LUMINEX 2013
ANNUAL REPORT

[MISSION]

Luminex transforms the way our customers perform biological testing. We pioneer comprehensive yet simple solutions to improve outcomes and reduce overall costs.

Every day we work to enhance the health, safety and quality of life for all.

LETTER TO SHAREHOLDERS

2013 was another year of significant progress for Luminex. We again achieved record revenue for the year and shipped over a thousand multiplexing analyzers, surpassing the important milestone of 10,000 cumulative instrument shipments. Our gross margins continue to lead the industry, reflecting our strategically important low cost manufacturing position. In addition, we successfully completed an important evolutionary step in our company's history with the transition to a direct sales force in our high growth molecular diagnostics business.

The health care market continues to evolve and change, particularly recently in the U.S. We saw the effect of these changes in 2013, as administrative changes in reimbursement for certain molecular diagnostic tests impacted the ordering patterns of many of our customers. These conditions in turn, affected our growth rate for the year. However, we are optimistic that the effects of these recent changes will subside throughout 2014. Longer term, our future remains bright as these conditions favor Luminex due to our low manufacturing costs.

Innovation is a key to our success, so we continued to invest in our growing pipeline. We introduced multiple assay products in areas such as infectious disease with our novel xTAG® Gastrointestinal Pathogen Panel (GPP), the first comprehensive FDA-cleared molecular diagnostic assay that tests for greater than 90% of bacterial, viral, and parasitic causes of infectious gastroenteritis from a single patient sample. In the growing and important field of pharmacogenomics, we received FDA clearance for an updated Cytochrome P450 2D6 assay and a new comprehensive genotyping assay, Cytochrome P450 2C19. Both of these tests are used by physicians to determine a patient's ability to metabolize a wide range of drugs. We are pleased with the productivity of our R&D team and our growing assay portfolio, as well as the increasing growth opportunities these products provide.

Luminex has established a leadership position in the markets we serve by delivering real solutions to the problems facing our laboratory customers. Laboratory professionals continue to be asked to do more with less as they contend with a scarcity of resources, limited trained personnel, and less bench space. We are pioneering solutions that address unmet customer needs, with products that reduce overall cost and improve outcomes—as reflected in our proud history of innovation with the first FDA-cleared test for cystic fibrosis, the first FDA-cleared test for the detection of multiple respiratory viruses, and in 2013, the first FDA-cleared test for detection of multiple gastrointestinal pathogens.

Our leadership position in the high volume multiplexed molecular diagnostics market has been beneficial in numerous ways, including having provided us with insights into adjacent markets, such as the low-plex molecular market segment. Based on the opportunities these insights have uncovered, over the last few years we have made strategic acquisitions of technologies and capabilities that have positioned us to enter this market segment, where we expect to continue to be a market innovator. In 2014, our strategic actions of the past few years will culminate with the introduction of our most exciting product ever, resulting from the largest development program in our history, the ARIES™ platform.

ARIES is a next generation molecular diagnostics system of hardware, proprietary testing chemistries, a differentiated menu of assays, and best-in-class software that will appeal to customers across the testing spectrum. Because of our strong commitment to serve our customers,

we plan to introduce a robust assay menu at launch. In addition, ARIES will elegantly address many unmet customer needs such as automating a group of tests that are called Lab Developed Tests, or LDTs. ARIES will allow labs to perform these tests in an easy to use, sample in, answer out format. The vertical design of the system, which incorporates a touchscreen monitor into the instrument itself, will minimize the utilization of lab bench space, thus solving a significant problem for customers given the scarcity of lab space that exists today. ARIES will serve a large and growing segment, with a combination of true sample-to-answer automation and simplicity.

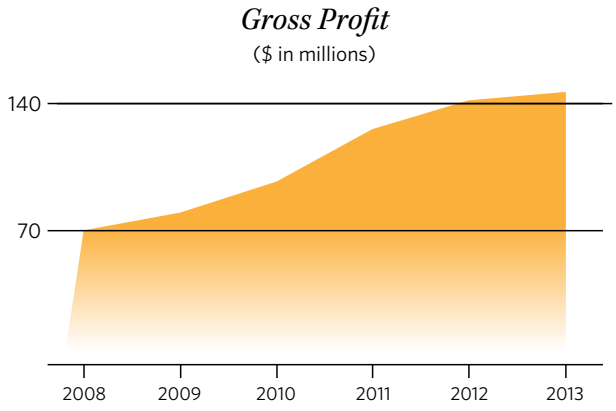
As we look to the future, our priorities include continuing to support our strategic partners in achieving their goals. As the foundation of our company, our partnership business continues to drive strong adoption of our core technology platform as demonstrated by achieving 10,000 instruments shipped. This installed base generates ongoing high margin revenue. Leveraging this foundation, we will continue to invest and innovate while growing our market presence and expanding our strategically important partnership business.

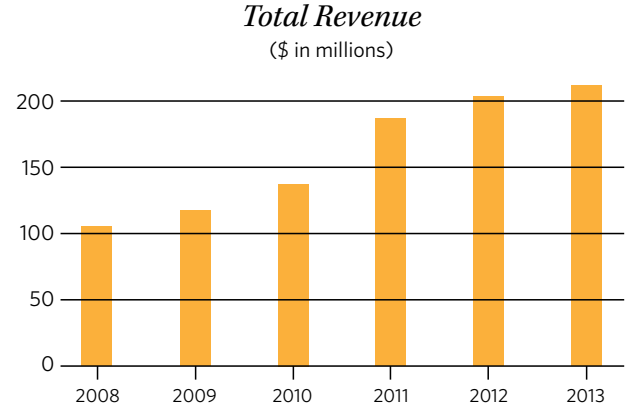
In 2014, we will also defend our leadership position in high volume accounts with our automation programs and other initiatives. For example, we are currently in development of our next generation multiplexing technology. For those high volume labs who are our main customers with xTAG®, this new technology and product line will deliver very high quality results with elegant ease of use in a highly streamlined format. We look forward to providing updates on our progress throughout the year.

We are proud of our achievements and we expect 2014 to be an exciting year for the Company. We are dedicated, determined, and focused on our strategic initiatives and executing our long-term growth strategy. Our diversified business model and ever-growing product portfolio are positioning us to accelerate growth. The progress we have made and the progress we will continue to achieve is possible because of our dedicated, hard-working employees. Every day, our talented workforce strives to fulfill our mission to enhance the health, safety and quality of life for all. Thank you for your continued support, and I look forward to a bright future for Luminex.

Sincerely,

Patrick J. Balthrop, Sr.
Chief Executive Officer and President





[V I S I O N]

Breakthrough solutions to improve health and advance science.

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

/X/ Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013 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 No. 000-30109

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

DELAWARE	**74-2747608**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
12212 TECHNOLOGY BLVD., AUSTIN, TEXAS	**78727**
(Address of principal executive offices)	(Zip Code)

(512) 219-8020
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of exchange on which registered
Common Stock, $0.001 par value	The NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: **NONE**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [X] No [ ]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes [ ] No [X]

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 [X] 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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

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 (Check one).

Large accelerated filer [X]	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 Act). Yes [ ] No [X]

Based on the closing sale price of common stock on The NASDAQ Global Select Market on June 28, 2013, the aggregate market value of the voting stock held by non-affiliates of the Registrant was $769,750,174 as of such date, which assumes, for purposes of this calculation only, that all shares of common stock beneficially held by officers and directors are shares owned by "affiliates."

There were 41,975,783 shares of the Company's Common Stock, par value $0.001 per share, outstanding on February 24, 2014.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2014 Annual Meeting of Stockholders are incorporated by reference into Part III hereof.

LUMINEX CORPORATION

FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2013

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Safe Harbor Cautionary Statement

This annual report on Form 10-K contains statements that are forward-looking statements under the Private Securities Litigation Reform Act of 1995. Forward-looking statements provide our current expectations of forecasts of future events. All statements other than statements of current or historical fact contained in this annual report, including statements regarding our future financial position, business strategy, restructuring, impact of the reimbursement landscape, new products including ARIES® , assay sales, projected consumables sales patterns or bulk purchases, budgets, anticipated gross margins, liquidity, cash flows, projected costs and expenses, taxes, litigation costs, including the costs or impact of any litigation settlements or orders, regulatory approvals or the impact of any laws or regulations applicable to us, plans and objectives of management for future operations, and acquisition integration and the expected benefit of our acquisitions are forward-looking statements. The words "anticipate," "believe," "continue," "should," "estimate," "expect," "intend," "may," "plan," "projects," "will" and similar expressions as they relate to us, are intended to identify forward-looking statements. These statements are based on our current plans and actual future activities, and our financial condition and results of operations may be materially different from those set forth in the forward-looking statements as a result of known or unknown risks and uncertainties, including, among other things:

- risks and uncertainties relating to market demand and acceptance of our products and technology;
- the uncertainty relating to increased focus on direct sales to the end user;
- dependence on strategic partners for development, commercialization and distribution of products;
- concentration of our revenue in a limited number of strategic partners, some of which may be experiencing decreased demand for their products utilizing or incorporating our technology, budget or finance constraints in the current economic environment, or periodic variability in their purchasing patterns or practices;
- the timing of and process for regulatory approvals;
- the impact of the ongoing uncertainty in U.S. and global finance markets and changes in government and government agency funding, including its effects on the capital spending policies of our partners and end users and their ability to finance purchases of our products;
- fluctuations in quarterly results due to a lengthy and unpredictable sales cycle, fluctuations in bulk purchases of consumables, fluctuations in product mix, and the seasonal nature of some of our assay products;
- our ability to obtain and enforce intellectual property protections on our products and technologies;
- risks and uncertainties associated with implementing our acquisition strategy, including our ability to obtain financing, our ability to integrate acquired companies or selected assets into our consolidated business operations, and the ability to recognize the benefits of our acquisitions;
- reliance on third party distributors for distribution of specific assay products;
- our ability to scale manufacturing operations and manage operating expenses, gross margins and inventory levels;
- potential shortages, or increases in costs, of components or other disruptions to our manufacturing operations;
- competition;
- our ability to successfully launch new products;
- our increasing dependency on information technology to enable us to improve the effectiveness of our operations and to monitor financial accuracy and efficiency;
- the implementation, including any modification, of our strategic operating plans;
- the uncertainty regarding the outcome or expense of any litigation brought against or initiated by us; and

- risks relating to our foreign operations, including fluctuations in exchange rates, tariffs, customs and other barriers to importing/exporting materials and products in a cost effective and timely manner; difficulties in accounts receivable collections; the burden of monitoring and complying with foreign and international laws and treaties; and the burden of complying with and change in international taxation policies.

Many of these risks, uncertainties and other factors are beyond our control and are difficult to predict. Any or all of our forward-looking statements in this annual report may turn out to be inaccurate. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. New factors could also emerge from time to time that could adversely affect our business. The forward-looking statements herein can be affected by inaccurate assumptions we might make or by known or unknown risks, uncertainties and assumptions, including the risks, uncertainties and assumptions outlined above and described in Item 1A "Risk Factors" below. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this annual report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements. When you consider these forward-looking statements, you should keep in mind these risk factors and other cautionary statements in this annual report including in Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Item 1A "Risk Factors."

Our forward-looking statements speak only as of the date made. We undertake no obligation to publicly update or revise forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this annual report.

Unless the context requires otherwise, references in this Annual Report on Form 10-K to "Luminex," the "Company," "we," "us" and "our" refer to Luminex Corporation and its subsidiaries.

PART I

ITEM 1. BUSINESS

Overview

We develop, manufacture and sell proprietary biological testing technologies and products with applications throughout the life sciences and diagnostics industries. These industries depend on a broad range of tests, called bioassays, to perform diagnostic tests and conduct life science research.

Our xMAP® (Multi-Analyte Profiling) technology, an open architecture, multiplexing technology, allows simultaneous analysis of up to 500 bioassays from a small sample volume, typically a single drop of fluid, by reading biological tests on the surface of microscopic polystyrene beads called microspheres. xMAP technology combines this miniaturized liquid array bioassay capability with small lasers, light emitting diodes (LEDs), digital signal processors, photo detectors, charge-coupled device imaging and proprietary software to create a system offering advantages in speed, precision, flexibility and cost. Our xMAP technology is currently being used within various segments of the life sciences industry, which includes the fields of drug discovery and development, and for clinical diagnostics, genetic analysis, bio-defense, food safety and biomedical research. In addition to our xMAP technology, our other offerings include our proprietary MultiCode® technology, used for real-time polymerase chain reaction (PCR) and multiplexed PCR assays, as well as automation and robotics in the field of dry sample handling. Our business is currently organized into two reportable segments: the technology and strategic partnerships (TSP) segment and the assays and related products (ARP) segment. Our products are described below under "Products."

The TSP segment has been built around strategic partnerships. As of December 31, 2013, we had 58 strategic partners, 48 of which have developed reagent-based products utilizing our technology. Luminex and these partners have sold approximately 10,737 xMAP-based instruments in laboratories worldwide as of December 31, 2013. We license our xMAP technology to our partners, who then develop products that incorporate the xMAP technology into products that they sell to end users. We also develop and manufacture the proprietary xMAP laboratory instrumentation and the proprietary xMAP microspheres and sell these products to our partners. When our partners sell xMAP-based reagent consumable products or xMAP-based testing services, which run on the xMAP instrumentation, to end users, such as testing laboratories, we obtain a royalty on the sales from the partner.

The ARP segment is primarily involved in the development and sale of assays utilizing xMAP and xTAG® technology on our installed base of systems along with our MultiCode technology. The ARP segment utilizes a direct sales model, designed to take advantage of our increasing installed base of xMAP-based instrumentation. The ARP segment is primarily focused on multiplexed applications for the human molecular clinical diagnostics market. Our ARP segment products are currently focused on three segments of the molecular diagnostic testing market: human genetics, personalized medicine and infectious disease. We have established our position in the marketplace through our regulatory compliant manufacturing processes, product development competencies and U.S. Food and Drug Administration (FDA) compliant manufacturing capabilities.

We have established a position in several segments of the life sciences industry by developing and delivering products that meet customer needs in specific market segments, including multiplexing, accuracy, precision, sensitivity, specificity, reduction of labor and ability to test for proteins and nucleic acids. These needs are addressed by our proprietary technology, which allows the end user in a laboratory to perform biological testing in a multiplexed format. Multiplexing allows for many different laboratory results to be generated from one sample at one time. This is important because our end user customers and partners, which include laboratory professionals performing research and clinical laboratories performing tests on patients as ordered by a physician and other laboratories, have a fundamental need to perform high quality testing as efficiently as possible. Until the availability of multiplexing technology such as xMAP, the laboratory professional had to perform one test per sample in a sequential manner, and if additional testing was required on a sample, a second procedure would be performed to generate the second result, and so on until all the necessary tests were performed. By using xMAP technology, these end users have the opportunity to become more efficient by generating multiple simultaneous results per sample. We believe that this technology may also offer advantages in other industries, such as in food safety/animal health, newborn screening and bio-defense/bio-threat markets. Using the products Luminex has available today, up to 500 simultaneous analyte results can be generated from a single sample.

Luminex was incorporated under the laws of the State of Texas in May 1995 and reincorporated in the State of Delaware in February 2000.

Recent Events

Restructuring

In August 2013, the Company announced a restructuring plan focused on its ARP segment's Newborn Screening Group and its Brisbane, Australia office where automated punching systems are designed and manufactured. The Company is exploring strategic alternatives for these assets, including a potential sale or abandonment. The Company has reviewed the requirements for held-for-sale and discontinued operations presentation and has determined that this business did not qualify for this presentation at December 31, 2013. The Company will continue selling its automated punching systems while it explores strategic alternatives for this business.

Available Information

Our shares of common stock are traded on the Nasdaq Global Select Market under the symbol "LMNX." Our principal executive offices are located at 12212 Technology Blvd., Austin, Texas 78727, and our telephone number is (512) 219-8020. Our website address is *www.luminexcorp.com*. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, are available free of charge through our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the Securities and Exchange Commission, or the SEC. Information contained or accessible on our website is not incorporated by reference into this report and such information should not be considered to be part of this report except as expressly incorporated herein. The public may read and copy these materials at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549 or on the SEC's website at *www.sec.gov*. The SEC's website contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Questions regarding the public reference room may be directed to the SEC at 1-800-732-0330.

Industry Background

The life sciences industry uses bioassays to detect the presence and characteristics of certain biochemicals, proteins or nucleic acids in a sample. Drug discovery, genetic analysis, pharmacogenomics, clinical diagnostics and general biomedical research all use bioassays. For example, bioassays can be used to:

- measure the presence and quantity of substances such as infectious agents, antigens for histocompatibility, hormones, cancer markers and other proteins in a patient's blood, other body fluid or tissue to assist physicians in diagnosing, treating or monitoring disease conditions;

- detect genetic variations, such as single nucleotide polymorphisms or genetic mutations present in inherited diseases;

- measure the response to a compound or dosage by measuring cellular activity for drug discovery and development; and

- assist physicians in prescribing or dosing the appropriate drug therapy based on the patient's genetic makeup, a field known as pharmacogenetics.

The life sciences customer can purchase bioassays in the form of complete off-the-shelf kits, develop them from scratch or utilize a customized service to meet their specific needs.

The table below briefly describes the key bioassay technologies in the life sciences industry:

KEY TECHNOLOGIES	DESCRIPTION	MARKETS SERVED
BioChips/Microarrays	High-density arrays of DNA fragments or proteins attached to a flat glass or silicon surface	Biomedical research and clinical diagnostics
Sequencing	Instruments which "read" the nucleotide sequence of DNA or ribonucleic acid (RNA) by a variety of methods including Next Generation Sequencing methods	Biomedical research and clinical diagnostics
Automated Immunoassays	Automated test tube-based instruments used for detecting antibodies, proteins and other analytes	Clinical diagnostics
Gels and blots	Physical separation of molecules or analytes for visualization	Biomedical research and clinical diagnostics
PCR methods	Tests which use PCR technology to test DNA and RNA	Nucleic acid testing in clinical diagnostics and biomedical research
Microfluidics chips	Miniaturized liquid handling system on a chip	Biomedical research and clinical diagnostics
Microtiter-plate based assays	Plastic trays with discrete wells in which different types of assays are performed, usually Enzyme-Linked Immuno-Sorbent Assay (ELISA) tests	Drug discovery, clinical diagnostics and biomedical research
Genotyping technologies	DNA primers or probes designed to identify small differences between DNA targets	Drug discovery, clinical diagnostics and biomedical research
Gene expression technologies	DNA primers or probes designed to measure the degree of transcriptional activity of a specific gene, indicating how active the cells are in making the protein encoded by that gene	Drug discovery, clinical diagnostics and biomedical research

Our xMAP Technology

Our xMAP technology combines existing biological testing techniques with illumination, advanced digital signal processing, detection and proprietary software. With our technology, discrete bioassays are performed on the surface of color-coded microspheres. These microspheres are read in a compact analyzer that utilizes lasers or LEDs, detectors and high-speed digital signal processing to simultaneously identify the bioassay and measure the individual assay results. The key features of xMAP technology include the following:

- Multi-analyte/multi-format

  xMAP technology has been designed to simultaneously perform up to 500 distinct bioassays in a single tube or well of a microtiter plate using only a small amount of sample. Moreover, unlike most existing technologies that are dedicated to only one type of bioassay, xMAP can perform multiple types of assays including enzymatic, genetic and immunologic tests on the same instrumentation platform.

- Flexibility/scalability

  xMAP technology allows flexibility in customizing test panels. Panels can be modified to include new bioassays in the same tube by adding additional microsphere sets. It is also scalable, meaning that there is no change in the manufacturing process and only minimal changes to the required labor to produce a small or large number of microsphere-based tests.

- Both protein and nucleic acid applications on a single platform

  xMAP technology has an advantage due to its ability to analyze both proteins and nucleic acids. This allows customers to utilize a single platform to evaluate samples across more biological parameters and generate a more complete assessment of these samples. Alternative technologies are typically restricted to either proteins or nucleic acid, requiring customers to use two or more technologies from other vendors to get the same information.

- High throughput

  Our technology can perform up to 500 tests in a single well permitting up to 96,000 unattended tests to be detected in approximately one hour with only a small amount of sample. Rapid sample analysis permits efficient use for high-throughput applications.

- Ease of use

  Most xMAP-based bioassays are simple to perform. A test sample is added to a solution containing microspheres that have been coated with reagents. The solution is then processed through our xMAP technology system which incorporates proprietary software to automate data acquisition and analysis in real-time.

- Cost effective

  By performing multiple assays at one time, xMAP technology is designed to be cost effective for customers compared to competitive techniques such as ELISA or real-time PCR. By analyzing only those assays in which a customer is interested, xMAP is also more cost effective than most competing microarray technologies. In addition, microsphere-based bioassays are inexpensive compared to other technologies, such as biochips.

Two types of microspheres, polystyrene microspheres and polystyrene magnetic microspheres, are both fundamental components of the xMAP technology. We purchase and manufacture microspheres and, in a proprietary process, dye them with varying intensities of proprietary dyes to achieve up to 500 distinct colors. The specific dye proportions permit each color-coded microsphere to be readily identified based on its distinctive fluorescent signature. Our customers create bioassays by attaching different biochemical reactants to each distinctly colored microsphere set. These unique reactants bind, or capture, specific substances present in the test sample. The microsphere sets can then be combined in test panels as required by the user, with a maximum of 500 tests per panel. Customers can order either standard microspheres or magnetic microspheres.

