenture, dated as of February 4, 2014, by and between Fluidigm Corporation and U.S. Bank National Association	8-K	4.1	2/4/2014
4.2	First Supplemental Indenture, dated as of February 4, 2014, by and between Fluidigm Corporation and U.S. Bank National Association	8-K	4.2	2/4/2014
4.3	Form of Global Note (included in Exhibit 4.2)	8-K	4.3	2/4/2014
10.1	Business Financing Modification Agreement dated January 29, 2014, by and between Bridge Bank, National Association and Fluidigm Corporation	8-K	10.1	1/29/2014
10.2	Letter Agreement between Fluidigm Corporation and William M. Smith, the registrant's Executive Vice President of Legal Affairs and General Counsel, dated March 4, 2014	Filed herewith		
10.3†	License Agreement between MDS Analytical Technologies, a business unit of MDS INC., and DVS Sciences Inc., dated July 17, 2008	Filed herewith		
10.4†	Sublicense Agreement between DVS Sciences Inc. and Fluidigm Corporation, dated January 28, 2014	Filed herewith		
10.5	Business Financing Modification Agreement dated May 9, 2014, by and between Bridge Bank, National Association and Fluidigm Corporation	Filed herewith		
31.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Filed herewith		
31.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Filed herewith		
32.1(1)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Furnished herewith		
32.2(1)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Furnished herewith		
101.INS	XBRL Instance Document	Filed herewith		

101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Document	Filed herewith

† Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from this Quarterly Report on Form 10-Q and have been filed separately with the Securities and Exchange Commission.

(1) In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 33-8238 and 34-47986, Final Rule: Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

FLUIDIGM CORPORATION

Dated: May 12, 2014

By: /s/ Gajus V. Worthington

Gajus V. Worthington

President and Chief Executive Officer

Dated: May 12, 2014

By: /s/ Vikram Jog

Vikram Jog

Chief Financial Officer

EXHIBIT LIST

Exhibit Number	Description	Incorporated by Reference From Form	Incorporated by Reference From Exhibit Number	Date Filed
2.1	Agreement and Plan of Merger dated January 28, 2014 by and among Fluidigm Corporation, DVS Sciences, Inc., Dawid Merger Sub, Inc. and Shareholder Representative Services LLC	8-K	2.1	1/29/2014
4.1	Indenture, dated as of February 4, 2014, by and between Fluidigm Corporation and U.S. Bank National Association	8-K	4.1	2/4/2014
4.2	First Supplemental Indenture, dated as of February 4, 2014, by and between Fluidigm Corporation and U.S. Bank National Association	8-K	4.2	2/4/2014
4.3	Form of Global Note (included in Exhibit 4.2)	8-K	4.3	2/4/2014
10.1	Business Financing Modification Agreement dated January 29, 2014, by and between Bridge Bank, National Association and Fluidigm Corporation	8-K	10.1	1/29/2014
10.2	Letter Agreement between Fluidigm Corporation and William M. Smith, the registrant's Executive Vice President of Legal Affairs and General Counsel, dated March 4, 2014	Filed herewith		
10.3†	License Agreement between MDS Analytical Technologies, a business unit of MDS INC., and DVS Sciences Inc., dated July 17, 2008	Filed herewith		
10.4†	Sublicense Agreement between DVS Sciences Inc. and Fluidigm Corporation, dated January 28, 2014	Filed herewith		
10.5	Business Financing Modification Agreement dated May 9, 2014, by and between Bridge Bank, National Association and Fluidigm Corporation	Filed herewith		
31.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Filed herewith		
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March 4, 2014

William M. Smith
95 Howard Way
Atherton, CA 94027

RE: Secondment to Fluidigm Canada Inc.

Dear Bill:

This is to confirm the terms and conditions relating to your secondment by Fluidigm Corporation ("Home Company") to Fluidigm Canada Inc. ("Host Company"), a subsidiary of the Home Company. During the period of your secondment, the terms and conditions of your offer letter with Home Company dated May 2, 2000 ("the Offer Letter") will remain applicable, including your at-will status, unless expressly modified by the contents of this letter.

At the end of your secondment to Host Company, the terms contained in this letter will cease to have effect and you will revert to the terms and conditions of the Offer Letter. In the event that this secondment is followed by another secondment, whether with Host Company or another entity, a new secondment letter will be sent to you setting out the terms and conditions for such subsequent secondment.

Your secondment is subject to your obtaining any required passport, visa, resident and/or work permits and any related documents, as well as compliance with any required medical or government clearances.

Secondment

During the period of your secondment, you will perform the role of **President and Acting General Manager** for Host Company. Your responsibilities will include, but are not limited to, overseeing operations and integration with Host Company. During the course of your secondment, you will remain an employee of Home Company, but your services will be temporarily seconded to Host Company. You will be based at the office of Host Company at 70 Esna Park Drive, Unit 12, Markham, ON L3R6E7 Canada.

While you are in Canada during your secondment, you shall not have any authority to negotiate on behalf of Home Company, or to modify or accept contracts on behalf of Home Company, or to otherwise bind Home Company to any contract with any third party or to conduct any business in the name of or on behalf of Home Company. Further, any contract presented to you that is intended to bind Home Company must be entered into by a duly authorized officer of Home Company located in the principal business office of Home Company in South San Francisco, CA.

Compensation and Benefits

During your secondment, you will receive the following compensation:

Annual Base salary: USD equivalent of $325,000.00

Retirement Plans: You will continue to participate in Home Company's 401k retirement plan while on secondment. The terms of your participation will be consistent with plan rules and eligibility.

Health and Welfare Plans: When possible, and in accordance with plan rules and eligibility, you will be covered by Home Company's health and welfare plans. If international coverage is not available through Home Company's plans, Human Resources will contact you to arrange for supplementary coverage.

Work and Holiday Schedule: Your work and holiday schedule will be in accordance with the work and holiday schedule of Canada.

Vacation and Leaves: Vacation eligibility and accrual and entitlements to leaves of absence will be determined in accordance with Home Company policies.

Business Expenses: Home Company will be responsible for reimbursing you for all business expenses reasonably and properly incurred on Host Company business. You should follow the applicable procedure for reimbursement of reasonable business expenses under your Home Company's policies, including the requirement of producing appropriate supporting documentation for the reimbursement of such expenses.

Tax Equalization

During the period of your secondment, you will pay approximately the same U.S. income (federal, state and local) and social security taxes that you would have paid had you remained in California, the United States. To accomplish this, there will be an amount deducted from your pay corresponding to the U.S. federal and California income tax, as well as U.S. social security tax, that you would have paid had you lived and worked in California ("Retained Hypothetical Tax"). This Retained Hypothetical Tax will be calculated and deducted from your compensation and will replace actual withholdings. After your tax returns are prepared, your hypothetical tax will be recomputed to reflect the actual facts for the year ("Final Hypothetical Tax") and the difference between the Retained Hypothetical Tax and the Final Hypothetical Tax will be settled promptly thereafter.

You will be required to comply with all U.S., state and local and foreign laws regarding personal income and social taxes. You will be responsible and liable for the submission of tax returns for the United States and California and Canada. To assist you in this regard, Home Company will designate a tax return preparer and pay for the preparation of required tax returns and tax equalization settlement calculations for you for all tax years affected by the secondment. For purposes of Home Company's tax equalization policy, you agree to either personally provide Home Company with a copy of your completed tax returns applicable to the years of your secondment or allow the tax return preparer to provide this information directly to Home Company for you.

Without prejudice to the above, you further agree:

- to authorise Home Company to deduct the Retained Hypothetical Tax from your salary and other earnings on a monthly basis; and
- that any additional tax amounts due from you when the Final Hypothetical Tax is computed will be settled by you promptly.

You also agree that Home Company or Host Company shall be entitled at any time during your employment, or in any event on termination, to deduct from your remuneration or from any other monies due to you from Home Company or from Host Company (or from any other group company), any amounts owing from you as a result of the application of these tax equalization provisions, whether in respect of hypothetical tax withholding or final tax equalization balances (including interest and penalties attributable to you).