To perform a bioassay using xMAP technology on our flow cytometry platforms, a researcher attaches biochemicals, or reagents, to one or more sets of color-coded microspheres, which are then mixed with a test sample. This mixture is injected into the xMAP analyzer such as the Luminex 200 instrument, or LX200, where the microspheres pass single-file in a fluid stream through two laser beams. The first laser excites the internal dyes that are used to identify the color of the microsphere and the test being performed on the surface of the microsphere. The second laser excites a fluorescent dye captured on the surface of the microspheres that is used to quantify the result of the bioassay taking place. Our proprietary optics, digital signal processors and software record the fluorescent signature of each microsphere and compare the results to the known identity of that color-coded microsphere set. The results are analyzed and displayed in real-time with data stored on the computer database for reference, evaluation and analysis.

We have a full range of instruments in our xMAP line. Our LX200 system offers 100-plex testing. Our FLEXMAP 3D® system is our high-throughput, 500-plex testing system and our MAGPIX® system provides 50-plex testing at a lower cost using imaging rather than flow cytometry.

Our xTAG and MultiCode Technologies

Our xTAG technology, developed by the ARP segment, consists of several components including multiplexed PCR or target identification primers, DNA Tags, xMAP microspheres and data analysis software. xTAG technology permits the development of molecular diagnostic assays for clinical use by hospital and reference laboratories. xTAG technology has been applied, in particular, to human genetic assays, pharmacogenetic assays and infectious disease assays.

In June 2011, we acquired EraGen Biosciences, Inc., now referred to as Luminex Madison (LMA), which provided us with access to a highly complementary portfolio of molecular diagnostic assays based on an innovative and proprietary technology platform called MultiCode. This unique assay chemistry is a flexible platform for both real-time PCR and multiplex PCR-based applications. Our MultiCode technology is powered by a base pair (man made nucleotide pair isoC:isoG in addition to the A:T and G:C nucleotide pairs found in nature) that does not exist in nature, but can be combined with natural base pairs, and incorporated into a wide range of molecular diagnostic applications. The MultiCode base pair is recognized by naturally occurring enzymes and can be used for the specific placement of reporter molecules and to increase the molecular recognition capabilities of hybridization-based assays. The MultiCode base pair enables solutions to complex molecular challenges that were previously not possible with natural nucleic acid alone.

We have multiple assay development activities ongoing in the ARP segment. The ARP segment has assay development programs focused in the areas of human genetics, pharmacogenetics, infectious disease, custom gene expression assays, agricultural testing and bio-threat. In 2014, we have plans to submit certain assay products to regulatory authorities, including the FDA and foreign equivalents, for clearance in order to comply with established guidelines across the jurisdictions in which we participate.

Business Strategy

Our company's focus continues to be the establishment of Luminex as an industry leader and our xMAP and MultiCode technologies as the industry standards for performing bioassays by transforming Luminex from a technology-based company to a market-driven, customer-focused company. To achieve this objective, we have implemented and are pursuing the following strategies:

- Focus on key market segments

  We have identified the following key market segments: (i) molecular infectious disease, (ii) genetic or inherited disease, (iii) pharmacogenetic testing, (iv) immunodiagnostics, (v) life sciences research, and (vi) bio-defense, or bio-threat testing. We will continue to employ a combination of both a partnership-driven business model and a product-driven business model focused on selected market segments and bioassay applications.

- Direct sales and customer support in molecular diagnostics

  On January 1, 2013, we assumed responsibility from our major distributors to directly serve the customer base that they supported with a portion of our proprietary molecular diagnostics product line. Our decision to go direct was driven by our desire to take control of our molecular diagnostics business to drive demand for our products, build on our direct relationship with the end user customer and benefit from end user customer pricing.

- Continue to develop strategic partnerships focused in select key market segments

  As of December 31, 2013, 48 of our 58 strategic partners have developed and commercialized xMAP based assay products and are submitting royalties. We also have strategic partners who distribute Luminex products. During 2013, the 48 strategic partners who have commercialized xMAP based assay products accounted for approximately 70% of our total revenue and all of our strategic partners represented approximately 74% of our total revenue. We intend to broaden and accelerate market acceptance of xMAP technology through development, marketing and distribution partnerships with leading companies in the life sciences markets. By leveraging our strategic partners' market positions and utilizing their distribution channels and marketing infrastructure, we believe we can continue to expand our installed instrument base. Furthermore, our partners' investments in research and development for xMAP applications provide Luminex xMAP customers with more assay product options than any one company or Luminex could develop and commercialize individually.

  We will continue to focus our commercialization efforts through our strategic partners covering large sectors of the life science research market where Luminex believes it has competitive advantages over alternative technologies and approaches. We define strategic partners as those companies in the life sciences markets that develop and distribute assays and tests on xMAP technology or may only distribute our xMAP technology based systems and consumables. With our partners' support and through our direct commercial efforts in the molecular diagnostics clinical laboratory segment, we have targeted major pharmaceutical companies, large clinical laboratories, research institutions and major medical institutions for our principal marketing efforts. We believe these customers provide the greatest opportunity for maximizing the use of xMAP based products and continued adoption by these industry leaders will promote wider market acceptance of our xMAP technology.

- Develop and deliver market-leading assay products

  We are focused on maximizing the value we provide our stockholders, partners and end user customers by developing internally and co-developing with partners content applications based on customers' needs in key market segments. We believe that by enhancing both our partner driven model and our direct efforts with the delivery of value-added assay content, Luminex can gain greater control over product development, market penetration and commercialization, thereby realizing a larger percentage of end-user sales revenue and generating incremental gross profit.

- Develop next generation products

  Our research and development group is pursuing projects such as the development of consumables, automation, software and the expansion and enhancement of our multiplexing capabilities to advance our technologies and market acceptance. Along with these projects, we are focusing resources on improving the simplicity and ease of use of our mulitplex products through the development of a new version of our multiplex PCR technology. This new chemistry is expected enable customers to simplify the performance of multiplex assays with reduced labor and faster turnaround times. We recognize that the critical aspect of our current technology that we want to preserve for our larger customers is the ability to process anywhere from 1 to 96 patients in a single batch. This throughput flexibility and capacity is a critical aspect for tests like our xTAG Respiratory Viral Panel (RVP), in which seasonality and local outbreaks can cause testing volumes to surge unpredictably. We intend to offer the convenience of a one-step workflow with the throughput of a batch-based system. In addition, products using this new chemistry are expected to have the convenience of room temperature shipping and storage. We intend to release a next-generation respiratory panel and new multiplex tests offering these workflow advantages over the next several years.

  In 2012, we completed the acquisition of privately-held GenturaDx, Inc. (GenturaDx), a molecular diagnostics company focused on making nucleic acid testing both affordable and practical for any laboratory. GenturaDx's sample-to-answer prototype instrument, when combined with our proprietary real-time PCR chemistry and a new menu of highly automated assays that we are developing, is expected to enable us to offer a differentiated, sample-to-answer solution.

  We have used both the EraGen and GenturaDx acquisitions, as well as research and development, to expand the breadth of technology and solutions we offer our customers to meet their needs. We have developed a full range of multiplexing instruments and consumables to cover a broad range of customer applications and budgets. We have developed, and continue to improve, the xTAG multiplex PCR chemistry for our proprietary multiplex assays in areas such as human genetic testing, personalized medicine testing and infectious disease testing. We have also acquired the MultiCode RTx real-time PCR technology for both quantitative and qualitative low-plex real-time assays. We have acquired GenturaDx and its IDbox sample-to-answer platform, which is compatible with our MultiCode RTx technology, to provide our customers with molecular assays that are easy to implement. All of these technology solutions provide our customers with a breadth of innovative solutions to meet their many testing needs.

  We are also collaborating with industry participants, biomedical research institutions and government entities to develop additional products. We also continuously consider other adjacent markets where our platform and assay offerings would be beneficial. We believe that our design, development and manufacturing capabilities and FDA compliance track record provide us a competitive advantage over our competitors, relating to the commercialization of both multiplex testing platforms and assay products.

- Opportunistically pursue acquisitions that could accelerate these strategies

  We have developed analytical tools and an evaluation template to assess potential acquisition targets to accelerate our business strategies in the key markets described above. This approach led to the acquisition of Tm Bioscience Corporation (Tm Bioscience), now referred to as Luminex Molecular Diagnostics (LMD) in 2007, the acquisition of LMA in 2011 and the acquisition of GenturaDx in 2012. We actively evaluate opportunities to enhance our capabilities or our access to targeted markets or technologies, or provide us other advantages in executing our business strategies in our key markets.

Products

TSP Segment

Instruments

Luminex® LX 100/200™ (LX Systems). The LX Systems are compact analyzers that integrate fluidics, optics and digital signal processing to perform up to 100 bioassays simultaneously in a single tube or well of a microtiter plate using only a small amount of sample. By combining semiconductor lasers with digital signal processors and microcontrollers, these systems perform rapid, multi-analyte profiles under the control of a Windows®-based personal computer and our proprietary software.

FLEXMAP 3D®. The FLEXMAP 3D system is intended for use as a general laboratory instrument in markets, including but not limited to, life science research and diagnostics. This device can simultaneously measure up to 500 analytes from a single sample and offers increased speed and enhanced ease-of-use and serviceability. Like our LX Systems, the FLEXMAP 3D system combines semiconductor lasers with digital signal processors and microcontrollers and these systems perform rapid, multi-analyte profiles under the control of a Windows®-based personal computer and our proprietary software.

MAGPIX®. The MAGPIX system is a versatile multiplexing analyzer capable of performing qualitative and quantitative analysis of proteins and nucleic acids in a variety of sample matrices. This system is Luminex's newest instrument and can perform up to 50 tests in a single reaction volume, reducing sample input, reagents and labor while improving productivity. MAGPIX is based on an innovative detection mechanism that uses LEDs and a charge-coupled device (CCD) imaging system, rather than the lasers and detection mechanisms used in our flow cytometry-based instruments.

Consumables

MicroPlex® Microspheres. Our xMAP systems use polystyrene microspheres that are approximately 5.6 microns in diameter. We dye the microspheres in sets with varying intensities of a red and a near infrared dye to achieve up to 100 distinct color sets. Each microsphere can carry the reagents of an enzymatic, genetic or immunologic bioassay.

MagPlex® Microspheres. These microspheres feature super-paramagnetic properties that make them ideal for running automated xMAP-based assays. We dye the microspheres in sets with varying intensities of a red and a near infrared dye to achieve up to 500 distinct color sets. These microspheres can be moved or held in place by a magnetic field. Many automated systems utilize magnetic properties to automate the performance of the assay. Automating sample testing using MagPlex microspheres on a robotic sample preparation system decreases hands-on technician time, improves precision, and streamlines workflow.

xTAG® Microspheres. These dyed microspheres are linked to a set of 100 proprietary nucleic acid capture sequences providing a "universal array" for DNA and RNA work. They are designed for conducting genotyping and other nucleic acid-based experiments in the life sciences markets. When used in conjunction with our Luminex systems, the xTAG microspheres are designed to simplify the genotyping assay development process and increase assay flexibility. The xTAG microspheres may be used in customized end user identified single nucleotide polymorphisms or in pre-defined kits developed by our strategic partners.

SeroMAP™ Microspheres. These 100 distinct sets of microspheres are designed for specific protein based serological applications. Certain Luminex partners use this product for enhanced sensitivity in serum-based assays.

Calibration and Control Microspheres. Calibration microspheres are microspheres of known fluorescent light intensities used to calibrate the settings for the classification and reporter channel for the Luminex systems. Control microspheres are microspheres that are used to verify the calibration and optical integrity for both the classification and reporter channels for the various systems.

Software

xPONENT®. Our xPONENT software is included in all of our new instruments and enhances both ease-of-use and automation capabilities expanding xMAP functionality in our core market segments. The software suite incorporates important features, all designed to simplify laboratory workflow and increase productivity, including: enhanced security (21 CFR Part 11 compliance and electronic signatures); integration capabilities that allow users to transmit and receive data from Laboratory Information Systems (LIS/LIMS); integration with the most popular automated sample preparation systems; the ability to run magnetic bead applications; and touch-screen capability. xPONENT is sold on new Luminex 100, 200, FLEXMAP 3D, and MAGPIX systems and is available as an upgrade to the existing LX systems in the marketplace.

ARP Segment

Assay Product Families

A product family consists of two or more assay products which are focused on similar or related markets. Each assay consists of a combination of chemical and biological reagents and our proprietary bead technology used to perform diagnostic and research assays on samples. As of February 24, 2014 the following product families are commercially available:

Respiratory Viral Family

This family of products includes RVP, as well as xTAG RVP FAST, a newer version of the original RVP assay. These in vitro diagnostic (IVD) products enable our laboratory end users to identify the causative agent for respiratory infections, a major cause of illness and mortality globally, for their physicians and patients.

Gastrointestinal Pathogen Detection Family

The Gastrointestinal Pathogen Panel (GPP) family of products includes IVD assays as well as individual analyte specific reagents, which can be developed by Clinical Laboratory Improvement Amendments labs into laboratory developed tests. These products enable laboratory end users to identify the pathogens causing infectious gastroenteritis, which is a major cause of morbidity and mortality globally.

MultiCode Assays and Products Family

This product family includes our FDA-cleared HSV1/2 kit as well as a number of analyte specific reagents and other products. These products are generally designed to detect infectious agents in clinical samples using our proprietary MultiCode RTx real-time PCR chemistry.

Cystic Fibrosis Family

These FDA-cleared and Conformité Européenne (CE) marked IVD kits include the first-ever FDA-cleared IVD for cystic fibrosis genotyping. Current recommendations by the American College of Medical Genetics and the American College of Obstetricians and Gynecologists include screening for 23 mutations in the cystic fibrosis transmembrane conductance regulator gene. The xTAG Cystic Fibrosis kits screen for these mutations in addition to a variety of other important cystic fibrosis (CF) mutations, commonly found in the ethnically diverse North American and European populations. These kits are typically used for screening newborns and for diagnosing adult carriers of the CF gene.

Personalized Medicine Product Family

This product family includes three assays used to determine the drug metabolism status of individuals for specific medications. All three products include genotyping of genes encoding different cytochrome P450 drug metabolizing enzymes. This type of information is typically used to determine if a patient will need a lower or higher dose of a specific drug, or whether they should be switched to a different medication altogether. One of the products in this category is the FDA-cleared CYP2D6 assay used for identifying patients with variants in the CYP2D6 gene, which affects the metabolism and efficacy of some pharmaceutical compounds. The other two assays are currently Investigational Use Only (IUO) assays.

Specialty Product Family and Instrumentation

This family of products includes a variety of assays targeted towards specialty, niche markets.

In addition to the commercially available assays, we develop custom reagents for certain of our partners. Our ARP segment also distributes LX Systems, FLEXMAP 3D, MAGPIX and dry sample preparation systems.

Sales and Marketing

Our sales and marketing strategy is to expand the installed base and utilization of xMAP and MultiCode technologies. We are focused on generating recurring revenues from the sale of Luminex-developed assays, microspheres and other consumables, as well as from royalties on bioassay kits and testing services developed or performed by others that use our technology. We have two key elements of our sales and marketing strategy: i) our dedication to marketing the assays developed by the ARP segment directly to end users and ii) our allegiance to Luminex's historic strategic partner program with life sciences companies that develop applications or perform testing using our technology platforms and distribute our systems to their customers.

We continue to use strategic partners as the primary distribution channel for our systems, and we will continue to pursue new partnerships focusing on partners with market presence in our key segments described above. Some of our strategic partners develop application-specific bioassay kits for use on our xMAP platform that they, in turn, sell to their customers thereby generating royalties for us. Certain strategic partners also perform testing services for third parties using our technology also resulting in royalties for us. Other strategic partners buy our products, including xMAP Luminex systems and consumables, or xTAG test kits, and then resell those products to their customers. As of December 31, 2013, we had 58 strategic partners, compared to approximately 55 strategic partners as of December 31, 2012. On a regular basis, we update our strategic partner listing to reflect results of partner consolidations due to mergers and acquisitions, commercial sales inactivity, as well as termination or expiration of existing non-performing partner agreements, which in 2013 did not account for material revenue. During 2013, 51 strategic partners with commercialized products utilizing the Luminex platform submitted royalties. As of December 31, 2013, 48 of these strategic partners with commercialized products remain, of which 26 companies principally serve the clinical diagnostics market and 22 companies principally serve the life science research market. Revenues through these commercialized, royalty-submitting, strategic partners constituted 74% of our revenues for 2013. We also believe our strategic partners provide us with complementary capabilities in product development, regulatory expertise and sales and marketing. By leveraging our strategic partners' bioassay testing competencies, customer relationships and distribution channels, we believe that we can continue to achieve measurable market penetration and technology adoption.

We also serve as the original equipment manufacturer (OEM) for certain strategic partners that choose to sell our xMAP technology as an embedded system under their own branding and marketing efforts.

Customers

In each of the last three years, one or more customers each accounted for more than 10% of our total revenues. Laboratory Corporation of America (LabCorp), including acquired Genzyme Genetics, accounted for 18%, 19% and 10% of our total revenues in 2013, 2012 and 2011, respectively. Thermo Fisher Scientific, Inc., including acquired One Lambda, Inc., accounted for 16%, 24% and 30% of our total revenues in 2013, 2012 and 2011, respectively. Bio-Rad Laboratories, Inc. accounted for 9%, 8% and 10% of our total revenues in 2013, 2012 and 2011, respectively. No other customer accounted for more than 10% of our total revenues in 2013, 2012 or 2011. The loss of any of these customers could have a material adverse effect on our business, financial condition and results of operations.

Thermo Fisher Scientific, Inc., including acquired One Lambda, Inc., accounted for 27%, 28% and 33% of our total TSP segment revenues in 2013, 2012 and 2011, respectively. Bio-Rad Laboratories, Inc. accounted for 14%, 14% and 14% of our total TSP segment revenues in 2013, 2012 and 2011, respectively. EMD Millipore accounted for 11%, 13% and 11% of our total TSP segment revenues in 2013, 2012 and 2011, respectively. LabCorp, including acquired Genzyme Genetics, accounted for 44%, 45% and 31% of our total ARP segment revenues in 2013, 2012 and 2011, respectively. Thermo Fisher Scientific, Inc., including acquired One Lambda, Inc., accounted for 0%, 18% and 24% of our total ARP segment revenues in 2013, 2012 and 2011, respectively. Abbott Laboratories accounted for 2%, 9% and 10% of our total ARP segment revenues in 2013, 2012 and 2011, respectively. The decrease in revenue concentration from Thermo Fisher Scientific, Inc. and Abbott Laboratories is primarily a result of our transition to a direct sales model. No other customer accounted for more than 10% of total segment revenues in 2013, 2012 or 2011. As a result of our focus on selling directly to the end user, customer concentration in the ARP segment is expected to decline in future periods.

International Operations

We currently sell our products to a number of customers outside the United States, primarily including customers in other areas of North America, Europe and Asia-Pacific. For the annual periods ended December 31, 2013, 2012 and 2011, foreign sales to customers totaled $35.1 million, $34.7 million, and $31.9 million, respectively, representing 16%, 17%, and 17%, respectively, of our total revenues for such periods. We have foreign subsidiaries in Canada, the Netherlands, the People's Republic of China, Japan and Australia, which increase our international support, service and marketing capabilities. Our foreign subsidiaries are a direct and integral component of the U.S. entity's operations and their efforts support the sales made by our North American entities. Sales to territories outside of the U.S. are primarily denominated in U.S. dollars. We believe that our activities in some countries outside the U.S involve greater risk than our domestic business due to the foreign economic conditions, exchange rate fluctuations, local commercial and economic policies and political uncertainties. See Note 19 to our Consolidated Financial Statements.

Technical Operations

Our Technical Operations Group provides technical support to our customers, our strategic partners and their customers. Most of our technical operations personnel have experience as biologists, biochemists or electrical engineers and have extensive experience in academic, industrial and commercial settings. Cross training is a major focus, as is empowering group members to solve problems outside their primary assignment.

Remote Support

Our technical support services department assists users primarily through a toll-free hotline, internet interface and e-mail communications. We deliver "24/7" remote technical support with our staff based at our Austin and Toronto locations and from our European, Chinese, Australian and Japanese subsidiaries to better serve our customer base. Personnel assist our strategic partners and customers with product orders, software, hardware, system implementation and development of their bioassays. A comprehensive software and database system is utilized to track customer interactions, follow trends and measure utilization. The information is categorized and presented to management for regular review.

Training

Through our training group, we offer comprehensive programs in basic system training, advanced assay development, instrument field service and technical support functions. A significant part of our training material is now web-based and available online. For larger customers who have many users, such as our strategic partners, training may be performed on-site at their locations.

Field Support

We currently have field service and field application personnel based across North America, Europe, China, Japan and Australia in areas of our more significant system concentration. We intend to place additional field service personnel and pursue third-party service provider agreements through our certified service professional program, as required, in order to ensure responsive and cost-effective support of our customers worldwide. In addition, several of our strategic partners provide their own field service and field application support. As we continue to expand our installed base, we believe a strong, reliable, efficient field support organization is crucial to building a high level of customer satisfaction.

Research and Development

Our research and development groups work to develop next generation systems, chemistries, assays and software to provide new, innovative products to our customers. Our research and development expense for the years ended December 31, 2013, 2012 and 2011, was $45.0 million, $43.0 million and $35.4 million, respectively including customer-sponsored research funding of $0.8 million, $1.1 million, and $0.6 million, respectively.