You agree that, if any amounts remain owing after termination of employment, and the Fluidigm group company in question is unable to recover the full amount due by making deductions from your remuneration

or from any other monies due to you from any Fluidigm group company, you will pay to Home Company or Host Company on demand and in full a sum equal to any amounts owing. You agree that this sum shall be recoverable as a debt, together with all costs, including legal costs, incurred by any Fluidigm group company in recovering the sum.

Finally, if you were subject to social security charges in your host location and the host location permits you to apply for a refund of such charges, you agree to apply for such refund, and have such refund paid to Host Company or Home Company where possible. If refund directly to Host Company or Home Company is not possible, then you authorize Home Company or Host Company, as applicable, to deduct and set off any amounts refunded to you from any payments due from Home Company or Host Company to you, up to the maximum extent permitted by law. If the set-off is insufficient to cover the refund that you received, you agree to write a personal check for the amount still outstanding. The obligations under this clause continue after termination of your secondment and/or employment.

Any amounts paid to you in connection with tax equalization, that meet the requirements of Section 1.409A-1(b)(8)(iii) of the Treasury Regulations under Section 409A, shall be paid no later than the end of the second calendar year next following the calendar year to which the compensation subject to the tax equalizations relate. All reimbursements under this letter, including amounts paid for tax equalization that do not meet the requirements of Section 1.409A-1(b)(8)(iii) of the Treasury Regulations shall be made no later than the end of the calendar year next following the calendar year in which the applicable expenses are incurred.

Other Benefits

During the period of your secondment to Host Company, you shall be eligible to be provided with certain employee fringe benefits as you will be an expatriate working and living in Canada. Further details of these expatriate fringe benefits that you are eligible to receive are provided below.

These fringe benefits shall not be considered for purposes of determining any vacation pay or similar.

Pre-Secondment Support Services

To ensure that you are prepared to assume your new role in Canada, you will be provided with pre-secondment services in accordance with the Relocation Policy prior to deployment to Canada.

Passports, Visas, Residence and Work Permits. Home Company shall pay all costs for obtaining any required passports, visas, resident and/or work permits for you and any related documents and all associated administrative fees imposed, as may be required in connection with your secondment to Host Company and your business activities on behalf of Host Company.

Pre-Secondment Trip. Home Company shall pay for two trips to include business class airfare, local transportation, per diem and lodging per Home Company policy for a pre-assignment trip not exceeding five (5) days for you and your accompanying spouse.

Other International Secondment Allowances and Benefits

During your secondment, you shall be eligible for the following secondment allowances and benefits up to USD $125,000.00, but only for the duration of the secondment:

Housing Assistance. You will be provided with suitable housing consistent with the local market, including furniture as needed and all basic utilities (including telephone) and insurance. Standard house upkeep such as house cleaning will be at your personal expense.

Where possible, Home Company will sign the apartment/home lease and will pay all rental expenses directly. The terms of any lease must be approved by Home Company prior to acceptance.

Home Company will provide property maintenance and upkeep services related to your vacant Atherton, CA property while you are on the secondment. You are responsible for the costs of mortgage, insurance and taxes on the property. In the event that the property is rented, you agree to turn over to Home Company the gross rents collected. You are responsible for costs of mortgage, insurance and taxes on the property.

If you are required to vacate your principal residence prior to departure for Canada, you will be reimbursed for reasonable costs for meals, lodging, laundry, and other incidentals for a maximum of seven days. You will also be reimbursed for temporary living expenses in order to provide for a maximum of seven days of temporary living if living accommodations are not ready when you arrive in your host location. Reasonable costs for meals, lodging, laundry, and other incidentals are reimbursable during this period.

Health Club. You will be provided membership to a country club that is consistent with your current membership at home location.

Relocation Expenses. Home Company will reimburse business class air travel and incidental travel expenses for you and your accompanying spouse to travel to Canada (pre-visa) and from Canada at the end of your secondment (except as indicated below under “Term and Termination”).

You will be reimbursed up to USD $5,000.00 for shipping your personal possessions to Canada in connection with the start and also the conclusion of your secondment (except as indicated below under “Term and Termination”).

Transportation. To assist you and your spouse with transportation costs in Canada**,** Home Company will provide you with an automobile for use in the performance of your duties as well as an additional automobile for your spouse (which may be rented on occasions). In addition, Home Company will pay for all of the expenses of operating, maintaining and insuring such automobile[s] as well as applicable fees and taxes. You are responsible for fuel costs related to personal use. The automobile[s] will be the customary vehicle[s] in the host location for locals of your position.

Home Trips. You and your accompanying family members are each eligible for several completed round trip per 9-months’ period to Atherton, CA to maintain home location ties. Home Company will not allow the carryover of any unused home leave trips. Home Company will reimburse round-trip coach airfare for you and your accompanying family members. In accordance with company policy, you can use your frequent flyer miles to upgrade from coach airfare. You are expected to obtain pre-approval from Canada management for your specific travel dates and visit Home Company and coordinate your travel with business trips.

At the end of your secondment, all related allowances and benefits will terminate.

Exemption from Code Section 409A for U.S. Taxpayers. If you are subject to U.S. income taxation, any amounts paid to you in connection with tax equalization, that meet the requirements of Section 1.409A-1(b)(8)(iii) of the Treasury Regulations under U.S. Internal Revenue Code Section 409A, shall be paid no later than the end of the second calendar year next following the calendar year to which the compensation subject to the tax equalizations relate. All reimbursements under this letter, including amounts paid for tax equalization that do not meet the requirements of Section 1.409A-1(b)(8)(iii) of the Treasury Regulations shall be made no later than the end of the calendar year next following the calendar year in which the applicable expenses are incurred.

Standard of Conduct

During the period of your secondment, you will comply with the rules and procedures of Host Company, in addition to those of Home Company applicable despite your secondment abroad. You will be subject to the day-to-day management and control of the President & CEO of Home Company, from whom you will take instructions.

You are also expected to abide by the laws and regulations of Canada. Accordingly, you are required to maintain a standard of conduct that does not bring discredit upon yourself, your supervisors or upon Host Company.

Term and Termination

This secondment will commence as soon as is reasonably practicable after the date hereof. This secondment is anticipated to last for up to one year. At its discretion, however, Home Company may terminate this secondment before the expiration of that period in accordance with this letter or extend the secondment as required. If your secondment goes beyond one year, the terms and conditions of your secondment will be reviewed by Home Company.

Notwithstanding anything in this letter agreement to the contrary, Home Company may terminate this secondment at any time for any reason, however, we will attempt to give you one (1) month's advance notice in order to assist you in preparing for the transition.

Home Company's intention is that you will return to work for Home Company in a suitable capacity, however, you remain at all times an at-will employee of Home Company and shall not have an entitlement or guarantee of any position with Home Company. For the avoidance of doubt, the termination of your employment with Home Company shall automatically terminate your secondment under this letter. The cost of relocating you back to your home location will be covered in accordance with the Relocation Policy.

Notwithstanding the foregoing, Home Company may terminate your employment at any time if your conduct is such as to constitute Cause (as defined below) for summary dismissal. In the event your secondment or your underlying employment is terminated by reason of Cause, or if you voluntarily terminate employment or accept employment with another organization (unrelated to Home Company) within six months of the secondment start date, you will be solely responsible for any and all expenses related to the relocation of you and your family back to your home jurisdiction, including without limitation airfare, shipping costs, temporary housing expenses, and the like. For purposes of this letter agreement, "Cause" means (i) an act of dishonesty made by you in connection with your responsibilities as an employee, (ii) your conviction of, or pleading guilty to any indictable offense or any crime involving fraud, embezzlement or any other act of moral turpitude, (iii) your gross misconduct, (iv) your unauthorized use or disclosure of any proprietary information or trade secrets of Home Company, Host Company, or any other party to whom you owe an obligation of nondisclosure as a result of your relationship with Home Company or Host Company; (v) your willful breach of any obligations under any written agreement or covenant with Home Company or Host Company; or (vi) your continued failure to perform your employment duties after you have received a written demand of performance from Home Company which specifically sets forth the factual basis for Home Company's belief that you have not substantially performed your duties and your failure to cure such non-performance to Home Company's satisfaction within 10 business days after receiving such notice. In such circumstance, your employment shall end immediately without notice or pay in lieu thereof or any other form of compensation, except pay to your last day worked and any accrued vacation pay owing.