Our current research and development projects include:

- ***New platform development***
  Following the acquisition of GenturaDx in 2012, we have continued the development of the ARIES instrument for sample-to-answer molecular diagnostic automated testing. This involves the final design and development of the instrument, consumables and software, as well as the development of a menu of assay products based on the ARIES platform.

- ***Simplified assay products***
  Our research and development group has been working on the development of a new, easy-to-use chemistry for running multiplexed tests in 96-well plates. This chemistry is expected to combine our xTAG and xMAP technologies into a simple to use, two-step format. We intend to develop a menu of assays using this new, simplified multiplex chemistry.

- ***Partnership projects***
  Our research and development group is collaborating with Merck on the development of a companion diagnostic that will help screen patients into Merck's lead investigational candidate drug study for Alzheimer's disease. Luminex is also working with the Defense Threat Reduction Agency of the United States government to develop a hand-held diagnostic instrument. Luminex on occasion collaborates on other partnered research programs.

Manufacturing

We have historically purchased many of the components and raw materials used in our products from numerous suppliers worldwide. For reasons of quality assurance, sole source availability or cost effectiveness, certain components and raw materials used in the manufacture of our products are available only from one supplier. We have worked closely with our suppliers to develop contingency plans to assure continuity of supply while maintaining high quality and reliability, and in some cases, we have established long-term supply contracts with our suppliers. Due to the high standards and FDA requirements applicable to the manufacturing of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. In the event that we are unable to obtain sufficient quantities of raw materials or components on commercially reasonable terms or in a timely manner, our ability to manufacture our products on a timely and cost-competitive basis may be compromised, which may have a material adverse effect on our business, financial condition and results of operations.

We have approximately 46,500 square feet of manufacturing space located at our principal executive offices in Austin, Texas. We initially certified our Quality Management System (QMS) to the ISO 9001:2000 standard and in 2010 updated our certification to ISO 9001:2008. ISO is an internationally recognized standard for quality management systems. Subsequent audits by the registrar have been and will continue to be carried out at regular intervals to ensure we are maintaining our system in compliance with ISO standards. Recertification is required every three years and we have been successfully recertified since obtaining our original ISO certification. Also, we have our QMS certified to the ISO 13485:2012 Quality Management Standard and the Canadian Medical Devices Conformity Assessment System (CMDCAS) for Medical Devices. These standards include a special set of requirements specifically related to the supply of medical devices and related services. Additionally, we seek to manufacture to current Good Manufacturing Practice requirements and our QMS is implemented in accordance with FDA Quality System Regulations.

In addition, we have approximately 6,000 square feet of manufacturing space located in Toronto, Canada, approximately 10,000 square feet of manufacturing space located in Madison, Wisconsin and approximately 2,500 square feet of manufacturing space in Brisbane, Australia. The Toronto and Madison facilities and related QMS have been certified to the ISO 13485:2012 standard and registered under the CMDCAS and the Australia facility and the Australian QMS have been certified to the AS/NZS ISO 9001:2008 standard.

Instruments

Contract manufacturers assemble certain components of our xMAP technology systems. The remaining assembly and manufacturing of our systems are performed at our facility in Austin, Texas. The quality control and quality assurance protocols are all performed at our facility. Parts and component assemblies that comprise our xMAP technology system are obtained from a number of sources. We have identified alternate sources of supply for several of our strategic parts and component assemblies. Additionally, we have entered into supply agreements with most of our suppliers of strategic parts and component subassemblies to help ensure component availability and flexible purchasing terms with respect to the purchase of such components. As of December 31, 2013, a total of 10,737 Luminex multiplexing analyzers had been sold since inception.

Microspheres

We manufacture as well as procure undyed, standard and magnetic carboxylated polystyrene microspheres. We synthesize our dyes and manufacture our dyed polystyrene microspheres using a proprietary method in our Austin, Texas manufacturing facility in large lots. We dye the microspheres with varying intensities of red and near infrared dyes to produce our distinctly colored microsphere sets. We currently purchase polystyrene microspheres from one supplier, in accordance with a supply agreement. We believe this agreement will help ensure microsphere availability and flexible purchasing terms with respect to the purchase of such microspheres. While we believe the microspheres will continue to be available from our supplier in quantities sufficient to meet our production needs, we believe our in-house manufacturing capabilities along with other potential suppliers would provide sufficient microspheres for us if given adequate lead-time to manufacture the microspheres to our specifications.

Assays and Reagents

Contract manufacturers produce certain components of our xMAP-based and MultiCode-based developed reagents. The remaining assembly and manufacturing of our developed kits are performed at one of our facilities in Austin, Texas; Toronto, Canada; or Madison, Wisconsin. The quality control and quality assurance protocols are all performed at our facilities. Reagents, consumables and other raw material that comprise our kits are obtained from a number of sources.

Increasing regulatory requirements coupled with rising demand for new clinical applications are driving demand for laboratory developed tests. Our proprietary technologies and platforms offer a unique combination of flexibility and throughput, as our systems' open architecture, software and standard protocols allow our customers the ability to use our proprietary reagents to validate and verify a new test, while being able to utilize the same system to handle increasing volumes once the assay is commercialized.

Automated Punching Systems

At our facility in Brisbane, Australia, we manufacture laboratory equipment used in the preparation, prior to processing, of biosamples dried on media. This office is a component of the restructuring plan announced in August 2013. The Company is exploring strategic alternatives for these assets, including a potential sale or abandonment.

Competition

We design our xMAP technology for use by customers across the various segments of the life sciences industry. Our competition includes companies marketing conventional testing products based on established technologies such as ELISA, real-time PCR, mass spectrometry, sequencing, gels, biochips and flow-based technologies as well as companies developing their own advanced testing technologies.

The pharmaceutical industry is a large market for the genomic, protein and high-throughput screening applications of the xMAP technology. In each application area, Luminex faces a different set of competitors. Genomic and protein testing can be performed by products available from Affymetrix, Inc., Life Technologies Corporation (currently being acquired by Thermo Fisher Scientific, Inc.), Becton, Dickinson and Company, Illumina, Inc., Qiagen N.V., Hologic, Inc., Meso Scale Discovery (a division of Meso Scale Diagnostics LLC) and Sequenom, Inc., among others.

Our diagnostic market competitors include, among others, Abbott Laboratories, Applied Biosystems Inc., BioFire Diagnostics, Inc. (acquired by bioMérieux), Cepheid, GenMark Dx, Johnson & Johnson, Roche Diagnostics, Siemens Medical and Hologic, Inc.. Some of these companies have technologies that can perform a variety of established assays. In addition, certain of these companies offer integrated systems and laboratory automation that are designed to meet the need for improved work efficiencies in the clinical laboratory.

Competition within the academic biomedical research market is highly fragmented. There are hundreds of suppliers to this market including, among others, Amersham Pharmacia Biotech, a part of GE Healthcare, Life Technologies Corporation and Becton, Dickinson and Company.

Intellectual Property

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade secret laws and confidentiality agreements. We have filed for registration or obtained registration for trademarks used with our products and key technologies.

We have implemented a strategy designed to optimize our intellectual property rights. For core intellectual property, we are pursuing patent coverage in the United States and those foreign countries that correspond to the majority of our current and anticipated customer base. We currently own 281 issued patents worldwide, including 110 issued patents in the United States. Other countries in which we have issued patents directed to various aspects and applications of our products and technology include France, Germany, United Kingdom, Australia, Japan, Netherlands, Canada, Hong Kong and China, amongst others. In addition, our patent portfolio includes 196 pending patent applications in the United States and other foreign jurisdictions. We believe our patents and pending claims provide, or will provide, protection for systems and technologies that allow real-time multiplexed analytical techniques for the detection and quantification of many analytes from a single sample. We also hold patents covering the precision-dyeing process used in the manufacture of our fluorescent microspheres and patents covering digital over-sampling to measure the area of a fluorescence pulse instead of "peak detection," giving increased sensitivity with no lost events. In addition, multiple granted patents and pending applications describe aspects of Multicode technology, xTAG technology, as well as our automated real-time PCR system.

The source code for our proprietary software is protected as a trade secret and/or as a copyrighted work. Aspects of this software also are covered by an issued patent.

We also rely on trade secret protection of our intellectual property. We attempt to protect our trade secrets by entering into confidentiality agreements with strategic partners, third parties, employees and consultants. Our employees and third-party consultants also sign agreements requiring that they assign to us their interests in inventions and original works of expression and any corresponding patents and copyrights arising from their work for us. See risk factor on property rights we rely upon to protect the technology underlying our products on page 24.

Government Regulation

Food and Drug Administration

The FDA regulates medical devices pursuant to various statutes, namely the Federal Food, Drug and Cosmetic Act as amended and supplemented by the Medical Device Amendments of 1976; the Safe Medical Devices Act of 1990; the Medical Device Amendments of 1992; the FDA Export Reform and Enhancement Act of 1996; the FDA Modernization Act of 1997; the Public Health, Security and Bioterrorism Preparedness and Response Act of 2002; the Medical Device User Fee and Modernization Act of 2002 and the Project BioShield Act of 2004. Medical devices, as defined by statute, include instruments, machines, in vitro reagents or other similar or related articles, including any components, parts or accessories of such articles that are intended for use in the diagnosis of disease or other condition or in the cure, mitigation, treatment or prevention of disease; or are intended to affect the structure or function of the body and do not achieve their intended purpose through chemical action or metabolization. The FDA classifies medical devices intended for human use into three classes. For Class I devices, general controls (for example, labeling and good manufacturing practices) provide reasonable assurance of safety and effectiveness. Class II devices are products for which general controls do not provide reasonable assurance of safety and effectiveness and for which there is sufficient information to establish special controls (for example, special control documents, guidelines and patient registries). Class III devices are products for which neither general nor special controls provide reasonable assurance of safety and effectiveness. Generally, Class III includes devices that support or sustain human life, are for uses that are substantially important in preventing impairment of human health, are used as a stand alone assay for patient screening or diagnosis of disease, or present a potential, unreasonable risk of illness or injury.

We manufacture versions of the Luminex instruments for use with diagnostic assay kits that are available through our strategic partners. For FDA purposes, the Luminex systems are IVD cleared and are considered a component of our partners' kit products. Depending on the particular kit's regulatory classification into Class I, II or III and its intended use, kits manufactured by our strategic partners that are used in conjunction with our technology may be subject to FDA clearance or approval before they can be marketed and sold. After incorporating the Luminex systems into their products, our strategic partners may be required to make various premarket submissions such as premarket approval applications, premarket notifications and/or investigational device exemption applications to the FDA for their products and are required to comply with numerous requirements and restrictions prior to clearance or approval of the applications. Our partners are also subject to a number of other requirements in the Food, Drug, and Cosmetic Act and its regulations, such as Good Manufacturing Practice requirements and Good Clinical Practice requirements. There can be no assurance that such requirements will always be met without interruption, or that the FDA will file, clear or approve our strategic partners' submissions.

We also manufacture kit products that are intended for research use only (RUO) applications (not for diagnostic use), as well as kits that are for diagnostic use (currently regulatory classification of Class I and II). Additionally, the ARP segment manufactures products that are intended for RUO, those that are IVD cleared (Class I and II) as well as IUO or clinical applications.

In December 2007, we submitted to the FDA our request for 510(k) clearance on our Luminex LX 100/200 Instrument. On December 13, 2007 the FDA received our 510(k) #k073506 submission for the Luminex LX 100/200 IS System. On March 7, 2008, the instrument received FDA 510(k) clearance. All future diagnostic assay kits subject to FDA clearance may reference the 510(k) #k073506 for the instrument in their respective applications. A master file letter from Luminex allowing the partner to reference the file may be required. Subsequent clearances for FLEXMAP 3D and MAGPIX were received January 9, 2013 and March 21, 2013.

Certain of our instruments use lasers to identify the bioassays and measure their results. Therefore, we are required to ensure that these products comply with FDA regulations pertaining to the performance of laser products. These regulations are intended to ensure the safety of laser products by establishing standards to prevent exposure to excess levels of laser radiation. There can be no assurance that the FDA will agree with our interpretation and implementation of these regulations.

We, and our strategic partners, may be subject to periodic inspection by the FDA for, among other things, compliance with the FDA's current good manufacturing practice regulations. These regulations, also known as the Quality System Regulations, govern the methods used in, and the facilities and controls used for, the design, manufacture, packaging, labeling, servicing, installation and distribution of all finished medical devices intended for human use. Additionally, our strategic partners may be subject to other pre-market and post-market controls such as labeling, complaint handling, medical device reporting, corrections and removals reporting and record keeping requirements. If the FDA has evidence demonstrating that a company is not in compliance with applicable regulations, it can detain or seize products, request or, in certain circumstances, require a recall, impose operating restrictions, enjoin future violations, recommend criminal prosecution to the Department of Justice and assess civil and criminal penalties against us, our officers or our employees. Other regulatory agencies may have similar powers.

Medical device laws and regulations are also in effect in many countries outside of the United States. These range from comprehensive pre-approval requirements for medical products to simpler requests for product data or certification. The number and scope of these requirements are increasing. There can be no assurance that we, and our strategic partners, will be able to obtain any approvals that may be required to market xMAP technology products outside the United States.

The ARP segment produces CE marked products, which are subject to a number of different European Union (EU) Directives, including, but not limited to, the In Vitro Diagnostic Devices Directive (98/79/EEC). CE marking of our products is currently by self declaration, not issued by a third party, based on the intended uses of our products. A product that is not CE marked is automatically considered to be non-compliant. The law is enforced through market surveillance by appointed national enforcement agencies. Imported products are checked for compliance at customs offices.

The State Food and Drug Administration, P.R. China, is the government regulation authority in charge of safety management of drug, food, health food and cosmetics for the People's Republic of China. In December 2007 we submitted the application for a certificate to combine both Luminex 100 and Luminex 200 into one product called "Luminex System". This certificate is required for registration and approval to import our products into China. Luminex received the registration certificate from the People's Republic of China for the Luminex 100 and Luminex 200 Systems on March 4, 2009 and received recertification on October 17, 2013.

Failure by us, or our strategic partners, to comply with applicable federal, state and foreign medical product laws and regulations would likely have a material adverse effect on our business. In addition, federal, state and foreign regulations regarding the manufacture and sale of medical devices and components of such devices are subject to future changes. We cannot predict what impact, if any, such changes might have on our business, but any such change could have a material impact.

WEEE

The European Community Council Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) outlines the responsibility for the disposal of waste electrical and electronic equipment. Compliance with WEEE is placed with the manufacturers of such equipment. Those manufacturers are required to establish an infrastructure for collecting WEEE, in such a way that users of electrical and electronic equipment from private households should have the ability of returning WEEE at least free of charge. All Luminex-manufactured equipment is in compliance with this directive. We have been in compliance with the requirements since August 13, 2005, regarding the labeling and disposal of our products containing electronic devices in each of the EU member states where our regulated products are distributed.

RoHS

RoHS stands for "The Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" and implements EU Directive 2002/95 which bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl and polybrominated diphenyl ether flame retardants.

The Directive directly affects producers who manufacture or assemble electrical or electronic equipment in the EU, importers of electrical or electronic equipment from outside the EU and companies that re-brand electric producers as their own. The Directive applies to electrical and electronic equipment falling under the categories 1, 2, 3, 4, 5, 6, 7 and 10 set out in Annex IA of the WEEE Directive (2002/96/EC). Equipment categories 8 and 9 defined in the WEEE Directive are currently outside the scope of the RoHS Directive. Luminex IVD equipment is classified as category 8 (Medical Devices) in Annex IA of the WEEE Directive, which is not covered within the scope of the RoHS Directive. Luminex research equipment is classified as category 9 (Monitoring and Control Instruments) in Annex IA of the WEEE Directive, which is not covered within the scope of the RoHS Directive.

European IVD Directive

The EU's regulation of in vitro medical devices is under the In Vitro Diagnostic Directive (IVDD) 98/79/EC of October 27, 1998, as implemented in the EU member states.

The principle behind the IVDD is that no in vitro device or accessory may be placed on the market or put into service unless it satisfies the essential requirements set forth in the IVDD. Devices considered to meet the essential requirements must bear the CE marking of conformity when they are placed on the market. The responsibility for placing the CE marking on the device lies with the manufacturer. A manufacturer placing devices on the market in its name is required to notify its national competent authorities.

Luminex has declared that the LX100 IS, the LX200 IS, the FLEXMAP 3D and the MAGPIX are classified as self-declaration devices and are in conformity with Article 1, Article 9, Annex I (Essential Requirements), and Annex III and the additional provisions of IVDD 98/79/EC. However, there can be no assurance that the EU member states will agree with our interpretation and implementation of these regulations. As the European marketplace continues to be material to our operations, failure by us or our strategic partners to comply with the IVDD could have a material adverse effect on our business.

Environmental

We are subject to federal, state and local laws and regulations relating to the protection of human health and the environment. In the course of our business, we are involved in the handling, storage and disposal of certain chemicals and biohazards. The laws and regulations applicable to our operations include provisions that regulate the discharge of materials into the environment. Some of these environmental laws and regulations impose "strict liability," rendering a party liable without regard to negligence or fault on the part of such party. Such environmental laws and regulations may expose us to liability for environmental contamination, including remediation costs, natural resource damages and other damages as a result of the conduct of, or conditions caused by, us or others, or for acts that were in compliance with all applicable laws at the time such acts were performed. In addition, where contamination may be present, it is not uncommon for neighboring landowners and other third parties to file claims for personal injury, property damage and recovery of response costs. Although it is our policy to use generally accepted operating and disposal practices in accordance with applicable environmental laws and regulations, hazardous substances or wastes may have been disposed or released on, under or from properties owned, leased or operated by us or on, under or from other locations where such substances or wastes have been taken for disposal. These properties may be subject to investigation, remediation and monitoring requirements under federal, state and local environmental laws and regulations. We believe that our operations are in substantial compliance with applicable environmental laws and regulations. However, failure to comply with these environmental laws and regulations may result in the imposition of administrative, civil and criminal penalties or other liabilities. We do not believe that we have been required to expend material amounts in connection with our efforts to comply with environmental requirements or that compliance with such requirements will have a material adverse effect upon our capital expenditures, results of operations or competitive position. Because the requirements imposed by such laws and regulations may frequently change and new environmental laws and regulations may be adopted, we are unable to predict the cost of compliance with such requirements in the future, or the effect of such laws on our capital expenditures, results of operations or competitive position. Moreover, the modification or interpretation of existing environmental laws or regulations, the more vigorous enforcement of existing environmental laws or regulations, or the adoption of new environmental laws or regulations may also negatively impact our strategic partners, which in turn could have a material adverse effect on us and other similarly situated component companies.

Sunshine Act

In 2010, Congress enacted a statute called the Transparency Reports and Reporting of Physician Ownership or Investment Interests (commonly known as the Sunshine Act), as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the Health Reform Law). The Sunshine Act aims to promote transparency and requires manufacturers of most drugs, devices, biologicals and medical supplies covered by Medicare, Medicaid or the Children's Health Insurance Program (CHIP) to report annually to the Centers for Medicare and Medicaid Services (CMS) any payments or other transfers of value made to physicians and teaching hospitals, with limited exceptions. Manufacturers must also disclose to CMS any physician ownership or investment interests. On February 8, 2013, CMS issued a final rule implementing the Sunshine Act. Manufacturers covered by the Sunshine Act, including Luminex entities operating or selling in the US, must begin reporting by March 31, 2014. The first report must address transfers of value and relationships from August 1, 2013 through December 31, 2013. CMS will release data on a public website by September 30, 2014. We have provided internal training regarding the Sunshine Act requirements to relevant personnel and have implemented procedures to track and report any transfers of value covered by the Sunshine Act. Failure to comply with the reporting requirement may result in substantial penalties.

Other

Further, based on the Health Reform Law, the IRS issued a final rule on December 7, 2012 implementing a Medical Device Excise Tax on manufacturers that applies to medical devices sold after December 31, 2012. The tax is 2.3% of the sale price on non-exempt medical devices. This tax has not had, nor do we expect it to have, a material impact on our operations.

Employees

As of February 24, 2014 and December 31, 2013, we had a total of 731 employees and contract employees, as compared with 687 as of December 31, 2012. The increase from December 31, 2012 to 2013 is primarily the result of the addition of sales and marketing employees focusing on selling to our end customers directly, as well as personnel added related to development, production, regulatory clearance and quality control for our new sample to answer instrument and our bead products and assays. None of our employees are represented by a collective bargaining agreement, and we have not experienced any work stoppage. We believe that relations with our employees are good.

Seasonality

Worldwide sales, including U.S. sales, do not reflect any significant degree of seasonality; however, sales of our Respiratory Viral products in our ARP segment have demonstrated seasonal fluctuations consistent with the onset and decline of influenza-like illnesses.

Segments

Financial information relating to our reportable segments for the years ended December 31, 2013, 2012 and 2011 can be found in Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 8 "Financial Statements and Supplementary Data."