Third Party Beneficiary

Each of Home Company and Host Company is a third party beneficiary of this agreement and each of them has the full right and power to enforce rights, interests and obligations under this agreement without limitation or other restriction.

Governing Law

This temporary amendment to the Offer Letter will be governed by and construed in accordance with the laws of the State of California. You expressly agree that Canada law does not apply and waive all claims under Canada law. Notwithstanding the foregoing, to the extent that you are entitled to rights, benefits or compensation under the laws of both Canada and your home jurisdiction, you agree that you will be entitled to such rights, benefits, or compensation that are no greater than those provided to you under the terms of this letter agreement, so that any advantages that may accrue to you under the laws of both jurisdictions may not be combined.

Severability

If any term herein is unenforceable in whole or in part, the remainder shall remain enforceable to the extent permitted by law.

Please confirm your agreement to the terms of this secondment by signing and dating the duplicate copy of this letter, in the space provided.

Yours sincerely,

/s/ Gajus V. Worthington
Gajus V. Worthington
For and on behalf of Home Company

I agree to the terms and conditions of my secondment to Host Company in accordance with this letter. I understand that nothing contained herein shall be considered to be a guarantee of employment for the estimated duration of the secondment.

/s/ William M. Smith	March 4, 2014
William M. Smith	Date

LICENSE AGREEMENT

THIS AGREEMENT made this 17th day of July, 2008

BETWEEN:

MDS Analytical Technologies, a business unit of MDS INC., a company incorporated pursuant to the laws of Canada, **through its Sciex division**, having divisional offices at 71 Four Valley Drive, Concord, Ontario, Canada, L4K 4V8

(hereinafter, "MDS AT")

and

DVS Sciences Inc., a company incorporated pursuant to the laws of Ontario, having its head office at 70 Peninsula Crescent, Richmond Hill, Ontario, Canada, L4S 1Z5

(hereinafter, "DVS")

WHEREAS:

A. MDS AT is the owner by assignment of certain intellectual property rights, including, but not limited to, the Licensed IP as herein defined and specified in Schedule A hereto.

B. MDS AT is willing to grant and DVS wishes to obtain a worldwide exclusive, royalty bearing license under the Licensed IP to [*****], as herein defined.

C. MDS AT is further willing to grant and DVS wishes to obtain a worldwide, non-exclusive, royalty bearing license under the Licensed IP, with the right to [*****], as herein defined

THEREFORE, in consideration of the mutual promises set forth below, it is agreed as follows:

1. DEFINITIONS

In this Agreement the following terms shall have the following meanings, whether in singular or plural form:

1.1 "Flow Cytometer" means an analytical instrument that provides assay of a biological sample based on the analysis of individual cells or particles.

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.2 "Flow Cytometry" means the art of conducting assays with a Flow Cytometer.

1.3 "Field" means [*****].

1.4 Licensed Intellectual Property" or "Licensed IP" means the patents and/or patent applications listed in Schedule A hereto, and all continuations, continuations-in-part and divisions hereof, and all further patent applications claiming or describing inventions contained in, or claiming priority to, any of the foregoing, and all patents which may issue from any of such patent applications.

1.5 "Licensed Processes" means processes and technology that are within a Valid Claim of the Licensed IP.

1.6 "Licensed Product" means the ICP MS-based Flow Cytometer that is within a Valid Claim of Licensed IP and [*****].

1.7 "Licensed Reagent" means reagent or kit that is within a Valid Claim of Licensed IP.

1.8 "Licensed Technology" means Licensed Reagents and the Licensed Products.

1.9 "Gross Sales", for any Licensed Technology. In the case of a sale of such Licensed Technology by DVS to a purchaser who is bona fide at arm's-length from and unrelated to DVS with no consideration involved other than the invoice price, Gross Sales means the gross selling price invoiced by DVS to such purchaser for such Licensed Technology. In all other cases, "Gross Sales" means Gross Sales that would have applied had the Licensed Technology in question been sold to a purchaser who was bona fide at arm's-length and unrelated to DVS, with no consideration involved other than the invoice price.

1.10 "Sublicensee" means any party with which DVS enters into a sublicense agreement in accordance with this Agreement. For greater clarity it is understood that any payments made under this section are deemed to be royalty payments and therefore apply toward the minimum royalties in section 3.

1.11 Licensed Products incorporating Licensed Technology shall be deemed to have been sold or disposed of for value when they are shipped to a customer, or when they are invoiced, or when they are leased, or when any value whatsoever is received for them by DVS or a Sublicensee, whichever is first.

1.12 "Year" means a calendar year.

1.13 All sums mentioned herein shall be in Canadian dollars unless the context otherwise requires.

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.14 "Improvements" means improvements and developments [*****].

1.15 "Valid Claim" means a claim in an issued patent of the Licensed IP which has not (i) expired, (ii) been finally adjudicated invalid or unenforceable, (iii) found invalid or unenforceable, or (iv) been abandoned.

2. GRANT OF LICENSE

2.1 MDS AT hereby grants to DVS an exclusive, royalty bearing worldwide license under the Licensed IP, with the right to sublicense [*****] within the Field.

2.2 MDS AT hereby grants to DVS a non-exclusive, royalty bearing worldwide license under the Licensed IP, [*****] Licensed Reagents in fields other than the Field.

2.3 Notwithstanding section 2.2, MDS AT retains the right to [*****].

3. FEES AND ROYALTIES

3.1 Fee in the amount of [*****] dollars, to be guaranteed by manufacturing/distributing partner of DVS (the "Guarantor"), shall be paid by DVS to MDS AT by or before December 31, 2010. Royalties paid in calendar 2010 shall be applied against this fee.

3.2 DVS shall pay to MDS AT royalties (the "Royalties") as follows:

(i) [*****] of the Gross Sales of Licensed Technology sold.

(ii) If DVS grants a sublicense to a Sublicensee to make Licensed Products, DVS shall pay to MDS AT royalties equal to [*****] of the gross sales of Licensed Products sold by the Sublicensee and [*****] of any fees charged for the grant of such sublicense. For greater clarity, it is understood that any payments made under this subsection 3.3 are deemed to be royalty payments and therefore apply toward the minimum royalties required in section 5.

3.3 No Royalties shall accrue or be owed to MDS AT from DVS, including without limitation any payments under Sections 3.1 and 3.2, prior to [*****].

4. DUE DILIGENCE

4.1 DVS shall, itself or through a Sublicensee, use commercially reasonable efforts to effect introduction of Licensed Technology into the marketplace.

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

5. MINIMUM ROYALTIES

5.1 DVS shall pay to MDS AT minimum royalties under this Agreement as follows:

(i) [*****] dollars, and

(ii) [*****]: two hundred fifty thousand ($250,000) dollars.

5.2 If DVS fails to pay the minimum royalties set forth in subsection 5.1, and such failure to pay is not cured pursuant to section 13.3 herein, such failure shall constitute a breach of this Agreement.

5.3 The minimum royalties payable for the Year in which the last-to-expire Valid Claim expires shall be pro-rated based on date of expiration of such last-to-expire Valid Claim. No minimum royalties shall be payable for any subsequent Year following the expiration of the last-to-expire Valid Claim.

6. PAYMENT OF ROYALTIES

6.1 Royalties under subsection 3.2 shall be calculated quarterly, on the last day of each quarter of the Year (the "Quarter"), and should be payable within one (1) month following the end of each Quarter for Gross Sales by DVS which have occurred during the Quarter in question until the expiration of the last-to-expire Valid Claim.

6.2 Subject to Section 5.3, the Royalty payment for each Quarter of each Year beginning with the year [*****] shall be at least equal to the pro-rated minimum royalty payment applicable to that Quarter for such Year. Any overpayment for each Quarter resulting from payment of the minimum royalty may be credited against subsequent royalties otherwise payable for the Year in question and the subsequent Year.

6.3 All payments due to MDS AT under this Agreement shall be made to the credit of MDS AT. Where Gross Sales are in a currency other than Canadian dollars, the conversion into Canadian dollars shall be calculated at the rate of exchange for DVS to sell such currency quoted by the Canadian Imperial Bank of Commerce on the last day of the Quarter in respect of which payment is due.

6.4 For greater clarity, it is understood and agreed that royalty will be paid only once for each Licensed Technology.

7. RECORDS AND REPORTS

7.1 Each royalty payment made under this Agreement shall be accompanied by a statement showing particulars of all Gross Sales for the Quarter in question, and the total royalty due and payable to MDS AT.

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

7.2 DVS shall, and shall require each of its Sublicensees, to keep true and accurate records and books of account containing all data necessary for the determination of the royalties payable hereunder and to evaluate the performance of DVS or its Sublicensee. MDS AT may, upon reasonable prior notice (which shall include the name of the accountant referred to below), have such records and books of account inspected (not exceeding twice per annum) by a duly authorized independent chartered accountant, to verify the accuracy of the reports made hereunder. DVS or the Sublicensee may, by thirty (30) days' notice to MDS AT upon receiving the notice of inspection referred to above, object to the accountant selected by MDS AT if such accountant has a conflict of interest, reasonably determined, due to having provided services currently or during the immediately preceding two (2) years to a competitor of DVS or the Sublicensee in question, and MDS AT shall then select a different independent chartered accountant who has no such conflict of interest. The accountant shall maintain its findings relating to such inspection in confidence but may disclose to MDS AT full particulars of any deficiencies or inaccuracies in reports or payments by DVS.

8. IMPROVEMENTS (If Applicable)

8.1 Each party shall [*****] during the life of this Agreement.

8.2 Improvements developed by MDS AT may [*****] be deemed to be included in this Agreement and be subject to the terms hereof, and any such application for patents or equivalent protection made in respect thereof shall [*****].

8.3 Should DVS, during the term of this Agreement, develop any Improvements [*****] , DVS shall disclose the same to MDS AT. DVS shall grant to MDS AT a non-exclusive, royalty free[*****] license, [*****] to [*****] such Improvements in research and development only.

9. PATENTS AND PATENT APPLICATIONS

9.1 At all times during the term of this Agreement and, [*****], DVS shall control, in consultation with MDS AT, [*****] prosecuting any [*****] relating to [*****]. DVS shall advise MDS AT of [*****] in a timely manner to allow MDS AT to comment thereon and shall take into fair consideration any such comments.

9.2 MDS AT shall control, in consultation with DVS, [*****] prosecution [*****] of patents and patent applications for the Licensed Reagents not in the Field. MDS AT shall advise DVS of [*****] in a timely manner to allow DVS to comment thereon and shall take into fair consideration any such comments.

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

9.3 DVS and MDS AT each agree to provide reasonable support to the other for the prosecution [*****] and Licensed Reagents not in the Field under Sections 9.1 and 9.2, respectively, at no cost to the other Party.

9.4 If MDS AT believes, [*****] that it will not [*****] obtain a [*****] patent [*****] included in the Licensed IP, or that it would not be [*****] maintaining one of the Licensed IP, then it may discontinue such prosecution or maintenance, but it shall give DVS advance notice of such intention to discontinue so that DVS may [*****] the patent application or patent in question. In this instance, the patent application or patent in question will [*****].

10. INFRINGEMENT OF THIRD PARTIES

10.1 MDS AT shall have the right to bring an action for infringement of the Licensed IP against alleged infringers. [*****]

10.2 If DVS's exercise of their rights under this license infringes or is alleged or suspected to infringe on the intellectual property rights of an arm's-length third party, then DVS shall so advise MDS AT, and DVS may:

(i) determine that [*****] does not infringe the third party's intellectual property rights, or

(ii) attempt [*****], or

(iii) obtain a license [*****], or

(iv) [*****].

11. WARRANTIES

11.1 MDS AT is the owner of certain intellectual property rights, including, but not limited to, the Licensed IP referred to in Schedule A hereto and has the right to grant this License.

11.2 MDS AT, DVS and Guarantor each represent that they respectively have the capacity and authority to enter into this Agreement.

11.3 The Licensed IP is in good standing and to the knowledge of MDS AT the Licensed IP is valid and enforceable.

11.4 MDS AT otherwise makes no warranties, express or implied, as to any matter whatsoever, including without limitation:

(i) the condition of the Licensed Technology or results derived therefrom, or

(ii) the merchantability, utility, or fitness for a particular purpose of the Licensed Technology or results derived therefrom, or

(iii) the scope of the Licensed IP or that the Licensed IP may be exploited by DVS without infringing other patents.

12. INDEMNIFICATION

12.1 DVS will indemnify, defend and hold harmless MDS AT, its Affiliates, employees, representatives or agents, from and against all actions, suits, claims or proceedings and any damages, costs expenses (including legal costs) or liability of any kind or incurred by MDS AT in any action whatsoever against MDS AT, its Affiliates, employees, representatives or agents, including all infringement actions relating to practice of the Licensed Technology and liability therefrom:

(i) arising out of the performance by DVS or by others at the request of DVS (more specifically Sublicensees of DVS) functions and/or products contemplated by this Agreement, or

(ii) resulting from the negligent acts or omissions of DVS's employees, representatives or agents (more specifically Sublicensees of DVS) in connection with this Agreement, whether or not information or material supplied by MDS AT is utilized, or

(iii) in respect of any direct, consequential or other damage awarded against MDS AT resulting from the use, sale or other disposition by DVS or its customers of Licensed Technology.

12.2 MDS AT will indemnify, defend and hold harmless DVS, its Affiliates, employees, representatives or agents, from and against all actions, suits, claims or proceedings and any damages, costs expenses (including legal costs) or liability of any kind or incurred by DVS in any action whatsoever against DVS, its Affiliates, employees, representatives or agents:

(i) arising out of the performance by MDS AT or by others at the request of MDS AT functions and/or products contemplated by this Agreement, or

(ii) resulting from the negligent acts or omissions of MDS AT's employees, representatives or agents in connection with this Agreement.

12.3 DVS agrees that it and any Sublicensee will be required to maintain, for so long as is reasonably necessary, general comprehensive liability and product liability insurance in an amount reasonably necessary to enable them to carry out their obligations under this section.

12.4 In the event that any of an Indemnitor's agents, employees or permitted assigns attend at the Indemnitee facilities or use Indemnitee's equipment in relation to this

Agreement, Indemnitor assumes responsibility and will exonerate and hold harmless Indemnitee from and against any liability or any damage to property or injury including death to persons that may be caused by said persons when on Indemnitee property, and shall also be responsible for any injury or death which may be sustained by such persons and for public liability insurance for the negligent acts or omissions of such persons as well as workers compensation coverage for such persons while on Indemnitee property.

12.5 The indemnification obligations of the Parties under Sections 12.1, 12.2 and 12.3 shall apply only if:

(i) Indemnitee promptly notifies the Indemnitor in writing after the Indemnitee receives notice of any claim; and

(ii) Indemnitor is given the opportunity to manage and control the defense and/or settlement of such claim; and

(iii) Indemnitee reasonably co-operates with the Indemnitor and its legal representatives in the defense and/or settlement of any such claim; and

(iv) Indemnitee refrains from making any admission of liability or any attempt to settle the claim without the Indemnitor's prior written consent.

12.6 Notwithstanding the foregoing, the Indemnitor shall not be liable to indemnify any Indemnitee to the extent that the claim arises out of the Indemnitee's negligence, bad faith, willful misconduct, or breach of this Agreement or any obligation to a third party.

13. TERM AND TERMINATION

13.1 This Agreement is effective as of the date written above and shall, subject to the remainder of this section, remain in force until the expiry of the last Valid Claim unless terminated earlier pursuant to sections 13.2, 13.3 and 13.4 herein.