Executive Officers of the Registrant as of February 24, 2014

Name	Age	Position
Patrick J. Balthrop	57	President and Chief Executive Officer
Harriss T. Currie	52	Chief Financial Officer, Senior Vice President, Finance and Treasurer
Jeremy Bridge-Cook, Ph.D	45	Senior Vice President, R&D
Michael F. Pintek	45	Senior Vice President, Operations
Russell W. Bradley	50	Senior Vice President, Business Development and Strategic Planning
David S. Reiter	47	Senior Vice President, General Counsel and Corporate Secretary

Patrick J. Balthrop. Mr. Balthrop joined Luminex in May 2004 as President and Chief Executive Officer and has served as a member of the Board of Directors since September 2004. He served as president of Fisher Healthcare, a Fisher Scientific International company, a manufacturer and supplier of products and services principally to the scientific and laboratory markets from 2002 to May 2004. Prior to Fisher Scientific International, Mr. Balthrop served in a number of leadership positions for over 20 years with Abbott Laboratories, primarily in Abbott's Diagnostics Division. Mr. Balthrop's most recent positions at Abbott were as head of worldwide commercial diagnostics operations and as head of Abbott Vascular. Mr. Balthrop holds an M.B.A. from the Kellogg Graduate School of Management of Northwestern University, and a B.S. in Biology from Spring Hill College.

Harriss T. Currie. Mr. Currie has served as Vice President, Finance, Treasurer and Chief Financial Officer since October of 2002 and was appointed Senior Vice President, Finance in March 2013. Since joining Luminex in November of 1998, Mr. Currie previously served in the capacities of Controller and Treasurer. Prior to joining us, he was employed as the chief financial officer, secretary and treasurer of SpectraCell Laboratories from 1993 to 1998 where he also served as vice president of finance for two subsidiary companies. Mr. Currie earned his B.B.A. from Southwestern University and his M.B.A. in Finance and Marketing from The University of Texas at Austin. Prior to returning to graduate school for his M.B.A., Mr. Currie was a certified public accountant with Deloitte & Touche LLP.

Jeremy Bridge-Cook, Ph.D. Dr. Bridge-Cook has served as Senior Vice President, Research and Development since June 2009. Dr. Bridge-Cook joined Luminex in March 2007 as Vice President of Luminex Molecular Diagnostics. Previously, Dr. Bridge-Cook served as senior vice president, corporate development of Tm Bioscience. Dr. Bridge-Cook joined Tm Bioscience in July 2000 as director of business development and served in various capacities thereafter, including vice president of business development, vice president of marketing and business development, and finally senior vice president, corporate development. Prior to joining Tm Biosciences, Dr. Bridge-Cook worked for three years as an investment analyst at MDS Capital Corp. and University Medical Discoveries Inc. Dr. Bridge-Cook has a Ph.D. in Immunology from the University of Toronto and a B.Sc. in Biology from McMaster University.

Michael F. Pintek. Mr. Pintek joined Luminex as Senior Vice President of Operations in July 2009. He joined Luminex from Roche Molecular Systems, Inc., a subsidiary of Roche Diagnostics Corporation, where he held several positions of increasing responsibility since 2001, most recently as Vice President and General Manager, Blood Screening at Roche. Prior to Roche Molecular Systems, his experience includes a number of leadership positions with Ventana Medical Systems and Abbott Laboratories' Diagnostics Division. Mr. Pintek holds a B.S. in Business Administration from Central Michigan University.

Russell W. Bradley. Mr. Bradley joined Luminex in May 2005 as Vice President of Business Development and Strategic Planning and was appointed as Senior Vice President, Corporate Development and Global Marketing in August, 2013. Previously, Mr. Bradley spent 17 years at Beckman Coulter, Inc., a manufacturer of biomedical testing systems and products, where he served in various roles of increasing responsibility including commercial leadership of Beckman Coulter's flow cytometry business and most recently as the director of the Beckman Coulter CARES initiative, leading the company's clinical HIV monitoring business in developing regions around the globe. During his tenure at Beckman Coulter, Mr. Bradley was involved in the evaluation, market assessment and commercial launch of multiple life science technologies and applications. Mr. Bradley holds a B.Sc. in Immunology and Biochemistry from Monash University, Melbourne, Australia.

David S. Reiter. Mr. Reiter joined Luminex as Vice President, General Counsel and Corporate Secretary in October 2003 and was appointed Senior Vice President, General Counsel and Corporate Secretary in March 2013.. Prior to becoming General Counsel, Mr. Reiter was in private practice with the firm of Phillips & Reiter, PLLC, which provides outsourced general counsel services for early to mid-stage companies. Before co-founding the firm, Mr. Reiter was vice president and general counsel for 724 Solutions Inc., a provider of mobile commerce software solutions and applications. Earlier in his career, Mr. Reiter served as senior counsel for Compaq Computer Corporation, supporting the Worldwide Sales & Services, Supply Chain Management and Consumer Products Group. Mr. Reiter is a graduate of the University of Southern California (Juris Doctorate/Master of International Relations), University of Sheffield, UK (M.B.A.) and the University of Notre Dame (B.A.) in Government. Mr. Reiter is a member of the Texas Bar and the American Bar Association.

ITEM 1A. RISK FACTORS

If we do not introduce new products in a timely manner, we may lose market share and be unable to achieve revenue growth targets.

We sell many of our products in industries characterized by rapid technological change, frequent new product and service introductions, and evolving customer needs and industry standards. Many of the businesses competing with us in these industries have significant financial and other resources to invest in new technologies, substantial intellectual property portfolios, substantial experience in new product development, regulatory expertise, manufacturing capabilities, and established distribution channels to deliver products to customers. Our products could become technologically obsolete over time, or we may invest in technologies that do not lead to revenue growth or continue to sell products for which the demand from our customers is declining, in which case we may lose market share or not achieve our revenue growth targets. The success of our new product offerings will depend upon several factors, including our ability to:

- accurately anticipate customer needs;
- innovate and develop new technologies and applications;
- successfully commercialize new technologies in a timely manner;
- price our products competitively, and manufacture and deliver our products in sufficient volumes and on time; and
- differentiate our offerings from our competitors' offerings.

Many of our products are used by our customers to develop, test and manufacture their products. We must anticipate industry trends and consistently develop new products to meet our customers' expectations. In developing new products, we may be required to make significant investments before we can determine the commercial viability of the new product. If we fail to accurately foresee our customers' needs and future activities, we may invest heavily in research and development of products that do not lead to significant revenue. We may also suffer a loss in market share and potential revenue if we are unable to commercialize our technology in a timely and efficient manner.

If our current technology and products and our products under development do not become widely used in the life sciences and clinical diagnostics industries, we may not be able to maintain or increase profitability.

Life sciences companies have historically conducted biological tests using a variety of technologies, including bead-based analysis. The commercial success of our technology depends upon its widespread adoption as a method to perform bioassays. In order to be successful, we must convince potential partners to utilize our system instead of competing technologies. Market acceptance depends on many factors, including our ability to:

- timely and successful launch of products under development;

- convince prospective strategic partners and customers that our technology is an attractive alternative to other technologies for pharmaceutical, research, clinical, biomedical and genetic testing and analysis;
- encourage these partners to develop and market products using our technology;
- manufacture products in sufficient quantities with acceptable quality and at an acceptable cost;
- obtain and maintain sufficient pricing and royalties from partners on such Luminex products; and
- place and service sufficient quantities of our products, including the ability to provide the level of service required in the mainstream clinical diagnostics market segment.

Because of these and other factors, our products may not gain or sustain sufficient market acceptance to maintain or increase profitability. Additionally, we may have to write off excess or obsolete inventory if sales of our products are not consistent with our expectations or if the demand for our products changes.

We expect our operating results to continue to fluctuate from quarter to quarter.

The sale of our instrumentation and assay products typically involves a significant technical evaluation and commitment of capital by us, our partners and the end user. Accordingly, the sales cycle associated with our products typically is lengthy and subject to a number of significant risks, much of which is beyond our control, including partners' budgetary constraints, inventory management practices, regulatory approval and internal acceptance reviews. As a result of this lengthy and unpredictable sales cycle, our operating results have historically fluctuated significantly from quarter to quarter. We expect this trend to continue for the foreseeable future.

The vast majority of our system sales are made to our strategic partners. Our partners typically purchase instruments in three phases during their commercialization cycle: first, instruments necessary to support internal assay development; second, instruments for sales force demonstrations; and finally, instruments for resale to their customers. As a result, most of our system placements are highly dependent on the continued commercial success of our strategic partners and can fluctuate from quarter to quarter as our strategic partners move from phase to phase. We expect this trend to continue for the foreseeable future.

Our assay products are sometimes sold to large customers. The ordering and consumption patterns of these customers can fluctuate, affecting the timing of shipments and revenue recognition. In addition, certain products assist in the diagnosis of illnesses that are seasonal, and customer orders can fluctuate for this reason.

Because of the effect of bulk purchases, defined as the purchase of $100,000 or more of consumables in a quarter, and the introduction of seasonal components to our assay menus, we experience fluctuations in the percentage of our quarterly revenues derived from our highest margin items: consumables, royalties and assays. Our gross margin percentage is highly dependent upon the mix of revenue components each quarter. These fluctuations contribute to the variability and lack of predictability of both gross margin percentage and total gross profit from quarter to quarter. We expect this trend to continue for the foreseeable future.

Due to the early stage of the market for molecular tests, projected growth scenarios for the ARP segment are highly volatile and are based on a number of underlying assumptions that may or may not prove to be valid, including the performance of strategic partners that distribute our ARP segment products and our ability to successfully implement our direct assay sales strategy.

If our direct selling efforts for our products are less successful than anticipated, our business expansion plans could suffer and our ability to generate revenues could be diminished. In addition, our transition to selling more of our molecular diagnostics products on a direct basis and our limited history in selling directly makes forecasting difficult.

We have a relatively small sales force compared to some of our competitors. If our direct sales force is not successful, or new additions to our sales team fail to gain traction among our customers, we may not be able to increase market awareness and sales of our products, or maintain historical sales levels. If we fail to establish our systems in the marketplace, it could have a negative effect on our ability to sell subsequent systems and hinder the planned expansion of our business.

As of January 2013, we transitioned to selling more of our molecular diagnostics products on a direct basis. We have limited historical experience forecasting the direct sales of our molecular diagnostics products. Our ability to produce product quantities that meet customer demand is dependent upon our ability to forecast accurately, plan production accordingly and scale our manufacturing efforts.

Our success depends significantly on the establishment and maintenance of successful relationships with our strategic partners. Currently, a limited number of strategic partners account for a majority of our revenue and the loss of any one of these partners or their inability to perform to expectations could have a material adverse effect on our business, financial condition and results of operations.

The development and commercialization of our xMAP technology is highly dependent on our ability to establish successful strategic relationships with a number of partners. For the twelve months ended December 31, 2013, we had 51 strategic partners submitting royalties as compared to 41 for the twelve months ended December 31, 2012. Three customers, LabCorp (including acquired Genzyme Genetics), Thermo Fisher Scientific Inc. (including acquired One Lambda, Inc.), and Bio-Rad Laboratories, Inc., accounted for 44% of total revenue (18%, 17% and 9%, respectively) in the twelve months ended December 31, 2013. For comparative purposes, these same three customers accounted for 51% of total revenue (19%, 24% and 8%, respectively) in the twelve months ended December 31, 2012 and 50% of total revenue (10%, 30% and 10%, respectively) in the twelve months ended December 31, 2011. No other customer accounted for more than 10% of total revenue during the twelve months ended December 31, 2013. We had only one additional partner who individually represented 5% or more of our total revenue for the year ended December 31, 2013. In total, for the year ended December 31, 2013, our top four partners accounted for 50% of our total revenue. In total, for the year ended December 31, 2012, our top four partners accounted for 59% of our total revenue. The loss of any of our significant strategic partners, or any of our significant customers, could have a material adverse effect on our growth and future results of operations. As expected, and resulting from our focus on selling directly to the end user, customer concentration in the ARP segment has declined. The ARP segment is dependent on one significant customer with respect to sales of its genetic test kits. If this significant customer discontinues its relationship with the ARP segment for any reason, or reduces or postpones current or expected purchase commitments for the ARP segment's products, the ARP segment's results from operations could be materially adversely affected.

Delays in implementation, delays in obtaining regulatory approval, changes in strategy or the financial difficulty of our strategic partners for any reason could have a material adverse effect on our business, financial condition and results of operations.

Our ability to enter into agreements with additional strategic partners depends in part on convincing them that our technology can help achieve and accelerate their goals or efforts. We will expend substantial funds and management efforts with no assurance that any additional strategic relationships will result. We cannot guarantee that we will be able to negotiate additional strategic agreements in the future on acceptable terms, if at all, or that current or future strategic partners will not pursue or develop alternative technologies either on their own or in collaboration with others. Some of the companies we are targeting as strategic partners offer products competitive with our xMAP technology, which may hinder or prevent strategic relationships. Termination of strategic relationships, the failure to enter into a sufficient number of additional strategic relationships on favorable terms, or disputes with our partners could reduce sales of our products, lower margins on our products and limit the creation of market demand for and acceptance of our products.

In most of our strategic relationships we have granted our strategic partners non-exclusive rights with respect to commercialization of our products and technology. The lack of exclusivity could deter existing strategic partners from commercializing xMAP technology and may deter new strategic partners from entering into agreements with us.

A significant portion of our future revenues will come from sales of our systems and the development and sale of bioassay kits utilizing our technology by our strategic partners and from use of our technology by our strategic partners in performing services offered to third parties. We believe that our strategic partners will have economic incentives to develop and market these products, but we cannot accurately predict future sales and royalty revenues because most of our existing strategic partner agreements do not include minimum purchase requirements or minimum royalty commitments. Some of our existing strategic partner agreements contain minimum purchase requirements for certain years, but unless renegotiated, those minimum purchase requirements could expire. In addition, we have no control with respect to our strategic partners' sales personnel and how they prioritize products based on xMAP technology nor can we control the timing of the development or release of products by our strategic partners. The amount of these revenues depends on a variety of factors that are outside our control, including the amount and timing of resources that current and future strategic partners devote to develop and market products incorporating our technology. Furthermore, the development and marketing of certain bioassay kits will require our strategic partners to obtain governmental approvals, which could delay or prevent their commercialization efforts. If our current or future strategic partners do not successfully develop and market products based on our technology and obtain necessary government approvals, our revenues from product sales and royalties will be significantly reduced.

Unfavorable economic conditions and the uncertain economic outlook may adversely impact our business, results of operations, financial condition or liquidity.

Global economic conditions could adversely affect our results of operations. The credit markets and the financial services industry continue to experience turmoil and volatility, both domestically and internationally. These conditions not only limit our access to capital but also make it extremely difficult for our customers, our vendors and us to accurately forecast and plan future business activities, and they could cause U.S. and foreign businesses and consumers to slow spending on our products and services, which would delay and lengthen sales cycles. Some of our customers rely on government research grants to fund technology purchases. If negative trends in the economy affect the government's allocation of funds to research, there may be less grant funding available for certain of our customers to purchase technologies like those Luminex sells. Certain of our partners and their and our customers may face challenges gaining timely access to sufficient credit or may otherwise be faced with budget constraints, which could result in decreased purchases of, or development of products based on, our products or in an impairment of their ability to make timely payments to us. If our partners and our customers do not make timely payments to us, we may be required to assume greater credit risk relating to those customers, increase our allowance for doubtful accounts and our days sales outstanding would be negatively impacted. Although we maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments and such losses have historically been within our expectations and the provisions established, we may not continue to experience the same loss rates that we have in the past, especially given the current turmoil of the worldwide economy. Additionally, these economic conditions and market turbulence may also impact our suppliers causing them to be unable to supply in a timely manner sufficient quantities of customized components, thereby impairing our ability to manufacture on schedule and at commercially reasonable costs.

If the governmental laws and regulations change in ways that we do not anticipate and if we fail to comply with laws and regulations that affect our business, we could be subject to enforcement actions, injunctions and civil and criminal penalties or otherwise be subject to increased costs that could delay or prevent marketing of our products.

The production, testing, labeling, marketing and distribution of our products for some purposes and products based on our technology are subject to governmental regulation by the FDA and by similar agencies in other countries. Some of our products and products based on our technology for in vitro diagnostic purposes are subject to clearance by the FDA prior to marketing for commercial use. To date, eight strategic partners have obtained such clearances. Others are anticipated. The process of obtaining necessary FDA clearances can be time-consuming, expensive and uncertain. Further, clearance may place substantial restrictions on the indications for which the product may be marketed or to whom it may be marketed. In addition, because some of our products employ laser technology, we are also required to comply with FDA requirements relating to radiation performance safety standards.

Periodically the FDA issues guidance documents that represent the FDA's current thinking on a topic. These issues are initially issued in draft form prior to final rule generally with enforcement discretion for some grace period of time. Changes made through this process may impact the release status of products offered and our ability to market those products affected by the change. For example, the FDA released on September 14, 2007 the final document "Guidance for Industry and FDA Staff Commercially Distributed Analyte Specific Reagents (ASRs): Frequently Asked Questions." This guidance may limit or delay distribution of assays on our platform, including assays developed and distributed by our ARP segment, to the extent additional regulatory clearance is required prior to distribution.

Cleared medical device products are subject to continuing FDA requirements relating to, among others, manufacturing quality control and quality assurance, maintenance of records and documentation, registration and listing, import/export, adverse event and other reporting, distribution, labeling and promotion and advertising of medical devices. Our inability or the inability of our strategic partners to obtain required regulatory approval or clearance on a timely or acceptable basis could harm our business. In addition, failure to comply with applicable regulatory requirements could subject us or our strategic partners to regulatory enforcement action, including warning letters, product seizures, recalls, withdrawal of clearances, restrictions on or injunctions against marketing our products or products based on our technology, and civil and criminal penalties.

Medical device laws and regulations are in effect within the United States and also in many countries outside the United States. These range from comprehensive device clearance requirements for some or all of our medical device products to requests for product data or certifications regarding the hazardous material content of our products. As a device manufacturer, beginning in March 2014 we are required to annually report to CMS any payments or transfers of value we have made to physicians and teaching hospitals and any physician ownership or investment interest in the company. As part of the European Council Directive 2002/96 of February 13, 2003, we are expected to comply with certain requirements regarding the collection, recycling and labeling of our products containing electronic devices in each of the European Union, or EU, member states where our regulated products are distributed. While we are taking steps to comply with the requirements of WEEE, we cannot be certain that we will comply with the national stage implementation of WEEE in all member states. Our products are currently exempt from the European Council Directive 2002/95 of January 27, 2003, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS), which required the removal of certain specified hazardous substances from certain products beginning July 1, 2006 in each of the member states. However, the EU has indicated that it may, and it is generally expected it will, include medical devices, including some of our products, under the jurisdiction of RoHS. If this exemption is revoked, it could result in increased costs to us and we cannot guarantee we will ultimately be able to comply with RoHS or related requirements in other jurisdictions. In addition, the State of California adopted the Electronic Waste Recycling Act, effective January 1, 2007, which requires the California Department of Toxic Substances Control to adopt regulations to prohibit the sale of electronic devices in California if they are also prohibited from sale in the EU under the RoHS directive because they contain certain heavy metals. The number and scope of these requirements are increasing and we will likely become subject to further similar laws in other jurisdictions. Failure to comply with applicable federal, state and foreign medical device laws and regulations may harm our business, financial condition and results of operations. We are also subject to a variety of other laws and regulations relating to, among other things, environmental protection and workplace health and safety.

Our strategic partners and customers expect our organization to operate on an established quality management system compliant with FDA Quality System Regulations and industry standards, the In Vitro Diagnostic Directive 98/79/EC of 27 October 1998 (Directive) as implemented nationally in the EU member states and industry standards, such as ISO 9000. We became ISO 9001:2000 certified in March 2002 and self-declared our Luminex 100, Luminex 200, FLEXMAP 3D and MAGPIX instruments to the Directive. Our devices are in conformity with Article 1, Article 9, Annex I (Essential Requirements), and Annex III and the additional provisions of the Directive as of December 7, 2003. Subsequent audits are carried out annually to ensure we maintain our system in substantial compliance with ISO and other applicable regulations and industry standards. We became ISO 13485:2003 and CMDCAS certified in July 2005. Failure to maintain compliance with FDA, CMDCAS and EU regulations and other medical device laws, or to obtain applicable registrations where required, could reduce our competitive advantage in the markets in which we compete and also decrease satisfaction and confidence levels with our partners.

Our reliance on strategic relationships makes forecasting difficult.

As a result of our reliance on our strategic relationships, it can be difficult to accurately forecast future operating results. For the following reasons, estimating the timing and amount of sales of our products is particularly difficult:

- We do not control the timing or extent of product development, marketing or sale of our products by our strategic partners.
- We do not control the incentives provided by our strategic partners and distributors to their sales personnel.
- We utilize a limited number of geographically focused distributors for a portion of our sales, including several of our key assay products and the loss of or nonperformance by these distributors could harm our revenues in the territories serviced by these distributors.
- A significant number of our strategic partners intend to produce clinical diagnostic applications that may need to be approved by the FDA or other regulatory bodies in jurisdictions outside of the United States.
- Certain strategic partners may have unique requirements for their applications and systems. Assisting the various strategic partners may strain our research and development and manufacturing resources. To the extent that we are not able to timely assist our strategic partners, the commercialization of their products will likely be delayed.
- Certain strategic partners may fail to deliver products that satisfy market requirements, or such products may fail to perform properly.
- We have limited access to partner and distributor confidential corporate information. A sudden unexpected change in ownership or strategy or other material event could adversely impact partner purchases of our products.

- Partners tend to order in bulk prior to the production of new lots of their products and prior to major product development initiatives. The frequency of these bulk purchases is difficult to predict and may cause large fluctuations in microsphere sales quarter to quarter.

The life sciences industry is highly competitive and subject to rapid technological change, and we may not have the resources necessary to compete successfully.

We compete with companies in the United States and abroad that are engaged in the development and production of similar products. We will continue to face intense competition from existing competitors and other companies seeking to develop new technologies. Many of our competitors have access to greater financial, technical, scientific, research, marketing, sales, distribution, service and other resources than we do. These companies may develop technologies that are superior alternatives to our technologies or may be more effective at commercializing their technologies in products.

The life sciences industry is characterized by rapid and continuous technological innovation. We may need to develop new technologies for our products to remain competitive. One or more of our current or future competitors could render our present or future products or those of our partners obsolete or uneconomical by technological advances. In addition, the introduction or announcement of new products by us or others could result in a delay of or decrease in sales of existing products as we await regulatory approvals, while customers evaluate these new products, or if customers choose to purchase the new products instead of legacy products. We may also encounter other problems in the process of delivering new products to the marketplace such as problems related to design, development, supply chain or manufacturing of such products, and as a result we may be unsuccessful in selling such products. Our future success depends on our ability to compete effectively against current technologies, as well as to respond effectively to technological advances by developing and marketing products that are competitive in the continually changing technological landscape.

Our success depends on our ability to service and support our products directly or in collaboration with our strategic partners.

To the extent that we or our strategic partners fail to maintain a high quality level of service and support for xMAP technology products, there is a risk that the perceived quality of our xMAP technology products will be diminished in the marketplace. Likewise, we may fail to provide the level, quantity or quality of service expected by the marketplace. This could result in slower adoption rates and lower than anticipated utilization of xMAP products which could have a material adverse effect on our business, financial condition and results of operations.

If third-party payors increasingly restrict payments for healthcare expenses or fail to adequately pay for multi-analyte testing, we may experience reduced sales which would hurt our business and our business prospects.

Third-party payors, such as government entities and government-sponsored healthcare programs (e.g. Medicare, Medicaid, Tricare), health maintenance organizations, preferred provider organizations and other private or commercial insurers, are continually seeking to reduce healthcare expenses. The federal government has reduced the funding for certain government-sponsored healthcare programs, which has caused some third party payors to seek further reduction in medical expenses. In 2010, the federal government passed The Health Reform Law, which is currently being implemented. The Health Reform Law could further limit government funds allocated to government-sponsored healthcare programs. In some cases, commercial third-party payors are influenced by government-sponsored healthcare programs, coverage determination and reimbursement rates. As a result, negative coverage decisions or reductions in reimbursement from government-sponsored healthcare programs may negatively impact coverage and reimbursements from commercial third-party payors. Increasingly, third-party payors are challenging the utilization of and prices charged for medical services, including clinical diagnostic tests. They are also attempting to contain costs by limiting coverage, reducing reimbursement and increasing patient cost-sharing obligations. In addition, cost containment initiatives by governmental or educational entities or programs may reduce funding for genetic research and development activities and retard the growth of the genetic testing market. Without adequate coverage and reimbursement, consumer demand for tests could decrease. Decreased demand could cause our strategic partners to reduce purchases or to cancel programs or development activities and could cause sales of our products, and sales and services by our strategic partners, to fall. In addition, decreased demand could place pressure on us, or our strategic partners, to lower prices on these products or services, resulting in lower margins. Reduced sales or margins by us, or our strategic partners, would adversely affect our business, profitability and business prospects.

The property rights we rely upon to protect the technology underlying our products may not be adequate to maintain market exclusivity. Inadequate intellectual property protection could enable third parties to exploit our technology or use very similar technology and could reduce our ability to distinguish our products in the market.

Our success depends, in part, on our ability to obtain, protect and enforce patents on our technology and products and to protect our trade secrets, including the intellectual property of entities we may acquire. Any patents we own may not afford full protection for our technology and products. Others may challenge our patents and, as a result, our patents could be narrowed or invalidated. In addition, our current and future patent applications may not result in the issuance of patents in the United States or foreign countries. Competitors may develop products that are not covered by our patents. Furthermore, there is a substantial backlog of patent applications at the U.S. Patent and Trademark Office and certain patent offices in foreign jurisdictions, and the approval or rejection of patent applications may take several years.

We currently own 281 issued patents worldwide, including 110 issued patents in the United States. Other countries in which we have issued patents directed to various aspects and applications of our products and technology include France, Germany, United Kingdom, Australia, Japan, Netherlands, Canada, Hong Kong and China, amongst others. In addition, our patent portfolio includes 196 pending patent applications in the United States and other foreign jurisdictions. We also have patents covering key aspects of MultiCode and xTAG technology utilized in our assay products as well as our automated real-time PCR system.

We require our employees, consultants, strategic partners and other third parties to execute confidentiality agreements. Our employees and third-party consultants also sign agreements requiring that they assign to us their interests in inventions and original expressions and any corresponding patents and copyrights arising from their work for us. In addition, we have implemented a patent process to file patent applications on our key technology. However, we cannot guarantee that these agreements or this patent process will provide us with adequate protection against improper use of our intellectual property or disclosure of confidential information. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants or advisers have prior employment or consulting relationships. Further, others may independently develop substantially equivalent proprietary technology, techniques and products or counterfeit versions of our products or otherwise gain access to our trade secrets. Our failure to protect our proprietary information and techniques may inhibit or limit our ability to exclude certain competitors from the market.

In order to protect or enforce our patent rights, we may have to initiate legal proceedings against third parties, such as infringement suits or interference proceedings. These legal proceedings could be expensive, take significant time and/or divert management's attention from other business concerns. These proceedings may cause us to lose the benefit of some of our intellectual property rights, the loss of which may inhibit or preclude our ability to exclude certain competitors from the market. These proceedings also may provoke these third parties to assert claims against us. The patent position of companies like ours generally is highly uncertain, involves complex legal and factual questions and has recently been the subject of much litigation. No consistent policy has emerged from the U.S. Patent and Trademark Office or the courts regarding the breadth of claims allowed or the degree of protection afforded under patents like ours.

Our success depends partly on our ability to operate without infringing on or misappropriating the proprietary rights of others.

We have been (and from time to time we may be) notified that third parties consider their patents or other intellectual property relevant to our products. We may be sued for infringing the intellectual property rights of others, including claims with respect to intellectual property of entities we may acquire. In addition, we may find it necessary, if threatened, to initiate a lawsuit seeking a declaration from a court that we do not infringe on the proprietary rights of others or that their rights are invalid or unenforceable. Intellectual property litigation is costly, and, even if we prevail, the cost of such litigation could affect our profitability. Furthermore, litigation is time-consuming and could divert management's attention and resources away from our business. If we do not prevail in any litigation, we may have to pay damages and could be required to stop the infringing activity or obtain a license. Any required license may not be available to us on acceptable terms, if at all. Moreover, some licenses may be nonexclusive, and therefore, our competitors may have access to the same technology licensed to us. If we fail to obtain a required license or are unable to design around a patent, we may be unable to sell some of our products, which could have a material adverse effect on our business, financial condition and results of operations.

We require collaboration with other organizations in obtaining relevant biomarkers, access to oligonucleotides and enzymes that are patented or controlled by others. If we cannot continue to obtain access to these areas or identify freedom to operate opportunities, our business, financial condition and results of operations could be negatively affected.

We may be unsuccessful in implementing our acquisition strategy. We may face difficulties integrating acquired entities with our existing businesses. Our business may be harmed by prior or future acquisitions.

Acquisitions of assets or entities designed to accelerate the implementation of our strategic plan are an important element of our long-term strategy. We may be unable to identify and complete appropriate future acquisitions in a timely manner, or at all, and no assurance can be provided that the market price of potential business acquisitions will be acceptable. In addition, many of our competitors have greater financial resources than we have and may be willing to pay more for these businesses or selected assets. In the future, should we identify suitable acquisition targets, we may be unable to complete acquisitions or obtain the financing, if necessary, for these acquisitions on terms favorable to us. Potential acquisitions pose a number of risks, including, among others, that:

- we may not be able to accurately estimate the financial effect of acquisitions on our business;
- future acquisitions may require us to incur debt or other obligations, issue additional securities, incur large and immediate write-offs, issue capital stock potentially dilutive to our stockholders or spend significant cash, or may negatively affect our operating results and financial condition.
- if we spend significant funds or incur additional debt or other obligations, our ability to obtain financing for working capital or other purposes could decline, and we may be more vulnerable to economic downturns and competitive pressures;
- technological advancement or worse than expected performance of acquired businesses may result in the impairment of intangible assets;
- we may be unable to realize the anticipated benefits and synergies from acquisitions as a result of inherent risks and uncertainties, including difficulties integrating acquired businesses or retaining their key personnel, partners, customers or other key relationships, entering market segments in which we have no or limited experience, and risks that acquired entities may not operate profitably or that acquisitions may not result in improved operating performance;
- we may fail to successfully obtain appropriate regulatory approval or clearance for products under development of our acquired businesses;
- we may fail to successfully manage relationships with customers, distributors and suppliers;
- our customers may not accept products of our acquired businesses;
- we may fail to effectively coordinate sales and marketing efforts of our acquired businesses;
- we may fail to combine product offerings and product lines of our acquired businesses quickly and effectively;
- we may fail to effectively enhance acquired technology and products to develop new products relating to the acquired businesses;
- an acquisition may involve unexpected costs or liabilities, including as a result of pending and future shareholder lawsuits relating to acquisitions or exercise by shareholders of their statutory appraisal rights, or the effects of purchase accounting may be different from our expectations;
- an acquisition may involve significant contingent payments that may adversely affect our future liquidity or capital resources;
- acquisitions and subsequent integration of these companies may disrupt our business and distract our management from other responsibilities; and
- the costs of unsuccessful acquisition efforts may adversely affect our financial performance.

Other risks of integration of acquired businesses include:

- disparate information technology, internal control, financial reporting and record-keeping systems;
- differences in accounting policies, including those requiring judgment or complex estimation processes;
- new partners or customers who may operate on terms and programs different than ours;

- additional employees not familiar with our operations;

- unanticipated additional transaction and integration-related costs;

- our current and prospective customers and suppliers may experience uncertainty associated with an acquisition, including with respect to current or future business relationships with us and may attempt to negotiate changes in existing business;

- facilities or operations of acquired businesses in remote locations or potentially foreign jurisdictions and the inherent risks of operating in unfamiliar legal and regulatory environments; and

- new products, including the risk that any underlying intellectual property associated with such products may not have been adequately protected or that such products may infringe on the proprietary rights of others.

As we continue to expand our business, we may experience problems in scaling our manufacturing operations, or delays or component shortages that could limit the growth of our revenue.

As we continue to expand our manufacturing capabilities in order to meet our growth objectives, we may not be able to produce sufficient quantities of products or maintain consistency between differing lots of consumables. If we encounter difficulties in scaling our manufacturing operations as a result of, among other things, quality control and quality assurance issues and availability of components and raw material supplies, we will likely experience reduced sales of our products, increased repair or re-engineering costs due to product returns, and defects and increased expenses due to switching to alternate suppliers, any of which would reduce our revenues and gross margins.

We presently outsource certain aspects of the assembly of our systems to contract manufacturers. Because of a long lead-time to delivery, we are required to place orders for a variety of items well in advance of scheduled production runs. We recently increased our flexibility to purchase strategic components within shorter lead times by entering into supply agreements with the suppliers of these components. Although we attempt to match our parts inventory and production capabilities to estimates of marketplace demand, to the extent system orders materially vary from our estimates, we may experience continued constraints in our systems production and delivery capacity, which could adversely impact revenue in a given fiscal period. Should our need for raw materials and components used in production continue to fluctuate, we could incur additional costs associated with either expediting or postponing delivery of those materials. In an effort to control costs, during the last quarter of 2005 we implemented a lean production system. Managing the change from discrete to continuous flow production requires time and management commitment. Lean initiatives and limitations in our supply chain capabilities may result in part shortages that delay shipments and cause fluctuations in revenue in a given period.

We currently purchase certain key components of our product line from a limited number of outside sources and, in the case of some components, a single source, and these components may only be available through a limited number of providers. We do not have agreements with all of our suppliers. While we currently believe that we will be able to satisfy our forecasted demand for our products, the failure to find alternative suppliers in the event of any type of supply failure at any of our current vendors at reasonably comparable prices could have a material adverse effect on our business, financial condition and results of operations. Additionally, we have entered into supply agreements with most of our suppliers of strategic reagents and component subassemblies to help ensure component availability, and flexible purchasing terms with respect to the purchase of such components. If our suppliers discontinue production of a key component, we will be required to revalidate and may be required to resubmit a previously cleared product. Our reliance on our suppliers and contract manufacturers exposes us to risks including:

- the possibility that one or more of our suppliers or our assemblers that do not have supply agreements with us could terminate their services at any time without penalty;

- natural disasters such as earthquakes, tsunamis, and floods that impact our suppliers;

- the potential obsolescence and/or inability of our suppliers to obtain required components;

- the potential delays and expenses of seeking alternate sources of supply or manufacturing services;

- the inability to qualify alternate sources without impacting performance claims of our products;

- reduced control over pricing, quality and timely delivery due to the difficulties in switching to alternate suppliers or assemblers; and

- increases in prices of raw materials and key components.

Consequently, in the event that supplies of components or work performed by any of our assemblers are delayed or interrupted for any reason, our ability to produce and supply our products could be impaired.

If the quality of our products does not meet our customers' expectations, then our reputation could suffer and ultimately our sales and operating earnings could be negatively impacted.

In the course of conducting our business, we must adequately address quality issues associated with our products and services, including defects in our engineering, design, and manufacturing processes, as well as defects in third-party components included in our products. Because our instruments and consumables are highly complex, the occurrence of defects may increase as we continue to introduce new products and services and as we rapidly scale up manufacturing to meet increased demand for our products and services. Although we have established internal procedures to minimize risks that may arise from product quality issues, there can be no assurance that we will be able to eliminate or mitigate occurrences of these issues and associated liabilities. In addition, identifying the root cause of quality issues, particularly those affecting reagents and third-party components, may be difficult, which increases the time needed to address quality issues as they arise and increases the risk that similar problems could recur. Finding solutions to quality issues can be expensive and we may incur significant costs or lost revenue in connection with, for example, shipment holds, product recalls, and warranty or other service obligations. In addition, quality issues can impair our relationships with new or existing customers and adversely affect our brand image, and our reputation as a producer of high quality products could suffer, which could adversely affect our business, financial condition, or results of operations.

Our operations in foreign countries expose us to certain risks inherent in doing business internationally, which may adversely affect our business, results of operations or financial condition.

We expect that revenue from U.S sales will continue to represent the majority of our total revenue, but our future profitability will depend in part on our ability to grow and ultimately maintain our product sales in foreign markets, particularly in Asia and Europe. In fiscal 2013, approximately 16% of our revenue was derived from sales to non-U.S. customers, with approximately 8% of revenue from sales to customers in Europe. As such, a significant slowdown in these foreign economies or lower investments in new infrastructure could have a negative impact on our sales. We also purchase a portion of the materials included in our products from overseas sources. As a result of acquisitions and organic growth, we have operations and manufacturing facilities in foreign countries that expose us to certain risks. For example, fluctuations in exchange rates may affect our revenues, expenses and results of operations as well as the value of our assets and liabilities as reflected in our financial statements. We are also subject to other types of risks, including the following:

- changes in or interpretations of foreign law that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- tariffs, customs and other barriers to importing/exporting materials and products in a cost effective and timely manner;
- hyperinflation or economic or political instability in foreign countries;
- imposition of limitations on or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries;
- conducting business in places where business practices and customs are unfamiliar and unknown;
- difficulties in staffing and managing international operations;
- the burden of complying with complex and changing foreign regulatory requirements;
- difficulties in accounts receivable collections;
- the imposition of restrictive trade policies, including export restrictions;
- worldwide political conditions;
- the imposition of inconsistent laws or regulations;

- reduced protection of intellectual property rights and trade secrets in some foreign countries;
- the imposition or increase of investment requirements and other restrictions by foreign governments;
- the interpretation of contractual provisions governed by foreign laws in the event of a contract dispute;
- uncertainties relating to foreign laws, including labor laws, and legal proceedings;
- the burden of complying with foreign and international laws and treaties;
- significant currency fluctuations;
- the burden of complying with and changes in international taxation policies;
- having to comply with a variety of U.S. laws, including the Foreign Corrupt Practices Act; and
- having to comply with U.S. export control regulations and policies that restrict our ability to communicate with non-U.S. employees and supply foreign affiliates, partners and customers.

Our international sales and purchases are subject to numerous U.S. and foreign laws and regulations, including, without limitation, tariffs, trade barriers, regulations relating to import-export control, technology transfer restrictions, the International Traffic in Arms Regulation promulgated under the Arms Export Control Act, the Foreign Corrupt Practices Act and the anti-boycott provisions of the U.S. Export Administration Act. If we fail to comply with these laws and regulations, we could be liable for administrative, civil or criminal liabilities, and in the extreme case, we could be suspended or debarred from government contracts or have our export privileges suspended, which could have a material adverse effect on our business.

International sales and purchases are also subject to a variety of other risks, including risks arising from currency fluctuations, collection issues and taxes. Our international sales are subject to variability as our selling prices become less competitive in countries with currencies that are declining in value against the U.S. Dollar and more competitive in countries with currencies that are increasing in value against the U.S. Dollar. In addition, our international purchases can become more expensive if the U.S. Dollar weakens against the foreign currencies in which we are billed.

We have not entered into any foreign currency derivative financial instruments; however, we may choose to do so in the future in an effort to manage or hedge our foreign exchange rate risk.

The capital spending policies of our customers have a significant effect on the demand for our products.

Our customers include clinical diagnostic, pharmaceutical, biotechnological, chemical and industrial companies, and the capital spending policies of these companies can have a significant effect on the demand for our products. These policies are based on a wide variety of factors, including general or local economic conditions, governmental regulation or price controls, the resources available for purchasing research equipment, the spending priorities among various types of analytical equipment and the policies regarding capital expenditures during recessionary periods. Any decrease in capital spending by life sciences companies could cause our revenues to decline. As a result, we are subject to significant volatility in revenue. Therefore, our operating results can be materially affected (negatively and positively) by the spending policies and priorities of our customers.

We had an accumulated deficit of approximately $27.8 million as of December 31, 2013.

We have incurred significant net losses since our inception. At December 31, 2013, we had an accumulated deficit of approximately $27.8 million. In order to remain profitable, we need to sustain or increase our revenues while achieving reasonable cost and expense levels. We believe that we have achieved a level of consistent profitability from our continuing operations; however, we cannot be certain that we can sustain or increase profitability on a quarterly or annual basis. If we fail to achieve operating results in line with market expectations, the market price of our common stock will likely decline. Furthermore, as we continue to utilize cash to support operations, acquisitions and research and development efforts, we may further decrease the cash available to us. As of December 31, 2013, cash, cash equivalents and short-term and long-term investments totaled $72.4 million, compared to $59.4 million at December 31, 2012. The increase in cash, cash equivalents and investments from the prior year is primarily attributable to strong operating cash flows, coupled with $8.7 million in proceeds from ESPP and stock option exercises and $9.6 million in proceeds from the sale of the Advanced Liquid Logic (ALL) equity investment, which funded the majority of our stock repurchases of $14.6 million and capital expenditures of $18.1 million.

If we become subject to product liability claims, we may be required to pay damages that exceed our insurance coverage.

Our business exposes us to potential product liability claims that are inherent in the testing, production, marketing and sale of biotechnological, human (including genetic) diagnostic and therapeutic products. Although we believe that we are reasonably insured against these risks and we generally have limited indemnity protections in our supplier agreements, there can be no assurance that we will be able to obtain insurance in amounts or scope sufficient to provide us with adequate coverage against all potential liabilities. A product liability claim in excess of our insurance coverage or claim that is outside or exceeds our indemnity protections in our supplier agreements or a recall of one of our products would have to be paid out of our cash reserves.

Our success depends on building and sustaining our technology infrastructure.

We are increasingly dependent on information technology to enable us to improve the effectiveness of our operations and to maintain financial accuracy and efficiency. If we do not allocate and effectively manage the resources necessary to build, implement and sustain the proper technology infrastructure, we could be subject to transaction errors, the inability to properly support and service our customers, processing inefficiencies, loss of customers, business disruptions or loss of or damage to intellectual property through security breach or cyber attack, each of which could materially adversely affect our business.

Our government contracts and administrative processes and systems related to such contracts are subject to audits and cost adjustments by the federal government, which could reduce our revenue, disrupt our business or otherwise adversely affect our results of operations.

Federal government agencies, including the Defense Contract Audit Agency (DCAA), routinely audit and investigate government contracts and government contractors' administrative processes and systems. These agencies review our performance on government contracts, pricing practices, cost structure and compliance with applicable laws, regulations and standards. They also review our compliance with government regulations and policies and the adequacy of our internal control systems and policies, including our purchasing, accounting, estimating, compensation and management information processes and systems. Any costs found to be improperly allocated to a specific government contract will not be reimbursed, any such costs already reimbursed must be refunded and certain penalties may be imposed. Moreover, if any of the administrative processes and systems related to such contracts is found not to comply with governmental requirements, we may be subjected to increased government scrutiny that could delay or otherwise adversely affect our ability to compete for or perform government contracts or collect our revenue in a timely manner. Therefore, an unfavorable outcome of an audit of our government contracts by the DCAA or another government agency could cause our actual results of operations to differ materially and adversely from those anticipated. If a government investigation uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination, forfeitures of profits, suspension of payments, fines and suspension or debarment from doing business with the federal government. In addition, we could suffer serious reputational harm if allegations of impropriety related to such contracts were made against us. Each of these outcomes could adversely affect our results of operations. We do not know the outcome of any existing or future audits and if any future audit adjustments significantly exceed our estimates, our profitability could be adversely affected.