13.2 MDS AT may at its option terminate this Agreement immediately (and shall promptly give DVS notice of such termination) and avail itself of such other legal remedies as are appropriate, in the event that DVS at any time becomes insolvent, or makes an assignment for the benefit of creditors, or has a petition in bankruptcy filed against it.

13.3 If either party commits a material breach of this Agreement, then the aggrieved party may give written notice of such breach to the defaulting party. If such breach is not cured within sixty (60) days from the date of the notice, or if the breach is correctible but not within such sixty (60) days, then if the defaulting party does not take prompt steps within the sixty (60) days to cure the default and diligently pursue such steps thereafter, then the aggrieved party may terminate this Agreement by written notice to the other, the written notice to take effect when it is given.

13.4 DVS may terminate this Agreement at any time after the date hereof, either in its entirety or as to any country or countries. Such termination shall be on at least ninety (90) days'

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

written notice and upon payment of the Guarantee under section 3.1 herein, and fulfillment of such other obligations as set for in section(s) 6, 8, 9, 12, 14, 16, 17, 19, and 20.3.

14. CONFIDENTIAL INFORMATION

14.1 Each party agrees to respect and maintain Confidential Information as defined in this section 14.1, which it acquires from the other party by virtue of this Agreement, and will not disclose to any third party nor make any use of such Confidential Information without prior written consent of the other party, which consent shall not unreasonably be withheld provided that DVS takes such reasonable and contractual steps to ensure Sublicensees agree to be under a similar duty of confidentiality with respect to MDS AT's confidential information as DVS. "Confidential Information" shall mean information deemed to be confidential by MDS AT or DVS ("Provider") and disclosed to the other party ("Recipient")in confidence and including, but not limited to, know-how, trade secrets, all information, knowledge or data of an intellectual, technical, scientific, commercial, financial or industrial nature, either in written documentation, oral or visual information, whether by inspection of parts or equipment or otherwise, subject to the exceptions set out below. Oral information deemed to be confidential by the Provider, shall be reduced to writing within thirty (30) days from the date of disclosure and provided to the Recipient.

14.2 The obligations of confidentiality in subsection 14.1 shall not apply to information which the Recipient can establish by written proof:

(i) is or becomes a part of the public domain other than by a disclosure in breach of this Agreement, or

(ii) was known to the receiving party prior to the Recipient's receipt of the information in question, or

(iii) comes into the hands of the Recipient from a third party who is entitled to make such disclosure and has no obligation of confidence to the disclosing party, or

(iv) was developed by the Recipient independently of the information received from the disclosing party, or

(v) is approved for release by written authorization of both DVS and MDS AT.

15. RIGHT OF ASSIGNMENT

15.1 The obligations of DVS hereunder, including the obligation to report and pay royalties, shall run in favour of the successors and assigns or other legal representatives of MDS AT.

15.2 In the event of the sale, consolidation, reorganization or otherwise of DVS of all or substantially all of the assets related to the Licensed Technology, MDS AT shall consent to negotiate a commercially reasonable license to such person, firm or corporation succeeding to all or substantially all of DVS's business relating to the Licensed Technology provided that such person,

firm or corporation shall, without delay, accept in writing the provisions of this Agreement and agree to become in all respects bound thereby in the place of DVS.

16. **USE OF OTHER PARTY'S NAME**

16.1 Neither party shall use the other party's name in any advertising material relating to Licensed Technology, without the prior written consent of the other party, as well as consent as to the content of such advertising material relating to the Licensed Technology by the other party.

16.2 Each party shall obtain the prior approval of the other, such approval not to be unreasonably withheld or delayed, to the content of any written publicity, news release or other public statement or announcement relating to this Agreement, prior to originating or releasing it.

17. **INVALID CLAUSE**

17.1 If any term of this Agreement is held invalid by a court of competent jurisdiction, such provision shall be deemed to be of no effect and the remainder of this Agreement shall continue in force. The parties shall use their best efforts to replace the invalid term with a term which is valid and as nearly as possible achieves the intent of the invalid term.

18. **NO AGENCY**

18.1 Each party is an independent contractor, and neither is an agent of the other nor is responsible for the debts and obligations of the other. Neither party has any authority to commit or bind the other.

19. **NOTICES**

19.1 All notices and other communications required or permitted to be given hereunder shall be in writing and shall be sent to the following addresses or such other addresses as the parties may from time to time advise:

MDS INC., through its MDS AT division,
[*****]
[*****]

Attention: [*****]
[*****]
Facsimile: [*****]

Copy to: [*****]

DVS Sciences Inc.
[*****]
[*****]

Attention: [*****]

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

19.2 In order for any notices, requests, directions, or other communications to be effective, they will be delivered in person; or, sent by registered mail, or facsimile addressed to the party for whom it is intended at the above-mentioned address and will be deemed to have been received, if sent by registered mail, within five (5) days from the date of the postal receipt; if sent by facsimile or e-mail, when transmitted, as long as the sender subsequently confirms with the recipient that it has been received. The address of either party may be changed by notice in the manner set out in this provision.

20. **GENERAL**

20.1 This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

20.2 This Agreement constitutes the entire understanding between the parties concerning the subject matter hereof, and any amendments or modification shall not be binding upon each party unless it is in writing and signed by a duly authorized representative of each party.

20.3 This Agreement shall be interpreted and governed by the laws of the Province of Ontario in Canada as applied to transactions taking place entirely within Ontario between Ontario residents and whose courts shall have exclusive jurisdiction in respect of all disputes relating to or arising out of this Agreement.

20.4 The persons signing on behalf of the parties to this Agreement hereby warrant and represent that they have authority to execute this Agreement on behalf of, and bind, the party for whom they have signed.

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the day and year first above written.

DVS Sciences, Inc.

Per: [*****]

Name: [*****]

Title: [*****]

MDS Analytical Technologies, through its Sciex division

Per: [*****]

Name: [*****]

Title: [*****]
[*****]

Guarantor

Per: [*****]

Name: [*****]

Company: [*****]

Title: [*****]

[*****]
[*****]
[*****]
[*****]
[*****]

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE A

Country	Patent	Serial/Patent No.
[*****]	[*****]	[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]	[*****]	[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		[*****]
[*****]		
[*****]		
[*****]		
[*****]		

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SUBLICENSE AGREEMENT

This **SUBLICENSE AGREEMENT** (the "**Agreement**") is made and signed as of January 28, 2014 (the "**Effective Date**") by and between **DVS SCIENCES INC.**, a company incorporated under the laws of Ontario, with a principal place of business at 70 Peninsula Crescent, Richmond Hill, Ontario, Canada, L4S 1Z5 ("**DVS**"), on the one hand, and **FLUIDIGM CORPORATION,** a Delaware corporation with a principal place of business at 7000 Shoreline, Suite 100, South San Francisco, California 94080 ("**Fluidigm**"), on the other hand. DVS and Fluidigm are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**".

RECITALS

WHEREAS, DVS and MDS Analytical Technologies, a business unit of MDS Inc. ("**MDS AT**"), entered into a license agreement dated July 17, 2008, pursuant to which MDS AT granted to DVS a worldwide, exclusive license, with the right to grant sublicenses, under certain patent rights owned by MDS AT (the "**Licensed IP**", as further defined below) [*****] in the field of [*****] (the "**License Agreement**").

WHEREAS, by way of a [*****], MDS AT assigned [*****] the License Agreement and in the Licensed IP to DH Technologies Development PTE Ltd., a subsidiary of Danaher Corporation ("**DH**"), and by way of [*****], DH assigned [*****] the License Agreement and in the Licensed IP to PerkinElmer Health Sciences, Inc. ("**PE**");

WHEREAS, this exclusive license was granted to DVS, with diligence obligations, to [*****] the Licensed IP in the Field, including the right to grant sublicenses [*****]; and

WHEREAS, DVS desires to grant to Fluidigm, and Fluidigm wishes to obtain a sublicense under DVS's interest in the Licensed IP, to [*****] and to achieve its goal of using [*****] to address [*****] through [*****], using [*****], including through the [*****] the Licensed IP.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the covenants and promises contained in this Agreement and intending to be legally bound, the Parties agree as follows:

ARTICLE 1. DEFINITIONS

The terms, as defined herein, shall have the same meanings in both their singular and plural forms. Capitalized terms used, but not defined, herein will have the meanings ascribed to them in the License Agreement.:

1.1 **Affiliate**" of any particular Person means any other Person controlling, controlled by or

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, contract or otherwise. For purposes of this Agreement, DVS shall be deemed not to be an Affiliate of Fluidigm.

1.2 "**Change of Control**" means, with respect to a Party, any of the following: (i) the acquisition by a Party or such Party's "group" (within the meaning of Section 13(d)(3) of the Exchange Act), in a single transaction or in a related series of transactions, by way of merger, recapitalization, consolidation or other business combination or purchase of beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of more than 50% of the total voting power of such Party or (ii) the sale, transfer or disposition of all or substantially all of the assets of such Party and its Subsidiaries (on a consolidated basis) to any Person or group (other than such Party or its wholly-owned Subsidiaries).

1.3 "**Confidential Information**" has the meaning set forth in Section 12.1.

1.4 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

1.5 "**Field**" means [*****].

1.6 "**Flow Cytometer**" means an analytical instrument that provides assay of a biological sample based on the analysis of individual cells or particles.

1.7 "**Flow Cytometry**" means the art of conducting assays with a Flow Cytometer.

1.8 "**Gross Sales**" means, for any Licensed Technology, in the case of a sale of such Licensed Technology by Fluidigm or its Affiliates to a purchaser who is bona fide at arms' length from and unrelated to Fluidigm with no consideration involved other than the invoice price, Gross Sales means the gross selling price invoiced by Fluidigm (or its Affiliate) to such purchaser for such Licensed Technology. In all other cases, "Gross Sales" means Gross Sales that would have applied, had the Licensed Technology in question been sold to a purchaser who was bona fide at arms'-length and unrelated to DVS, with no consideration involved other than the invoice price.

1.9 "**Improvements**" means improvements and developments [*****].

1.10 "**Licensed IP**" means the patents and/or patent applications listed in Schedule A to the License Agreement, and all continuations, continuations in part and divisions thereof, and all further patent applications claiming or describing inventions contained in, or claiming priority to, any of the foregoing, and all patents which may issue from any of such patent applications.

1.11 "**Licensed Product**" means the ICP MS-based Flow Cytometer that is within a Valid Claim of Licensed IP and [*****].

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.12 "**Licensed Reagent**" means reagent or kit that is within a Valid Claim of Licensed IP.

1.13 "**Licensed Technology**" means the Licensed Products and the Licensed Reagents.

1.14 "**Person**" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, a governmental entity or any other entity.

1.15 "**Subsidiary**" means, with respect to either Party, any corporation of which a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by such Party or one or more of the other Subsidiaries of such Party or a combination thereof, or any partnership, association or other business entity of which a majority of the partnership or other similar ownership interest is at the time owned or controlled, directly or indirectly, by such Party or one or more Subsidiaries of such Party or a combination thereof.

1.16 "**Third Party**" means any Person other than DVS or Fluidigm, or their respective Affiliates.

1.17 "**Valid Claim**" means a claim in an issued patent of the Licensed IP which has not (i) expired, (ii) been finally adjudicated invalid or unenforceable, (iii) found invalid or unenforceable, or (iv) been abandoned.

1.18 "**Year**" means a calendar year.

ARTICLE 2. GRANTS

2.1 **License.** Subject to the terms and conditions of this Agreement, DVS hereby grants to Fluidigm under the Licensed IP, a [*****] license, [*****] to [*****] in the Field.

2.2 **Reservation of Rights.** Fluidigm acknowledges and agrees that with the exception of certain rights granted to DVS in relation to Licensed Reagents pursuant to Section 2.2 of the License Agreement, PE retains the rights to [*****]. Except as explicitly set forth herein, neither Party grants the other Party any other rights in or to its intellectual property, or the intellectual property of any Third Party, pursuant to this Agreement.

2.3 **Termination of Sublicenses.** Any [*****] the rights granted in Section 2.1 [*****] in the event of [*****], which results in such [*****].

ARTICLE 3. CONSIDERATION

3.1 **Upfront Payment.** In consideration for the rights granted to Fluidigm under this Agreement, Fluidigm shall pay to DVS a one-time, non-refundable, non-creditable payment of

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

[*****], within five (5) days of the Effective Date and receipt by Fluidigm of an invoice in such amount from DVS, by wire transfer of immediately available funds into an account designated in writing by DVS.

3.2 **Royalties.** In consideration for the rights granted to Fluidigm under this Agreement, Fluidigm shall pay DVS a royalty of [*****] on annual, [*****] Gross Sales.

ARTICLE 4. PAYMENT

4.1 Royalties under Section 3.2 shall be calculated quarterly, on the last day of each quarter of the Year (the "**Quarter**"), and should be payable within one (1) month following the end of each Quarter for Gross Sales by Fluidigm which have occurred during the Quarter in question until the expiration of the last-to-expire Valid Claim.

4.2 All payments due to DVS under this Agreement shall be made to the credit of DVS. Where Gross Sales are in a currency other than Canadian dollars, the conversion into Canadian dollars shall be calculated at the rate of exchange for Fluidigm to sell such currency quoted by the Canadian Imperial Bank of Commerce on the last day of the Quarter in respect of which payment is due.

4.3 For greater clarity, it is understood and agreed that royalty will be paid only once for each Licensed Technology.

ARTICLE 5. RECORDS AND REPORTS

5.1 Each royalty payment made under this Agreement shall be accompanied by a statement showing particulars of all Gross Sales for the Quarter in question, and the total royalty due and payable to DVS.

5.2 Fluidigm shall keep true and accurate records and books of account containing all data necessary for the determination of the royalties payable hereunder and to evaluate the performance of Fluidigm. DVS may, upon reasonable prior notice (which shall include the name of the accountant referred to below), have such records and books of account inspected (not exceeding twice per annum) by a duly authorized independent chartered accountant, to verify the accuracy of the reports made hereunder. Fluidigm may, by thirty (30) days' notice to DVS upon receiving the notice of inspection referred to above, object to the accountant selected by Fluidigm if such accountant has a conflict of interest, reasonably determined, due to having provided services currently or during the immediately preceding two (2) years to a competitor of Fluidigm in question, and DVS shall then select a different independent chartered accountant who has no such conflict of interest. The accountant shall maintain its findings relating to such inspection in confidence but may disclose to DVS full particulars of any deficiencies or inaccuracies in reports or payments by Fluidigm.

ARTICLE 6. IMPROVEMENTS (If Applicable)

6.1. Each party shall [*****] during the life of this Agreement.

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

6.2 Should [*****], during the term of this Agreement, develop any Improvements [*****], [*****]shall disclose the same to [*****]. [*****] shall grant to [*****] a [*****] license, [*****], to [*****] such Improvements [*****].

ARTICLE 7. PATENTS AND PATENT APPLICATIONS

7.1 At all times during the term of this Agreement and, DVS shall control, in consultation with PE, [*****] prosecuting any [*****] relating to [*****].

7.2 [*****] acknowledges and agrees that PE shall control, in consultation with DVS, [*****] prosecution [*****] of patents and patent applications for the [*****].

ARTICLE 8. INFRINGEMENT BY THIRD PARTIES

8.1 If Fluidigm's exercise of its rights under this license infringes or is alleged or suspected to infringe on the intellectual property rights of an arm's-length third party, then [*****].

ARTICLE 9. WARRANTIES

9.1 Fluidigm and DVS each represent that they respectively have the capacity and authority to enter into this Agreement.

9.2 DVS represents that it holds an exclusive license from PE under the Licensed IP to [*****] in the Field, and has the [*****] in accordance with [*****].

9.3 Except as explicitly set forth in this Article 7, neither Party otherwise makes any warranties, express or implied, under this Agreement, including without limitation: (a) the condition of the Licensed Technology or results derived therefrom, or (b) the merchantability, utility, or fitness for a particular purpose of the Licensed Technology or results derived therefrom, or (c) the scope of the Licensed IP or that the Licensed IP may be exploited without infringing other patents.