We rely on the innovation and resources of larger industry participants and public programs to advance genomic research and educate physicians/clinicians on genetic diagnostics.

The linkages between genetic anomalies that our products detect and the underlying disease states are not always fully medically correlated. Additionally, the availability of correlated genetic markers is dependent on significant investment in genomic research, often funded through public programs for which there are no assurances of on-going support. Should any government limit patent rights to specific genetic materials, private investment in this area could also be significantly curtailed. In addition, the adoption of genetic diagnostics is dependent to a great extent on the education and training of physicians and clinicians. We do not have the resources to undertake such training, and are relying on larger industry participants and professional medical colleges to establish, communicate and educate physicians and clinicians on best practices related to genetic diagnostics.

We are subject to evolving legislative, judicial and ethical standards on use of technology and biotechnology.

The adoption of genetic testing is occurring within the broader context of a myriad of decisions related to genetic patenting and genotyping. Issues associated with health insurance, data access, intellectual property protection, national and international legislative initiatives and other variables may have a significant impact on the wide-spread adoption of genetic testing or on specific segments or tests within the genetic testing market.

Our success depends on our ability to attract and retain our management and staff.

We depend on the principal members of our management and scientific staff, including our chief executive officer, Patrick Balthrop, and our operations, marketing, research and development, technical support, technical service and sales staff. The loss of services of key members of management could delay or reduce our product development, marketing and sales and technical support efforts. In addition, recruiting and retaining qualified scientific and other personnel to perform research and development, technical support, technical service and marketing and sales work will be critical to our success. There is a shortage in our industry of qualified management and scientific personnel, and competition for these individuals is intense. There can be no assurance that we will be able to attract additional and retain existing personnel necessary to achieve our business objectives.

Our effective tax rate may fluctuate and we may incur obligations in tax jurisdictions in excess of amounts that have been accrued.

We are subject to income taxes in the United States and various foreign jurisdictions. Our effective tax rate may be lower or higher than experienced in the past due to numerous factors, including a change in the mix of our profitability from country to country and changes in tax laws. In addition, we take certain income tax positions on our tax returns that we recognize in our financial statements if it is more likely than not they will not withstand challenge by tax authorities. We are subject to tax audits in various jurisdictions, including the United States, and tax authorities may disagree with certain positions we have taken and assess additional taxes. There can be no assurance that we will accurately predict the outcomes of these audits, and the actual outcomes could have a material impact on our net income or financial condition. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations, which could have an adverse effect on our business and results of operations.

Changes in tax laws or tax rulings could materially impact our effective tax rate. There are several proposals to reform U.S. tax rules being considered by U.S. law makers, including proposals that may reduce or eliminate the deferral of U.S. income tax on our unrepatriated earnings, potentially requiring those earnings to be taxed at the U.S. federal income tax rate, reduce or eliminate our ability to claim foreign tax credits, and eliminate various tax deductions until foreign earnings are repatriated to the U.S. Our future reported financial results may be adversely affected by tax rule changes which restrict or eliminate our ability to claim foreign tax credits or deduct expenses attributable to foreign earnings, or otherwise affect the treatment of our unrepatriated earnings.

Our stock price has been and is likely to continue to be volatile.

The trading price of our common stock has been and is likely to continue to be highly volatile and subject to wide fluctuations in price. This volatility is in response to various factors, many of which are beyond our control, including:

- actual or anticipated variations in quarterly operating results from historical results or estimates of results prepared by securities analysts;
- new, or changes in, recommendations, guidelines or studies that could affect the use of our products;
- announcements of acquisitions or of technological innovations or new products or services by us or our competitors;
- developments in relationships with our partners, customers and suppliers;
- announcements by us of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- the success or lack of success of integrating our acquisitions;
- conditions or trends in the life science, biotechnology and pharmaceutical industries, including the regulatory environment;
- published studies and reports relating to the comparative efficacy of products and markets in which we participate;
- additions or departures of key personnel;
- developments in patents or other intellectual property rights and litigation;
- changes in financial estimates by securities analysts;

- general worldwide economic conditions and interest rates;

- instability in the United States and other financial markets and the ongoing and possible escalation of unrest in the Middle East, other armed hostilities or further acts or threats of terrorism in the United States or elsewhere;

- sales of our common stock; and

- the potential adverse impact of the secondary trading of our stock on foreign exchanges which are subject to less regulatory oversight than the NASDAQ Global Select Market, without our permission, and the activity of the market makers of our stock on such exchanges, including the risk that such market makers may engage in naked short sales and/or other deceptive trading practices which may artificially depress or otherwise affect the price of our common stock on the NASDAQ Global Select Market.

In addition, the stock market in general, and the NASDAQ Global Select Market and the market for technology companies in particular, has experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been particular volatility in the market prices of securities of life sciences companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources.

We may incur impairment charges on our goodwill and intangible assets which would reduce our earnings.

We are subject to Accounting Standards Codification (ASC) 350 "Goodwill and Other" (ASC 350) which requires that goodwill and other intangible assets that have an indefinite life be tested at least annually for impairment. Goodwill and other intangible assets with indefinite lives must also be tested for impairment between the annual tests if a triggering event occurs that would likely reduce the fair value of the asset below its carrying amount. As of December 31, 2013, goodwill and other intangible assets with indefinite lives represented approximately 30% of our total assets. In the future, if we determine that there has been impairment, our financial results for the relevant period would be reduced by the amount of the impairment, net of tax effects, if any.

Anti-takeover provisions in our certificate of incorporation, bylaws and Delaware law could make a third party acquisition of us difficult.

Our certificate of incorporation and bylaws contain provisions that could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. We are also subject to certain provisions of Delaware law that could delay, deter or prevent a change in control of us. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal research and development, manufacturing and administrative facilities are located in Austin, Texas, and consist of approximately 177,000 square feet of leased space pursuant to lease agreements which expire between April 30, 2015 and July 31, 2017. We have options to renew these lease agreements in Austin. We maintain an additional 11,900 square feet of leased office space in Oosterhout, Netherlands, approximately 28,000 square feet of leased office and manufacturing space in Toronto, Canada, approximately 35,000 square feet of leased office and manufacturing space in Madison, Wisconsin, approximately 3,900 square feet of leased office space in Shanghai, People's Republic of China, approximately 4,000 square feet of leased office space in Tokyo, Japan, and approximately 9,300 square feet of leased office and manufacturing space in Brisbane, Australia. Our facilities in Austin, Oosterhout, Shanghai and Tokyo are used by both the ARP and TSP segments. Our Toronto, Madison and Brisbane facilities are primarily used by the ARP segment.

ITEM 3. LEGAL PROCEEDINGS

On August 30, 2012 Abbott Laboratories, Inc. ("Abbott") was named as a defendant in the complaint filed by ENZO Life Sciences, Inc. ("ENZO") in U.S. District Court in Delaware for alleged infringement of its US Patent 7,064,197 as a result of Abbott's distribution of Luminex's xTAG Respiratory Viral Panel. Luminex and Abbott have entered into an agreement requiring Luminex to defend and indemnify Abbott for any alleged patent infringement resulting from its distribution of Luminex's Respiratory Viral Panel. The complaint seeks unspecified monetary damages and injunctive relief. Abbott filed an answer to the complaint on October 15, 2012. On November 30, 2012, Luminex intervened in the lawsuit. On January 2, 2013 ENZO filed additional claims against Luminex, alleging infringement of US Patent 7,064,197 resulting from Luminex's sale of its xTAG, FlexScript LDA, SelecTAG, and xMAP Salmonella Serotyping Assay products and alleging infringement of US Patent 8,097,405 resulting from Luminex's sale of Multicode products. Luminex filed an answer to ENZO's additional claims on January 28, 2013. On October 2, 2013 ENZO filed additional claims against Luminex, alleging infringement of U.S. Patent 6,992,180 resulting from Luminex's sale of Multicode products. Luminex filed an answer to ENZO's additional claims on October 21, 2013. A trial date has not been set. The parties to the lawsuit have engaged in the discovery process.

On November 1, 2013 Irori Technologies, Inc. filed a complaint against Luminex in U.S. District Court in the Southern District of California, alleging infringement of its U.S. Patent numbers 6,372,428, 6,416,714, and 6,352,854 resulting from Luminex's sale of its xMAP and xTAG based products. The complaint seeks unspecified monetary damages and injunctive relief. Luminex filed a motion to dismiss on January 9, 2014. Irori filed its response to our motion to dismiss February 7, 2014. The matter is currently before the court. A trial date has not been set.

When and if it appears probable in management's judgment that we will incur monetary damages or other costs in connection with any claims or proceedings, and such costs can be reasonably estimated, liabilities will be recorded in the financial statements and charges will be recorded against earnings. There can be no assurance that we will successfully defend these suits or that any judgment against us would not materially adversely affect our operating results.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is traded on the NASDAQ Global Select Market under the symbol “LMNX.”

The following table sets forth the range of high and low sale prices on The NASDAQ Global Select Market, as applicable, for each quarter during 2013 and 2012. On February 24, 2014, the last reported sale price of our common stock was $19.14 per share.

2013	High	Low
First Quarter	$ 19.39	$ 16.23
Second Quarter	$ 21.52	$ 15.39
Third Quarter	$ 24.10	$ 19.52
Fourth Quarter	$ 20.52	$ 17.15
2012	**High**	**Low**
First Quarter	$ 23.62	$ 19.50
Second Quarter	$ 25.79	$ 21.10
Third Quarter	$ 25.75	$ 16.80
Fourth Quarter	$ 19.71	$ 15.58

Holders

As of February 24, 2014, we had 473 holders of record of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial stockholders represented by these record holders.

Dividends

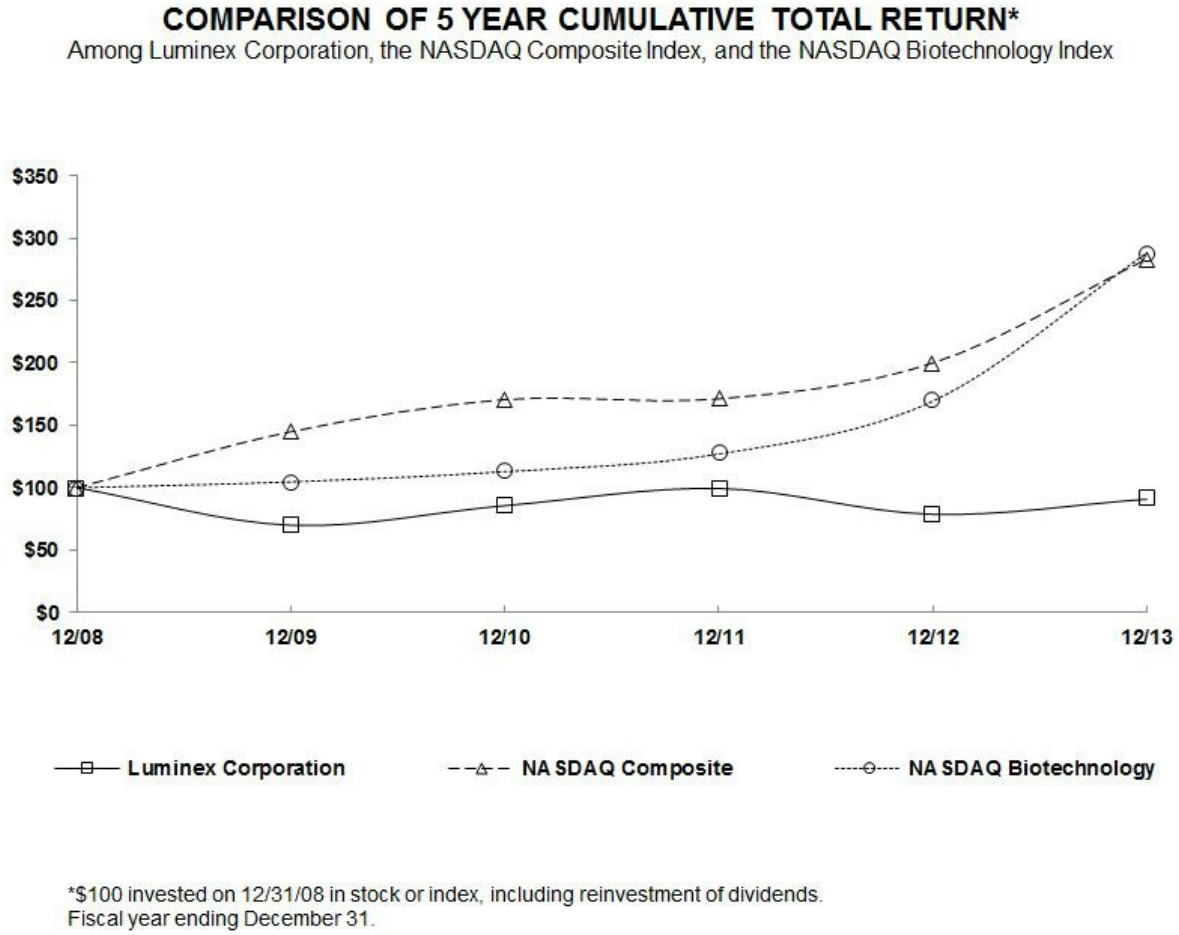
We have never declared or paid cash dividends on our common stock and, while this policy is subject to periodic review by our board of directors, we currently intend to retain any earnings for use in our business and do not anticipate paying cash dividends in the foreseeable future. Our ability to declare dividends may also from time to time be limited by the terms of any applicable credit facility. Luminex does not currently have a credit facility.

Recent Sales of Unregistered Securities

There were no sales of unregistered securities of Luminex during the twelve months ended December 31, 2013.

Performance Graph

The following graph compares the change in Luminex's cumulative total stockholder return on its common shares with the NASDAQ Composite Index and the NASDAQ Biotechnology Index.



	12/08	12/09	12/10	12/11	12/12	12/13
Luminex Corporation	100.00	69.90	85.58	99.39	78.64	90.82
NASDAQ Composite	100.00	144.88	170.58	171.30	199.99	283.39
NASDAQ Biotechnology	100.00	104.67	112.89	127.04	169.50	288.38

Issuer Purchases of Equity Securities

The stock repurchase activity for the fourth quarter of 2013 was as follows:

ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share ($)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (2)
10/1/2013 - 10/31/2013	11,869	18.54	11,504	$ —
11/1/2013 - 11/30/2013	376	18.51	—	$ —
12/1/2013 - 12/31/2013	20,323	19.40	—	$ —
Total Fourth Quarter	32,568	19.07	11,504	$ —

(1) Total shares purchased includes shares attributable to the withholding of shares by Luminex to satisfy the payment of tax obligations related to the vesting of restricted shares.

(2) On February 20, 2013, the Board of Directors authorized the repurchase of common stock up to the lesser of $22.5 million worth, or 900,000 shares, of Luminex outstanding common stock. This stock repurchase program was canceled on October 8, 2013 as a result of satisfying the 2013 objectives.

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with the Consolidated Financial Statements and Notes thereto and with Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial data included elsewhere in this Annual Report on Form 10-K. The consolidated statement of comprehensive income data for the years ended December 31, 2013, 2012 and 2011 and the consolidated balance sheet data at December 31, 2013 and 2012 are derived from the audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The consolidated results of operations data for the years ended December 31, 2010 and 2009 and the consolidated balance sheet data at December 31, 2011, 2010 and 2009 are derived from audited consolidated financial statements not included in this Annual Report on Form 10-K.

	Year Ended December 31,				
	2013	2012	2011	2010	2009
	(In thousands, except per share data)				
Consolidated Results of Operations Data:					
Total revenue	$ 213,423	$ 202,582	$ 184,339	$ 141,557	$ 120,643
Gross profit	143,626	142,574	125,490	96,377	81,294
Income from operations	4,767	22,716	23,843	11,251	7,399
Net income	7,096	12,407	14,474	5,231	17,729
Net income applicable to common stockholders	$ 7,096	$ 12,407	$ 14,474	$ 5,231	$ 17,729
Net income per common share, basic	$ 0.17	$ 0.30	$ 0.35	$ 0.13	$ 0.44
Shares used in computing net income per common share (basic)	40,799	40,927	41,262	41,030	40,562
Net income per common share, diluted	$ 0.17	$ 0.30	$ 0.34	$ 0.12	$ 0.43
Shares used in computing net income per common share (diluted)	41,986	41,884	42,537	42,438	41,633

	At December 31,				
	2013	2012	2011	2010	2009
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 67,924	$ 42,789	$ 58,282	$ 89,487	$ 90,843
Short-term investments	4,517	13,607	42,574	28,404	8,511
Long-term investments	—	3,000	6,151	6,021	20,228
Working capital	117,874	100,989	136,933	151,938	122,398
Total assets	306,046	297,175	282,647	265,810	248,013
Total long-term debt	463	1,702	2,573	3,351	3,591
Total stockholders' equity	269,620	259,667	250,855	234,865	218,738

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following information should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes included below in Item 8 and "Risk Factors" included above in Item 1A of this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We develop, manufacture and sell proprietary biological testing technologies and products with applications throughout the life sciences industry. This industry depends on a broad range of tests, called bioassays, to perform diagnostic tests and conduct life science research. Our xMAP technology, an open architecture, multiplexing technology, allows simultaneous analysis of up to 500 bioassays from a small sample volume, typically a single drop of fluid, by reading biological tests on the surface of microscopic polystyrene beads called microspheres. xMAP technology combines this miniaturized liquid array bioassay capability with small lasers, digital signal processors and proprietary software to create a system offering advantages in speed, precision, flexibility and cost. Our xMAP technology is currently being used within various segments of the life sciences industry which includes the fields of drug discovery and development, and for clinical diagnostics, genetic analysis, bio-defense, food safety and biomedical research. In addition to our xMAP technology, our other offerings include our proprietary MultiCode technology, used for real-time PCR and multiplexed PCR assays, as well as automation and robotics in the field of dry sample handling.

Our end user customers and partners, which include laboratory professionals performing research, clinical laboratories performing tests on patients as ordered by physicians and other laboratories, have a fundamental need to perform high quality testing as efficiently as possible. Luminex has adopted a business model built, in part, around strategic partnerships. We have licensed our xMAP technology to partner companies, which in turn then develop products that incorporate the xMAP technology into products that our partners sell to end users. We develop and manufacture the proprietary xMAP laboratory instrumentation and the proprietary xMAP microspheres and sell these products to our partners. Our partners then sell xMAP instrumentation and xMAP-based reagent consumable products, which run on the instrumentation, to the end user laboratory. As of December 31, 2013, Luminex had 58 strategic partners, of which 48 have released commercialized reagent-based products utilizing our technology.

Luminex has several forms of revenue that result from our business model:

- System revenue is generated from the sale of our xMAP multiplexing analyzers and peripherals and automated punching laboratory instruments.

- Consumable revenue is generated from the sale of our dyed polystyrene microspheres and sheath and drive fluid. Our larger commercial and development partners often purchase these consumables in bulk to minimize the number of incoming qualification events and to allow for longer development and production runs.

- Royalty revenue is generated when a partner sells our proprietary microspheres to an end user; a partner sells a kit incorporating our proprietary microspheres to an end user or when a partner utilizes a kit to provide a testing result to a user. End users can be facilities such as testing labs, development facilities and research facilities that buy prepared kits and have specific testing needs or testing service companies that provide assay results to pharmaceutical research companies or physicians.

- Assay revenue is generated from the sale of our kits which are a combination of chemical and biological reagents and our proprietary xMAP bead technology used to perform diagnostic and research assays on samples as well as real-time PCR and multiplexed PCR assays using our proprietary MultiCode technology.

- Service revenue is generated when a partner or other owner of a system purchases a service contract from us after the standard warranty has expired or pays us for our time and materials to service instruments. Service contract revenue is amortized over the life of the contract and the costs associated with those contracts are recognized as incurred.

- Other revenue consists of items such as training, shipping, parts sales, license revenue, grant revenue, contract research and development fees, milestone revenue and other items that individually amount to less than 5% of total revenue.

2013 Highlights

- Consolidated revenue was $213.4 million for 2013, representing a 5% increase over revenue for 2012.
- System shipments of 1,078 multiplexing analyzers, which included 495 MAGPIX systems, resulting in cumulative life-to-date multiplexing analyzer shipments of 10,737, up 11% from a year ago.
- Partners reported over $443 million of royalty bearing end user sales on xMAP technology for the year, a 12% increase over 2012, contributing to the 19% increase in royalty revenue over the prior year.
- Realized a gain of $5.4 million from the liquidation of our minority interest investment in a private company that was acquired by a third party in July 2013.
- Announced a restructuring plan focused on ARP segment's Newborn Screening Group and our Brisbane, Australia office to drive operational excellence and improve focus on the molecular diagnostics market.
- Received FDA and European Clearance for an Updated Version of Comprehensive Genotyping Assay, xTAG® CYP2D6 Kit and a New Personalized Medicine Genotyping Assay, xTAG® CYP2C19 Kit.
- Received FDA clearance for the MAGPIX instrument and the xTAG Gastrointestinal Pathogen Panel.
- Signed an agreement with Merck & Co. Inc. to develop a companion diagnostic that will help screen patients into Merck's lead investigational candidate drug study for Alzheimer's disease.
- As part of the completion of our transition to a direct assay distribution model, we finalized the termination of our molecular diagnostics distribution agreements resulting in an expense of $7.0 million recorded in selling, general and administrative expenses in the first quarter of 2013.