ARTICLE 10. INDEMNIFICATION

10.1 Fluidigm will indemnify, defend and hold harmless DVS, and its Affiliates, employees, representatives or agents of each of the foregoing entities (each a "**DVS Indemnitee**"), from and against all actions, suits, claims or proceedings and any damages, costs expenses (including legal costs) or liability of any kind or incurred by any DVS Indemnitee in any Third Party action whatsoever against any DVS Indemnitee, its employees, representatives or agents, including all infringement actions, in each case to the extent resulting from the practice of the Licensed Technology under this Agreement and liability therefrom: (a) arising out of the performance by Fluidigm or by others at the request of Fluidigm functions and/or products contemplated by this

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Agreement, or (b) resulting from the negligent acts or omissions of Fluidigm's employees, representatives or agents in connection with this Agreement, whether or not information or material supplied by any DVS Indemnitee is utilized, or (c) in respect of any direct, consequential or other damage awarded against any DVS Indemnitee resulting from the use, sale or other disposition by Fluidigm or its customers of Licensed Technology. For clarity, any action, suit, claim or proceeding brought by PE against any DVS Indemnitee with respect to DVS's indemnification obligations pursuant to Section 12.1 of the License Agreement that arise from activities by Fluidigm or its Affiliates that fall within the foregoing subsections (a), (b) and (c) of this Section 10.1 shall be considered a Third Party action for the purposes of Fluidigm's indemnification obligations pursuant to this Section 10.1.

10.2. DVS will indemnify, defend and hold harmless Fluidigm, its Affiliates, employees, representatives or agents, from and against all actions, suits, claims or proceedings and any damages, costs expenses (including reasonable legal costs) or liability of any kind or incurred by Fluidigm in any Third Party action whatsoever against Fluidigm, its Affiliates, employees, representatives or agents: resulting from the negligent acts or omissions of DVS's employees, representatives or agents in connection with this Agreement.

10.3 Each Party agrees that it will be required to maintain, for so long as is reasonably necessary, general comprehensive liability and product liability insurance in an amount reasonably necessary to enable them to carry out their obligations under this section.

10.4 The indemnification obligations of the Parties under Sections 10.1 and 10.2 shall apply only if:

(a) the Party seeking indemnification (the "**Indemnitee**") promptly notifies the other Party (the "**Indemnitor**") in writing after the Indemnitee receives notice of any claim; and

(b) the Indemnitor is given the opportunity to manage and control the defense and/or settlement of such claim; and

(c) the Indemnitee reasonably co-operates with the Indemnitor and its legal representatives in the defense and/or settlement of any such claim; and

(d) the Indemnitee refrains from making any admission of liability or any attempt to settle the claim without the Indemnitor's prior written consent.

10.5 Notwithstanding the foregoing, the Indemnitor shall not be liable to indemnify any Indemnitee to the extent that the claim arises out of the Indemnitee's negligence, bad faith, willful misconduct, or breach of this Agreement or any obligation to a Third Party.

ARTICLE 11. TERM AND TERMINATION

11.1 This Agreement is effective as of the Effective Date and shall, unless terminated earlier in accordance with the remainder of this section, remain in force for a period of [*****] (the "**Initial Term**"). Following the Initial Term, upon Fluidigm's written request, and subject to the remainder of this Section 11, the Parties may mutually agree to extend the term of this Agreement for an additional periods of [*****].

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

11.2 DVS may at its option terminate this Agreement immediately (and shall promptly give Fluidigm notice of such termination) and avail itself of such other legal remedies as are appropriate, in the event that Fluidigm at any time becomes insolvent, or makes an assignment for the benefit of creditors, or has a petition in bankruptcy filed against it.

11.3 DVS may at its option terminate this Agreement and all of the rights and licenses granted hereunder upon five (5) days' written notice to Fluidigm in the event that [*****].

11.4 If either Party commits a material breach of this Agreement, then the aggrieved Party may give written notice of such breach to the defaulting Party. If such breach is not cured within sixty (60) days from the date of the notice, or if the breach is correctible but not within such sixty (60) days, then if the defaulting Party does not take prompt steps within the sixty (60) days to cure the default and diligently pursue such steps thereafter, then the aggrieved Party may terminate this Agreement by written notice to the other, the written notice to take effect when it is given.

11.5 Fluidigm may terminate this Agreement at any time after the date hereof, either in its entirety or as to any country or countries. Such termination shall be on at least thirty (30) days' written notice.

ARTICLE 12. CONFIDENTIAL INFORMATION

12.1 Each Party agrees to respect and maintain Confidential Information as defined in this Section 12.1, which it acquires from the other Party by virtue of this Agreement, and will not disclose to any Third Party nor make any use of such Confidential Information without prior written consent of the other Party, which consent shall not unreasonably be withheld provided that each Party takes such reasonable and contractual steps to ensure that any such Third Party agrees to be under a similar duty of confidentiality with respect to the other Party's confidential information. "**Confidential Information**" shall mean information deemed to be confidential and disclosed by DVS or Fluidigm ("**Provider**") to the other Party ("**Recipient**")in confidence and including, but not limited to, know-how, trade secrets, all information, knowledge or data of an intellectual, technical, scientific, commercial, financial or industrial nature, either in written documentation, oral or visual information, whether by inspection of parts or equipment or otherwise, subject to the exceptions set out below. Oral information deemed to be confidential by the Provider, shall be reduced to writing within thirty (30) days from the date of disclosure and provided to the Recipient.

12.2 The obligations of confidentiality in Section 12.1 shall not apply to information which the Recipient can establish by written proof:

(i) is or becomes a part of the public domain other than by a disclosure in breach of this Agreement;

(ii) was known to the Recipient prior to the Recipient's receipt of the information in question;

(iii) comes into the hands of the Recipient from a third party who is entitled to make such disclosure and has no obligation of confidence to the Provider;

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(iv) was developed by the Recipient independently of the information received from the Provider; or

(v) is approved for release by written authorization of the Provider.

ARTICLE 13. RIGHT OF ASSIGNMENT

13.1 The obligations of Fluidigm hereunder, including the obligation to report and pay royalties, shall run in favor of the successors and assigns or other legal representatives of DVS.

13.2 Neither Party may assign or otherwise transfer this Agreement without the prior written consent of the other Party. Notwithstanding the foregoing, and subject to Section 11.3, either Party may assign or otherwise transfer this Agreement to a Third Party successor in interest in the context of a merger, sale or acquisition of such Party, or a sale of all or substantially all of the business or assets of such Party to which this Agreement relates.

ARTICLE 12. USE OF OTHER PARTY'S NAME

12.1 Neither party shall use the other party's name, or the name of MDS AT or PE in any advertising material relating to Licensed Technology, without the prior written consent of the other party, as well as consent as to the content of such advertising material relating to the Licensed Technology by the other party.

12.2 Each party shall obtain the prior approval of the other, such approval not to be unreasonably withheld or delayed, to the content of any written publicity, news release or other public statement or announcement relating to this Agreement, prior to originating or releasing it; provided that each Party shall be permitted to make any such statements or announcements to the extent required by applicable laws, rules and regulations.

ARTICLE 13. MISCELLANEOUS

13.1 If any term of this Agreement is held invalid by a court of competent jurisdiction, such provision shall be deemed to be of no effect and the remainder of this Agreement shall continue in force. The parties shall use their best efforts to replace the invalid term with a term which is valid and as nearly as possible achieves the intent of the invalid term.

13.2 Each Party is an independent contractor, and neither is an agent of the other nor is responsible for the debts and obligations of the other. Neither Party has any authority to commit or bind the other pursuant to this Agreement.

13.3 All notices and other communications required or permitted to be given hereunder shall be in writing and shall be sent to the following addresses or such other addresses as the Parties may from time to time advise:

Fluidigm Corporation
[*****]
[*****]
[*****]

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

[*****]
Copy to:

DVS Sciences Inc.
[*****]
[*****]
[*****]
Copy to:

In order for any notices, requests, directions, or other communications to be effective, they will be delivered in person; or, sent by registered mail, or facsimile addressed to the party for whom it is intended at the above-mentioned address and will be deemed to have been received, if sent by registered mail, within five (5) days from the date of the postal receipt; if sent by facsimile or e-mail, when transmitted, as long as the sender subsequently confirms with the recipient that it has been received. The address of either Party may be changed by notice in the manner set out in this provision.

13.4 This Agreement shall inure to the benefit of and shall be binding upon the Parties hereto and their respective successors and permitted assigns.

13.5 This Agreement constitutes the entire understanding between the Parties concerning the subject matter hereof, and cancels and supersedes any and all prior or contemporaneous negotiations, correspondence, understandings, and agreements, whether oral or written, between the Parties respecting the subject matter hereof, and neither Party shall be liable or bound to the other Party with respect to the subject matter of this Agreement in any manner by any representations, warranties, covenants, or agreements except as specifically set forth herein. Any amendments or modification of this Agreement shall not be binding upon each Party unless it is in writing and signed by a duly authorized representative of each Party.

13.6 This Agreement shall be interpreted and governed by the laws of the Province of Ontario in Canada as applied to transactions taking place entirely within Ontario between Ontario residents.

13.7 This Agreement may be executed simultaneously in two counterparts, either one of which need not contain the signature of more than one Party, but both of which taken together shall constitute one and the same agreement. Signatures to this Agreement transmitted by facsimile, by email in “portable document format” or “.pdf”, or by any other electronic means intended to preserve the original graphic and pictorial appearance of this Agreement, shall have the same effect as physical delivery of the paper document bearing original signature. The persons signing on behalf of the Parties to this Agreement hereby warrant and represent that they have authority to execute this Agreement on behalf of, and bind, the Party for whom they have signed.

(Signature Page Follows)

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the Effective Date by their duly authorized representatives as set forth below:

FLUIDIGM CORPORATION	**DVS SCIENCES INC.**
By: [*****]	By: [*****]
Name: [*****]	Name: [*****]
Title: [*****]	Title: [*****]

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

BUSINESS FINANCING MODIFICATION AND WAIVER AGREEMENT

This Business Financing Modification and Waiver Agreement is entered into as of May 9, 2014, by and between Fluidigm Corporation, a Delaware corporation (the "Borrower"), and Bridge Bank, National Association ("Lender"), and is effective as of March 31, 2014.

1. DESCRIPTION OF EXISTING DOCUMENTS: Borrower and Lender are parties to a Business Financing Agreement, dated December 16, 2010, as amended on February 8, 2011, March 31, 2011, December 21, 2012, and January 29, 2014 (as may be further amended from time to time, the "Business Financing Agreement"). Capitalized terms used without definition herein shall have the meanings assigned to them in the Business Financing Agreement.

Hereinafter, all indebtedness owing by Borrower to Lender shall be referred to as the "Indebtedness" and the Business Financing Agreement and any and all other documents executed by Borrower in favor of Lender shall be referred to as the "Existing Documents."

2. DESCRIPTION OF CHANGE IN TERMS.

A. Modifications to Business Financing Agreement:

(1) In order to account for new assets acquired by Borrower through Borrower's acquisition of DVS Sciences, Inc., a Delaware corporation, Section 4.14(a) is hereby amended to delete subsection (y) thereof and, as a result of such deletion, Section 4.14(a) shall hereafter be restated to read as follows:

(a) Adjusted Asset Coverage Ratio not at any time less than 1.1 to 1.0, with compliance determined on a quarterly basis if no Advances are outstanding, and on a monthly basis otherwise.

3. WAIVER. Lender hereby waives the Tangible Net Worth covenant set forth in Section 4.14(b) of the Business Financing Agreement for the fiscal quarter ended March 31, 2014; provided, however, that nothing herein, nor any communications among Borrower and Lender shall be deemed a waiver with respect to any other provision of the Business Financing Agreement, or any Default or Events of Default or any failure of Borrower to comply with any other provision of the Agreement or any other Existing Document, and in no event shall this waiver be deemed to be a waiver of enforcement of any of the rights or remedies of Lender under the Business Financing Agreement or any other Existing Document, at law, in equity, or otherwise, with respect to any Default or Event of Default now existing or hereafter arising. Except as expressly provided herein, Lender hereby reserves and preserves all of their rights and remedies against Borrower under the Business Financing Agreement and the other Existing Documents, at law, in equity, or otherwise.

4. CONSISTENT CHANGES. The Existing Documents are each hereby amended wherever necessary to reflect the changes described above.

5. NO DEFENSES OF BORROWER/GENERAL Release. Borrower agrees that, as of this date, it has no defenses against the obligations to pay any amounts under the Indebtedness. Each of Borrower and Guarantor (each, a "Releasing Party") acknowledges that Lender would not enter into this Business Financing Modification and Waiver Agreement without Releasing Party's assurance that it has no claims against Lender or any of Lender's officers, directors, employees or agents. Except for the obligations arising hereafter under this Business Financing Modification and Waiver Agreement, each Releasing Party releases Lender, and each of Lender's and entity's officers, directors and employees from any known or unknown claims that Releasing Party now has against Lender of any nature, including any claims that Releasing Party, its successors, counsel, and advisors may in the future discover they would have now if they had known facts not now known to them, whether founded in contract, in tort or pursuant to any other theory of liability, including but not limited to any claims arising out of or related to the Agreement or the transactions contemplated thereby. Releasing Party waives the provisions of California Civil Code section 1542, which states:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER, MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

The provisions, waivers and releases set forth in this section are binding upon each Releasing Party and its shareholders, agents, employees, assigns and successors in interest. The provisions, waivers and releases of this section shall inure to the benefit of Lender and its agents, employees, officers, directors, assigns and successors in interest. The provisions of this section shall survive

payment in full of the Obligations, full performance of all the terms of this Business Financing Modification and Waiver Agreement and the Business Financing Agreement, and/or Lender's actions to exercise any remedy available under the Business Financing Agreement or otherwise.

6. CONTINUING VALIDITY. Borrower understands and agrees that in modifying the Existing Documents, Lender is relying upon Borrower's representations, warranties, and agreements, as set forth therein. Except as expressly modified pursuant to this Business Financing Modification and Waiver Agreement, the terms of the Existing Documents remain unchanged and in full force and effect. Lender's agreement to modifications to the Existing Documents pursuant to this Business Financing Modification and Waiver Agreement in no way shall obligate Lender to make any future modifications to the Existing Documents or the Indebtedness. Nothing in this Business Financing Modification and Waiver Agreement shall constitute a satisfaction of the Indebtedness. It is the intention of Lender and Borrower to retain as liable parties all makers and endorsers of Existing Documents, unless the party is expressly released by Lender in writing. No maker, endorser, or guarantor will be released by virtue of this Business Financing Modification and Waiver Agreement. The terms of this paragraph apply not only to this Business Financing Modification and Waiver Agreement, but also to any subsequent modification agreements relating to the Business Financing Agreement.

~~ signatures follow ~~

IN WITNESS WHEREOF, Borrower and Lender have executed this Agreement on the day and year above written.

BORROWER:	LENDER:
FLUIDIGM CORPORATION	BRIDGE BANK, NATIONAL ASSOCIATION
By: /s/ Vikram Jog Name: Vikram Jog Title: Chief Financial Officer	By: /s/ Chris Hill Name: Chris Hill Title: Senior Vice President

Exhibit 31.1

**CERTIFICATION OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER
PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Gajus V. Worthington, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Fluidigm Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 12, 2014

By: /s/ Gajus V. Worthington
Gajus V. Worthington
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Vikram Jog, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Fluidigm Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 12, 2014

By: /s/ Vikram Jog
Vikram Jog
Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Gajus V. Worthington, the chief executive officer of Fluidigm Corporation (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 2014 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Gajus V. Worthington

Gajus V. Worthington
President and Chief Executive Officer

Date: May 12, 2014

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Vikram Jog, the chief financial officer of Fluidigm Corporation (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 2014 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Vikram Jog

Vikram Jog
Chief Financial Officer

Date: May 12, 2014