Reimbursement Landscape

The molecular diagnostic market is experiencing what we believe to be a temporary deceleration in the utilization of molecular assays, particularly in the human genetics segment, driven by administrative issues related to reimbursement associated with the new molecular diagnostic code system established by the Centers for Medicare and Medicaid Services ("CMS") on January 1, 2013. A number of our lab customers have experienced Medicare fee schedule reductions, delays in pricing and implementation of key molecular codes, denials of coverage for existing tests and delays in payment for tests performed by some payers after implementation of recently adopted pathology codes, all of which are resulting in lower than anticipated testing volumes for our customers and as a result decreased assay revenues for our ARP segment. Our lab customers are exerting efforts towards resolution, but the deceleration could continue to impact our sales, margins and cash flows until resolution. However, we believe these reimbursement headwinds will subside in 2014.

Consumables Sales and Royalty Revenue Trends

We have experienced significant fluctuations in consumable revenue over the past three years. Overall, the fluctuations manifested themselves through periodic changes in volume from our largest bulk purchasing partners. From the first quarter of 2010 through the fourth quarter of 2013, we had quarterly bulk purchases varying from $7.0 million to $16.1 million and representing between 75% and 88% of total consumable revenue. We expect these fluctuations to continue as the ordering pattern of our largest bulk purchasing partner remains variable; however, our other bulk purchasing customers are less variable in their ordering patterns. Additionally, even though we experience variability in consumable revenue, the key indicator of the success of our partners' commercialization efforts is the rising level of royalties and reported royalty bearing sales during the past several years.

Change in Cash Position

Our cash, cash equivalents and investments increased by approximately $13.0 million for the year ended December 31, 2013 to $72.4 million from $59.4 million at December 31, 2012. The increase in cash, cash equivalents and investments is primarily attributable to strong operating cash flows of $26.9 million, coupled with $8.7 million in proceeds from our employee stock purchase plan (ESPP) and stock option exercises and $9.6 million in proceeds from the sale of the ALL equity investment, which funded the majority of our stock repurchases of $14.6 million and capital expenditures of $18.1 million.

Segment Information

Luminex has two reportable segments: the technology and strategic partnerships (TSP) segment and the assays and related products (ARP) segment. The TSP segment, which is our original, base business, consists of system sales to partners and end customers, raw bead sales, royalties, service and support of the technology, and other miscellaneous items. The ARP segment is primarily involved in the development and sale of assays on xMAP and MultiCode technology for use on Luminex's installed base of systems.

Future Operations

We expect our areas of focus over the next twelve months to be:

- development of the next generation sample-to-answer platform for our MultiCode-RTx technology;
- development of the next generation multiplex platform;
- continued successful execution of our direct sales strategy, including the infrastructure necessary to support our sales force and decreasing reliance on our distributors.
- commercialization, regulatory clearance and market adoption of products from our ARP segment;
- adoption and use of our platforms and consumables by our customers for testing services;
- expansion and enhancement of our installed base and our market position within our identified target market segments;
- maintenance and improvement of our existing products and the timely development, completion and successful commercial launch of our pipeline products;
- monitoring and mitigating the effect of the ongoing uncertainty in global finance markets and changes in government funding on planned purchases by end users; and
- continued adoption and development of partner products incorporating Luminex technology through effective partner management.

We anticipate continued revenue concentration in our higher margin items (assays, consumables and royalties) contributing to favorable, but variable, gross margin percentages. Additionally, we believe that a sustained investment in research and development is necessary in order to meet the needs of our marketplace and provide a sustainable new product pipeline. We may experience volatility in research and development expenses as a percentage of revenue on a quarterly basis.

Critical Accounting Policies

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles (GAAP). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that are believed 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. The following is a discussion of our most critical accounting policies used in the preparation of our financial statements, and the judgments and estimates involved under each. We also have other significant accounting policies that do not involve critical accounting estimates because they do not generally require us to make estimates and judgments that are difficult or subjective. These are described in Note 1 of our Consolidated Financial Statements provided herein in Item 8. Estimates and assumptions are reviewed periodically. Actual results may differ from these estimates under different assumptions or conditions.

Revenue Recognition. Revenue is generated primarily from the sale of our products and related services, which are primarily support and maintenance services on our systems. We recognize product revenue at the time the product is shipped provided there is persuasive evidence of an agreement, no right of return exists, the fee is fixed or determinable and collectability is probable. There is no customer right of return in our sales agreements. If the criteria for revenue recognition are not met at the time of shipment, the revenue is deferred until all criteria are met.

We regularly enter into arrangements for system sales that are multiple-element arrangements, including services such as installation and training, and multiple products. These products or services are primarily delivered within a short time frame, approximately three to six months, of the agreement execution date and can also be performed by one of our third-party partners. Based on the terms and conditions of the sale, we believe that these services can be accounted for separately from the delivered system as our delivered products have value to our customers on a stand-alone basis. Items are considered to have stand-alone value when they are sold separately by any vendor or when the customer could resell the item on a stand-alone basis. Accordingly, the estimated selling price of services or products not yet performed or delivered at the time of system shipment are deferred and recognized as revenue as such services are performed. We have typically been able to determine the selling price of each deliverable in a multiple-element arrangement based on the price for such deliverable when it is sold separately. If vendor specific objective evidence (VSOE) is not determinable and when third-party evidence is not available, we use the estimated selling price of a deliverable which is determined based upon our pricing policies, expected margin of the deliverable, geographical location and information gathered from customer negotiations.

Within the diagnostic portion of our ARP segment, we provide systems and certain other hardware to customers through reagent rental agreements under which the customers commit to purchasing minimum quantities of disposable products at a stated price over a defined contract term, which is normally two to three years. Instead of rental payments, we recover the cost of providing the system and other hardware in the amount we charge for our diagnostic assays and other disposables. Revenue is recognized over the defined contract term as assays and other disposable products are shipped. The depreciation costs associated with the system and other hardware are charged to cost of sales on a straight-line basis over the estimated life of the system. The costs to maintain these instruments in the field are charged to cost of sales as incurred.

Revenue from extended service agreements is deferred and recognized ratably over the term of the agreement. We may also be entitled to milestone payments that are contingent upon our achieving a predefined objective. We follow the milestone method of recognizing revenue from milestones and milestone payments are recorded as revenue in full upon achievement of the milestone. Revenues from royalties related to agreements with strategic partners are recognized when such amounts are reported to the Company; therefore, the underlying end user sales may be related to prior periods.

Additional revenue is derived from cost-type contracts with the U.S. government. Revenue and profit under cost-plus service contracts is recognized as costs are incurred plus negotiated fees. Fixed fees on cost-plus service contracts are recognized ratably over the contract performance period as services are performed. Contract costs include labor and related employee benefits, subcontracting costs and other direct costs, as well as allocations of allowable indirect costs. For contract change orders, claims or similar items, judgment is required for estimating the amounts, assessing the potential for realization, and determining whether realization is probable. From time to time, facts develop that require revisions of revenue recognized or cost estimates. To the extent that a revised estimate affects the current or an earlier period, the cumulative effect of the revision is recognized in the period in which the facts requiring the revision become known. Reimbursements of certain costs, including certain hardware costs or out-of-pocket expenses are included in revenue with corresponding costs included in cost of revenue as costs are incurred.

Inventory. Inventories are valued at the lower of cost or market value, with cost determined according to the standard cost method. Inventories have been written down through an allowance for excess and obsolete inventories. The two major components of the allowance for excess and obsolete inventory are (i) a specific write-down for inventory items that we no longer use in the manufacture of our products or that no longer meet our specifications and (ii) a write-down against slow moving items for potential obsolescence. Inventory is reviewed on a regular basis and adjusted based on management's review of inventories on hand compared to estimated future usage and sales. While management believes that adequate write-downs for inventory obsolescence have been made in the consolidated financial statements, scientific and technological advances will continue and we could experience additional inventory write-downs in the future. However, we do not believe this estimate is subject to significant variability.

Warranties. We provide for the estimated cost of initial product warranties at the time revenue is recognized. While we engage in product quality programs and processes, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. While management believes that adequate reserve has been made in the consolidated financial statements for product warranties, should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required. However, we do not believe this estimate is subject to significant variability.

Purchase Price Allocation, Intangibles and Goodwill. The purchase price allocation for acquisitions requires extensive use of accounting estimates and judgments to allocate the purchase price to the identifiable tangible and intangible assets acquired, including in-process research and development, and liabilities assumed based on their respective fair values. Intangible assets with definite lives are amortized over the assets' estimated useful lives using the straight-line method. We periodically review the estimated useful lives of our identifiable intangible assets, taking into consideration any events or circumstances that might result in a diminished fair value or revised useful life.

Goodwill represents the excess of the cost over the fair value of the assets of the acquired business. We evaluate the carrying value of goodwill on a reporting unit level annually or more frequently if there is evidence that certain events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. All of our goodwill relates to one reporting unit, our ARP segment, for goodwill impairment testing. We have historically estimated the fair value of our ARP segment reporting unit using a discounted cash flow (DCF) analysis ("step one" analysis) of our projected future results or using a more qualitative analysis ("step zero" analysis) under the accounting guidance which allows an entity to first assess qualitative factors to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. In fiscal 2011 and 2012, we used the "step zero" analysis in our annual impairment analysis for goodwill. In performing the impairment test in the fourth quarter of 2013, we used the "step one" analysis. This analysis requires a comparison of the carrying value of the reporting unit to the estimated fair value of the reporting unit. Determining the fair value of goodwill is subjective in nature and often involves the use of estimates and assumptions. Our annual test, performed on the first day of the fourth quarter, did not result in an impairment charge for 2013 as the estimated fair value of the ARP segment reporting unit continues to exceed the carrying value by a significant enough amount that any reasonably likely change in the assumptions used in the analysis would not cause the carrying value to exceed the estimated fair value for the reporting unit as determined under our "step one" analysis.

We utilize an income approach based on a DCF analysis to determine fair value estimates, and then use market comparisons as a reasonableness check to ensure that neither the income approach nor the market comparisons yielded significantly different results. The income approach calculates the fair value by estimating the after-tax cash flows attributable to a reporting unit and then discounting the after-tax cash flows to a present value using a risk-adjusted discount rate. Our estimates are based on revenue projections by product line, and include judgment based on historical growth and scheduled product approvals by the various governmental authorities. We believe our assumptions are consistent with the plans and estimates used to manage the underlying businesses. The most significant assumptions used in the DCF methodology are the discount rate, based upon the estimated weighted average cost of capital (WACC), and the terminal growth rate, based upon strategic studies we commissioned and our own internal analysis. We used a WACC rate of 15% and a terminal growth rate of 2.9% in our 2013 analysis. To determine our WACC rate, we performed a peer company analysis and considered the weighted average return on debt and equity, the updated risk-free interest rate, beta, equity risk premium, and entity specific size risk premium.

Our analysis yielded an estimated fair value in excess of the carrying value by over 25% for 2013. Concurrent with the above analysis, we performed a sensitivity analysis based upon reasonably likely changes to determine if our DCF analysis would result in impairment if the following changes were made to our assumptions: i) assumed the fair value of the reporting unit was lower by 10% or ii) future revenue was 75% of our projections in the DCF model. Neither of these sensitivity analyses resulted in an estimated fair value less than the carrying amount of the reporting unit.

Accounting for Income Taxes. We calculate our provision for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized by identifying the temporary differences arising from the different treatment of items for tax and accounting purposes. In determining the future tax consequences of events that have been recognized in our financial statements or tax returns, judgment is required. Differences between the anticipated and actual outcomes of these future tax consequences could have a material impact on our consolidated results of operations or financial position. The recognition of deferred tax assets is reduced by a valuation allowance if it is more likely than not that the tax benefits will not be realized. We regularly review our deferred tax assets for recoverability and establish a valuation allowance based on historical income, projected future income, the expected timing of the reversals of existing temporary differences and the implementation of tax-planning strategies. Undistributed earnings of our foreign subsidiaries are considered permanently reinvested and, accordingly, no provision for U.S. federal or state income taxes has been provided thereon.

The GAAP guidance requires recognition of the impact of a tax position in our financial statements only if that position is more likely than not to be sustained upon examination by taxing authorities, based on the technical merits of the position. Any interest and penalties related to uncertain tax positions will be reflected in income tax expense. Determining the consolidated provision for income taxes involves judgments, estimates and the application of complex tax regulations. We are required to provide for income taxes in each of the jurisdictions where we operate, including estimated liabilities for uncertain tax positions. Although we believe that we have provided adequate liabilities for uncertain tax positions, the actual liability resulting from examinations by taxing authorities could differ from the recorded income tax liabilities and could result in additional income tax expense having a material impact on our consolidated results of operations. Changes of estimates in our income tax liabilities are reflected in our income tax provision in the period in which the factors resulting in the change to our estimate become known to us. We benefit from the tax credit incentives under the U.S. research and experimentation tax credit extended to taxpayers engaged in qualified research and experimental activities while carrying on a trade or business. The tax credit expired on December 31, 2013, and if not renewed under similar terms as in prior years, the result could have a material impact on our financial results.

We recognize excess tax benefits associated with share-based compensation to stockholders' equity only when realized. When assessing whether excess tax benefits relating to share-based compensation have been realized, we follow the with-and-without approach, excluding any indirect effects of the excess tax deductions. Under this approach, excess tax benefits related to share-based compensation are not deemed to be realized until after the utilization of all other tax benefits available to us.

In March 2010, significant reforms to the healthcare system were adopted as law in the U.S. The law includes provisions that, among other things, imposes new and/or increased taxes. Specifically, the law requires the medical device industry to subsidize healthcare reform in the form of a 2.3% excise tax on U.S. sales of certain medical devices effective January 1, 2013. Our products which have received FDA approval fall under the government classification and will be subject to the excise tax.

Stock compensation. All stock-based compensation cost, including grants of stock options, restricted stock units and shares issued under the Company's employee stock purchase plan, is measured at the grant date based on the fair value of the award and is recognized as an expense on a straight-line basis over the requisite service period, which is generally the vesting period. The fair value of our stock options is estimated using the Black-Scholes option pricing model. The Black-Scholes valuation calculation requires us to estimate key assumptions such as expected volatility, expected term and risk-free rate of return. Calculation of expected volatility is based on historical volatility. The expected term is calculated using the contractual term of the options as well as an analysis of our historical exercises of stock options. The estimate of risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant. We have never paid cash dividends and do not currently intend to pay cash dividends, thus we have assumed a 0% dividend yield.

The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. As part of the requirements of ASC 718, the Company is required to estimate potential forfeitures of stock grants and adjust compensation cost recorded accordingly. The estimate of forfeitures is based on historical forfeiture performance and will be adjusted over the requisite service period to the extent that actual forfeitures differ, or are expected to differ, from such estimates. Changes in estimated forfeitures will be recognized through a cumulative catch-up adjustment in the period of evaluation and will also impact the amount of stock compensation expense to be recognized in future periods. Ultimately, the actual expense recognized over the vesting period will only be for those awards that vest, except for the limited number of market based awards under long term incentive plans. If we use different assumptions for estimating stock-based compensation expense in future periods or if actual forfeitures differ materially from our estimated forfeitures, the change in our stock-based compensation expense could materially affect our operating income, net income and net income per share.

Consolidated Results of Operations

The following table sets forth the percentage of total revenue of certain items in the Consolidated Results of Operations. The financial information and the discussion below should be read in conjunction with the Consolidated Financial Statements and Notes thereto.

	Year Ended December 31,		
	2013	2012	2011
Revenue	100 %	100 %	100 %
Cost of revenue	33 %	30 %	32 %
Gross profit	67 %	70 %	68 %
Operating expenses:			
Research and development expense	21 %	21 %	19 %
Selling, general and administrative expense	41 %	36 %	34 %
Amortization of acquired intangible assets	2 %	2 %	1 %
Restructuring	1 %	— %	— %
Total operating expenses	65 %	59 %	55 %
Income from operations	2 %	11 %	13 %
Interest expense from long-term debt	— %	— %	— %
Other income, net	3 %	— %	— %
Income taxes	(2)%	(5)%	(5)%
Net income	3 %	6 %	8 %

Year Ended December 31, 2013 Compared to Year Ended December 31, 2012

	Year Ended December 31,			
	2013	2012	Variance	Variance (%)
	(dollars in thousands)			
Revenue	$ 213,423	$ 202,582	$ 10,841	5 %
Gross profit	$ 143,626	$ 142,574	$ 1,052	1 %
Gross margin percentage	67%	70%	(3)%	N/A
Operating expenses	$ 138,859	$ 119,858	$ 19,001	16 %
Operating income	$ 4,767	$ 22,716	$ (17,949)	(79)%
Net income	$ 7,096	$ 12,407	$ (5,311)	(43)%

Revenue. Total revenue increased to $213.4 million for the year ended December 31, 2013 from $202.6 million in 2012. The increase was primarily attributable to an increase of $5.8 million in royalty revenue and $3.9 million in other revenue. The increase in royalty revenue was driven by our partners continued menu expansion and increased utilization of our partners' assays on our technology. The increase in other revenue was driven by our our contracts with the U.S. government and our development agreement with Merck. In addition, system revenue increased from $31.1 million in 2012 to $31.8 million in 2013. We sold 1,078 multiplexing analyzers in 2013, which included 495 of our MAGPIX systems as compared to 981 multiplexing analyzers sold in 2012, which included 420 MAGPIX systems, bringing total multiplexing analyzer sales since inception to 10,737 as of December 31, 2013. Also included in system revenue for 2013 were sales of 45 automated punching systems compared to 68 in 2012.

A breakdown of revenue for the years ended December 31, 2013 and 2012 is as follows:

	Year Ended December 31,			
	2013	2012	Variance	Variance (%)
	(dollars in thousands)			
System sales	$ 31,786	$ 31,083	$ 703	2 %
Consumable sales	48,540	48,012	528	1 %
Royalty revenue	36,950	31,160	5,790	19 %
Assay revenue	74,101	75,020	(919)	(1)%
Service revenue	8,939	8,079	860	11 %
Other revenue	13,107	9,228	3,879	42 %
	$ 213,423	$ 202,582	$ 10,841	5 %

We continue to have revenue concentration in a limited number of customers. In 2013, the top five customers, by revenue, accounted for 54% of total revenue down from 63% of total revenue in 2012. In particular, three customers accounted for 43% of 2013 total revenue (18%, 16% and 9%, respectively) down from 51% of 2012 total revenue (19%, 24% and 8% respectively). No other customer accounted for more than 10% of total revenue in 2013. As expected, and resulting from our focus on selling directly to the end user, customer concentration in the ARP segment has declined. See the segment discussions that follow on pages 48-54 for additional revenue discussion.

Gross Profit. Gross profit increased to $143.6 million for the year ended December 31, 2013, as compared to $142.6 million for the year ended December 31, 2012. Gross margin (gross profit as a percentage of total revenue) was 67% for the year ended December 31, 2013, down from 70% for the year ended December 31, 2012. Gross margin was lower in 2013 primarily as a result of the inclusion of $2.6 million of impairment of inventory related to our restructuring plan focused on our Newborn Screening Group and our Brisbane, Australia office. Additionally, concentration of sales in our higher margin items (assays, consumables and royalties) was modestly lower than in the prior year, representing 75% of revenue for the year ended December 31, 2013 compared to 76% for the year ended December 31, 2012. We anticipate continued fluctuation in gross margin and related gross profit primarily as a result of variability in consumable and system purchases and seasonality effects inherent in our assay revenue.

Research and Development Expense. Research and development expense increased to $45.0 million for the year ended December 31, 2013 from $43.0 million for the year ended December 31, 2012, but remained flat as a percentage of revenue, at 21% in both 2013 and 2012. The increase in expense was primarily associated with (i) the development of a new version of our multiplex PCR technology and (ii) our sample-to-answer instrumentation and assays. Our current expectation is for research and development expenses to decrease modestly as a percentage of total revenue in 2014.

Selling, General and Administrative Expense. Selling, general and administrative expenses, excluding the amortization of acquired intangible assets, increased to $87.3 million for the year ended December 31, 2013 from $72.6 million for 2012. The increase was primarily attributable to an expense of $7.0 million related to the termination of our molecular diagnostics distribution agreements effective as of the first quarter of 2013, an increase of our allowance for bad debts of $3.9 million related to all of the receivables from Natural Molecular Testing Corporation (NMTC) that filed for Chapter 11 bankruptcy on October 21, 2013 and additional infrastructure and personnel and related expenses focused on our direct sales channels. Selling, general and administrative headcount at December 31, 2013 was 281 as compared to 259 at December 31, 2012. As a percentage of revenue, selling, general and administrative expense, excluding the amortization of acquired intangible assets, increased to 41% in 2013 compared to 36% in 2012.

Restructuring costs. We recorded total pre-tax restructuring charges of $5.0 million in 2013. The portion of these charges that pertained to the non-cash impairment of inventory and certain of the employee separation costs, $2.6 million, was recorded to cost of revenue. The portion of these charges that pertained to the non-cash impairment of intangible assets, fixed assets and certain employee separation costs, $2.4 million, was recorded to restructuring costs in our ARP segment operating expenses. As a result of the organizational change, the Company eliminated approximately 5% of its workforce.

Other Income, net. Other income, net increased to $6.7 million for the year ended December 31, 2013 from $0.3 million for the year ended December 31, 2012 due to the liquidation of our minority interest in a private company, which resulted in a gain of $5.4 million and a reduction in the contingent consideration liability established in connection with the 2012 acquisition of GenturaDx from $1.4 million to $0 during 2013.

Income taxes. Income tax expense decreased to $4.3 million for the year ended December 31, 2013 from $10.4 million for the year ended December 31, 2012 primarily due to decreased profitability in the U.S. during 2013. Our effective tax rate for the year ended December 31, 2013 was 38% compared to 46% for the year ended December 31, 2012. The decrease in our effective tax rate in 2013 is primarily a function of the decrease in the proportion of taxable income attributable to the U.S., an extension of the the U.S. federal research and experimentation tax credit in 2013, and an increase in the taxable losses in our foreign jurisdictions for which no income tax benefit is recognized. Our foreign earnings are generally taxed at lower rates than in the United States. We continue to assess our business model and its impact in various tax jurisdictions.

Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

	Year Ended December 31,			
	2012	2011	Variance	Variance (%)
	(dollars in thousands)			
Revenue	$ 202,582	$ 184,339	$ 18,243	10 %
Gross profit	$ 142,574	$ 125,490	$ 17,084	14 %
Gross margin percentage	70%	68%	2%	N/A
Operating expenses	$ 119,858	$ 101,647	$ 18,211	18 %
Operating income	$ 22,716	$ 23,843	$ (1,127)	(5)%
Net income	$ 12,407	$ 14,474	$ (2,067)	(14)%

Revenue. Total revenue increased to $202.6 million for the year ended December 31, 2012 from $184.3 million in 2011. The increase was primarily attributable to an increase in assay revenue, partially offset by a decrease in consumable and system sales. The increase in assay revenue of $26.4 million was driven primarily by the inclusion of and growth in sales of our infectious disease assay products. Consumable sales decreased by $7.4 million resulting primarily from a decrease of $8.7 million in bulk purchases from one of our partners. System revenue decreased from $35.9 million in 2011 to $31.1 million in 2012. We sold 981 multiplexing analyzers in 2012, which included 420 of our MAGPIX systems as compared to 978 multiplexing analyzers sold in 2011, which included 275 MAGPIX systems, bringing total multiplexing analyzer sales since inception to 9,659 as of December 31, 2012. Also included in system revenue for 2012 were sales of 68 automated punching systems compared to 144 in 2011, a decrease that was primarily the result of the unpredictable nature of activities in the world surrounding major forensic events; for example, the Japanese tsunami in 2011. Notwithstanding the slight increase in the number of multiplexing analyzer placements relative to 2011, system revenue declined primarily as a result of two factors: (i) a shift towards our lower priced MAGPIX systems and (ii) a decrease in the number of automated punching systems placed.

A breakdown of revenue for the years ended December 31, 2012 and 2011 is as follows:

	Year Ended December 31,			
	2012	2011	Variance	Variance (%)
	(dollars in thousands)			
System sales	$ 31,083	$ 35,901	$ (4,818)	(13)%
Consumable sales	48,012	55,457	(7,445)	(13)%
Royalty revenue	31,160	29,205	1,955	7 %
Assay revenue	75,020	48,670	26,350	54 %
Service revenue	8,079	7,444	635	9 %
Other revenue	9,228	7,662	1,566	20 %
	$ 202,582	$ 184,339	$ 18,243	10 %

We had revenue concentration in a limited number of customers, as the top five customers, by revenue, accounted for 63% of total revenue in 2012 up from 61% of total revenue in 2011. In particular, three customers accounted for 51% of 2012 total revenue (24%, 19% and 8%, respectively) up from 50% of 2011 total revenue (30%, 10% and 10%, respectively). The increase was primarily attributable to the increase in sales of our assay products. No other customer accounted for more than 10% of total revenue in 2012. See the segment discussions that follow on pages 48-54 for additional revenue discussion.

Gross Profit. Gross profit increased to $142.6 million for the year ended December 31, 2012, as compared to $125.5 million for the year ended December 31, 2011. Gross margin (gross profit as a percentage of total revenue) was 70% for the year ended December 31, 2012, up from 68% for the year ended December 31, 2011. Our gross margin is highly dependent upon the mix of revenue components, and our 2012 gross margin was impacted by the high concentration of sales in our higher margin items (assays, consumables and royalties), which represented 76% of revenue for the year ended December 31, 2012 compared to 72% for the year ended December 31, 2011. Additionally, gross margin was lower in 2011 as a result of the inclusion of a $3.3 million incremental expense from recording the LMA inventory acquired at fair value on the date of acquisition in 2011.

Research and Development Expense. Research and development expense increased to $43.0 million for the year ended December 31, 2012 from $35.4 million for the year ended December 31, 2011. As a percentage of revenue, research and development expense increased to 21% in 2012 compared to 19% in 2011. The increase was primarily attributable to our acquisitions of LMA in June 2011 and GenturaDx in July 2012, including $0.9 million of acquisition related costs, and increases in materials, clinical trial costs and additional personnel costs associated with the addition of employees and contract employees resulting from increased activity in our ARP segment related to the expansion of our product portfolio.

Selling, General and Administrative Expense. Selling, general and administrative expenses, excluding the amortization of acquired intangible assets, increased to $72.6 million for the year ended December 31, 2012 from $62.9 million for 2011. The increase was primarily attributable to $3.4 million of acquisition related costs resulting from the purchase of GenturaDx in July 2012, and additional personnel costs and rent, utility and depreciation expenses associated with the addition of employees, growth in our marketing efforts to support our global initiatives and expansion of our facilities and technology infrastructure. As anticipated when we completed the acquisition of GenturaDx, in the fourth quarter of 2012, we ceased using the Hayward, California facility, whose operating lease commitment was acquired under the GenturaDx acquisition in July 2012, and therefore accrued a liability of approximately $850,000 based upon the estimated fair value of the costs that will continue to be incurred under the lease, including an estimate of sublease rental income. As a percentage of revenue, selling, general and administrative expense, excluding the amortization of acquired intangible assets, increased to 36% in 2012 compared to 34% in 2011.

Other Income, net. Other income, net decreased to $0.3 million for the year ended December 31, 2012 from $0.4 million for the year ended December 31, 2011 due to the decrease in our invested balance and the decrease in the average rate earned on our current invested balances from 0.3% for the year ended December 31, 2011 to 0.2% for the year ended December 31, 2012. This decrease is the result of an overall decrease in market rates compared to the prior year period.

Income taxes. Income tax expense increased to $10.4 million for the year ended December 31, 2012 from $9.5 million for the year ended December 31, 2011 primarily due to increased profitability in the U.S. during 2012. Our effective tax rate for the year ended December 31, 2012 was 46% compared to 40% for the year ended December 31, 2011. The increase in our effective tax rate in 2012 is primarily a function of the proportion of positive taxable income attributable to the U.S., an increase in the proportion of taxable income attributable to tax loss jurisdictions for which no income tax benefit is recognized and recording a valuation allowance against the deferred tax assets in Australia. Our foreign earnings are generally taxed at lower rates than in the United States.

Segment Results of Operations

Technology and Strategic Partnerships Segment

Selected financial data for the year ended December 31, 2013 and 2012 of our TSP segment is as follows:

	Year Ended December 31,			
	2013	2012	Variance	Variance (%)
	(dollars in thousands)			
Revenue	$ 132,023	$ 121,032	$ 10,991	9 %
Gross profit	$ 86,461	$ 83,288	$ 3,173	4 %
Gross margin percentage	65%	69%	(4)%	N/A
Operating expenses	$ 52,700	$ 55,459	$ (2,759)	(5)%
Operating income	$ 33,761	$ 27,829	$ 5,932	21 %

Revenue. Total TSP segment revenue increased 9% to $132.0 million for the year ended December 31, 2013 from $121.0 million in 2012. The increase in TSP segment revenue was primarily attributable to an increase in royalty revenue of $6.0 million, increased system revenue of $2.2 million and an increase of $1.3 million in other revenue.

A breakdown of revenue in the TSP segment for the years ended December 31, 2013 and 2012 is as follows:

	Year Ended December 31,			
	2013	2012	Variance	Variance (%)
	(dollars in thousands)			
System sales	$ 30,127	$ 27,890	$ 2,237	8%
Consumable sales	48,344	47,655	689	1%
Royalty revenue	36,803	30,852	5,951	19%
Service revenue	8,343	7,523	820	11%
Other revenue	8,406	7,112	1,294	18%
	$ 132,023	$ 121,032	$ 10,991	9%

The top five customers, by revenue, accounted for 63% of total TSP segment revenue in 2013 compared to 64% in 2012. In particular, three customers accounted for 52% of total TSP segment revenue in the year ended December 31, 2013 (27%, 14% and 11%, respectively). For comparative purposes, these same three customers accounted for 55% of total TSP segment revenue (28%, 14% and 13%, respectively) in the year ended December 31, 2012. No other customer accounted for more than 10% of total TSP segment revenue during 2013.

Revenue from the sale of systems and peripheral components increased 8% to $30.1 million for the year ended December 31, 2013 from $27.9 million for the year ended December 31, 2012, due to the increase in the total multiplexing analyzer placements as the TSP segment sold 1,072 of the 1,078 total multiplexing analyzers sold in 2013 as compared to 960 in 2012. For the year ended December 31, 2013, five of our partners accounted for 894, or 83%, of total TSP segment multiplexing analyzers sold. Five of our partners accounted for 801, or 83%, of total TSP segment multiplexing analyzers sold for the year ended December 31, 2012.

Consumable sales, comprised of microspheres and sheath fluid, increased 1% to $48.3 million during 2013 from $47.7 million in 2012. During the year ended December 31, 2013, we had 74 bulk purchases of consumables totaling approximately $38.8 million (80% of total TSP segment consumable revenue), ranging from $0.1 million to $4.3 million, as compared with 70 bulk purchases totaling approximately $38.1 million (80% of total TSP segment consumable revenue), in the year ended December 31, 2012. The increase in bulk purchases is the primary driver to the increase in consumable revenue from the prior year. Partners who reported royalty bearing sales accounted for $38.4 million, or 79%, of TSP segment consumable sales for the year ended December 31, 2013 compared to $35.0 million, or 73%, of the total consumable sales for the year ended December 31, 2012.

Royalty revenue, which results when our partners sell products or services incorporating our technology, increased 19% to $36.8 million for the year ended December 31, 2013 from $30.9 million for the year ended December 31, 2012. We believe this is primarily the result of menu expansion and increased utilization of our partners' assays on our technology. Our partners' end user sales may reflect volatility from quarter to quarter and therefore, that same volatility is reflected in our reported royalty revenues on a quarterly basis. Additionally, we expect modest fluctuations in the number of commercial partners submitting royalties quarter to quarter based upon the varying contractual terms, consolidations among partners, differing reporting and payment requirements, and the addition of new partners. For the year ended December 31, 2013, we had 51 commercial partners submit royalties as compared with 41 for the year ended December 31, 2012. Total royalty bearing sales reported to us by our partners were $443.5 million for the year ended December 31, 2013 as compared to $397.8 million for the year ended December 31, 2012.

Service revenue, comprised of extended warranty contracts earned ratably over the term of a contract, increased 11% to $8.3 million during 2013 from $7.5 million in 2012. This increase is attributable to increased penetration of the expanded installed base. At December 31, 2013, we had 1,516 Luminex systems covered under extended service agreements and $3.8 million in deferred revenue related to those contracts. At December 31, 2012, we had 1,379 Luminex systems covered under extended service agreements and $3.3 million in deferred revenue related to those contracts.

Other revenue, which includes training revenue, shipping revenue, miscellaneous part sales, amortized license fees and grant revenue, increased 18% to $8.4 million for the year ended December 31, 2013 compared to $7.1 million for the year ended December 31, 2012. This increase is primarily the result of payments related to minimum purchase obligations.

Gross Profit. The gross margin (gross profit as a percentage of total revenue) for the TSP segment decreased to 65% for the year ended December 31, 2013 from 69% for the year ended December 31, 2012. The decrease in gross margin was primarily the result of mix in systems sales and modest increases in the fixed cost components of our consumables and our manufacturing and service activities. Gross profit for the TSP segment increased to $86.5 million for the year ended December 31, 2013, as compared to $83.3 million for the year ended December 31, 2012.

Research and development expense. Research and development expense decreased to $12.2 million, or 9% of TSP segment revenue, for the year ended December 31, 2013 from $15.1 million, or 12% of TSP segment revenue, for the year ended December 31, 2012. The focus of our TSP segment research and development activities on continued refinement of our systems, software and reagents to meet the evolving needs of the marketplace including the addition of more automated solutions for assay performance, remains consistent with the prior year period. The decrease in TSP segment research and development expense is primarily the result of some resources previously focused on TSP segment pipeline activities being prioritized towards development activities within our ARP segment.

Reclassifications. The Company reclassified certain 2012 amounts in the accompanying consolidated financial statements to conform to the 2013 presentation. These reclasses include $12.7 million of TSP segment selling, general and administrative expenses and the related headcount reclassed to ARP segment selling, general and administrative expenses for the year ended December 31, 2012.

Selling, general and administrative expense. Selling, general and administrative expense increased to $40.5 million for the year ended December 31, 2013 from $40.4 million in 2012. Notwithstanding the absolute dollar increase, as a percentage of TSP segment revenue, selling, general and administrative expense declined to 31% in 2013 from 33% in 2012. The modest increase in expense was primarily related to the addition of employees and the associated additional personnel costs, increased marketing services and rent, utility and depreciation expenses associated with expansion of our facilities, offset slightly by a decrease in incentive compensation based on current year financial performance.

Selected financial data for the year ended December 31, 2012 and 2011 of our TSP segment is as follows:

	Year Ended December 31,			
	2012	2011	Variance	Variance (%)
	(dollars in thousands)			
Revenue	$ 121,032	$ 127,779	$ (6,747)	(5)%
Gross profit	$ 83,288	$ 90,987	$ (7,699)	(8)%
Gross margin percentage	69%	71%	(2)%	N/A
Operating expenses	$ 55,459	$ 48,522	$ 6,937	14 %
Operating income	$ 27,829	$ 42,465	$ (14,636)	(34)%

Revenue. Total revenue decreased 5% to $121.0 million for the year ended December 31, 2012 from $127.8 million in 2011. The decrease in revenue was primarily attributable to a decrease of $7.5 million in consumable revenue attributable to volume decreases in bulk purchases from one of our partners and a decrease in system sales of $2.2 million due to the differing mix of systems sold and a slight decrease in the total multiplexing analyzer placements, offset by an increase in royalty revenue of $1.9 million.

A breakdown of revenue in the TSP segment for the years ended December 31, 2012 and 2011 is as follows:

	Year Ended December 31,			
	2012	2011	Variance	Variance (%)
	(dollars in thousands)			
System sales	$ 27,890	$ 30,071	$ (2,181)	(7)%
Consumable sales	47,655	55,159	(7,504)	(14)%
Royalty revenue	30,852	28,926	1,926	7 %
Service revenue	7,523	6,880	643	9 %
Other revenue	7,112	6,743	369	5 %
	$ 121,032	$ 127,779	$ (6,747)	(5)%

The top five customers, by revenue, accounted for 64% of total TSP segment revenue in 2012 compared to 68% in 2011. In particular, three customers accounted for 55% of total TSP segment revenue in the year ended December 31, 2012 (28%, 14% and 13%, respectively). For comparative purposes, these same three customers accounted for 58% of total TSP segment revenue (33%, 14% and 11%, respectively) in the year ended December 31, 2011. The decrease in percentage of total revenue represented by our three largest customers was primarily the result of the lower dollar amount of bulk purchases by one of our largest customers. No other customer accounted for more than 10% of total TSP segment revenue during 2012.

Revenue from the sale of systems and peripheral components decreased 7% to $27.9 million for the year ended December 31, 2012 from $30.1 million for the year ended December 31, 2011, due to the differing mix of systems sold and a slight decrease in the total multiplexing analyzer placements. The TSP segment sold 960 of the 981 total multiplexing analyzers sold in 2012 as compared to 967 in 2011. For the year ended December 31, 2012, five of our partners accounted for 801, or 83%, of total TSP segment multiplexing analyzers sold. Five of our partners accounted for 799, or 83%, of total TSP segment multiplexing analyzers sold for the year ended December 31, 2011.

Consumable sales, comprised of microspheres and sheath fluid, decreased 14% to $47.7 million during 2012 from $55.2 million in 2011. During the year ended December 31, 2012, we had 70 bulk purchases of consumables totaling approximately $38.1 million (80% of total TSP segment consumable revenue), ranging from $0.1 million to $5.7 million, as compared with 68 bulk purchases totaling approximately $47.4 million (86% of total TSP segment consumable revenue), in the year ended December 31, 2011. The decrease in consumable revenue was primarily attributable to a volume decrease of $8.7 million in bulk purchases from one of our partners as a result of a change in the timing of their consumable needs due to a modification to their inventory management practices, partially offset by an approximate 5% growth in total consumable sales from all other consumable purchasing customers. Partners who reported royalty bearing sales accounted for $35.0 million, or 73%, of total consumable sales for the year ended December 31, 2012.

Royalty revenue, which results when our partners sell products or services incorporating our technology, increased 7% to $30.9 million for the year ended December 31, 2012 from $28.9 million for the year ended December 31, 2011. We believe this was primarily the result of menu expansion and increased utilization of our partners' assays on our technology. For the year ended December 31, 2012, we had 41 commercial partners submit royalties as compared with 43 for the year ended December 31, 2011. Additionally, the 41 partners from whom we recognized $30.9 million in royalties in 2012 represented approximately $28.7 million of the total royalties in 2011, an increase of approximately 7% over their prior year payments. Total royalty bearing sales reported to us by our partners were $397.8 million for the year ended December 31, 2012 as compared to $384.0 million for the year ended December 31, 2011.

Service revenue, comprised of extended warranty contracts earned ratably over the term of a contract, increased 9% to $7.5 million during 2012 from $6.9 million in 2011. This increase was attributable to increased penetration of the expanded installed base. At December 31, 2012, we had 1,379 Luminex systems covered under extended service agreements and $3.3 million in deferred revenue related to those contracts. At December 31, 2011, we had 1,299 Luminex systems covered under extended service agreements and $3.0 million in deferred revenue related to those contracts.

Other revenue, comprised of training revenue, shipping revenue, miscellaneous part sales, amortized license fees and grant revenue, increased 5% to $7.1 million for the year ended December 31, 2012 compared to $6.7 million for the year ended December 31, 2011. This increase was primarily the result of increased grant revenue, offset by decreased parts sales.

Gross Profit. The gross margin (gross profit as a percentage of total revenue) for the TSP segment decreased to 69% for the year ended December 31, 2012 from 71% for the year ended December 31, 2011. The decrease was the result of a slightly lower concentration of consumable and royalty sales (our highest margin items) and the addition of resources, technology and infrastructure to improve our worldwide logistics. Consumables and royalties comprised $78.5 million, or 65%, of TSP segment revenue for the year ended December 31, 2012 and $84.1 million, or 66%, for the year ended December 31, 2011. Gross profit for the TSP segment decreased to $83.3 million for the year ended December 31, 2012, as compared to $91.0 million for the year ended December 31, 2011.

Research and development expense. Research and development expense increased to $15.1 million for the year ended December 31, 2012 from $12.8 million for the year ended December 31, 2011. The increase in TSP segment research and development expense was primarily attributable to increases in materials and additional personnel costs associated with increased activity related to product development. The focus of our TSP segment research and development activities, on continued refinement of our systems and software to meet the evolving needs of the marketplace including the addition of more automated solutions for assay performance, was consistent with the prior year.

Reclassifications. The Company reclassified certain 2012 and 2011 amounts in the accompanying consolidated financial statements to conform to the 2013 presentation. These reclasses include $12.7 million and $12.4 million of TSP segment selling, general and administrative expenses and the related headcount reclassed to ARP segment selling, general and administrative expenses for the years ended December 31, 2012 and 2011, respectively.

Selling, general and administrative expense. Selling, general and administrative expense increased to $40.4 million for the year ended December 31, 2012 from $35.7 million for 2011. The increase was primarily related to the addition of employees and increased technology infrastructure costs to help ensure that our technology enables us to maintain financial accuracy and operational effectiveness and additional personnel costs and rent, utility and depreciation expenses associated with expansion of our facilities. TSP segment employees and contract employees increased to 161 at December 31, 2012 from 125 at December 31, 2011.

Assays and Related Products Segment

Selected financial data for the year ended December 31, 2013 and 2012 of our ARP segment is as follows:

	Year Ended December 31,			
	2013	2012	Variance	Variance (%)
	(dollars in thousands)			
Revenue	$ 81,400	$ 81,550	$ (150)	— %
Gross profit	$ 57,165	$ 59,286	$ (2,121)	(4)%
Gross margin percentage	70%	73%	(3)%	N/A
Operating expenses	$ 86,159	$ 64,399	$ 21,760	34 %
Operating income	$ (28,994)	$ (5,113)	$ (23,881)	467 %

A breakdown of revenue in the ARP segment for the years ended December 31, 2013 and 2012 is as follows:

	Year Ended December 31,			
	2013	2012	Variance	Variance (%)
	(dollars in thousands)			
System sales	$ 1,659	$ 3,193	$ (1,534)	(48)%
Consumable sales	196	357	(161)	(45)%
Royalty revenue	147	308	(161)	(52)%
Assay revenue	74,101	75,020	(919)	(1)%
Service revenue	596	556	40	7 %
Other revenue	4,701	2,116	2,585	122 %
	$ 81,400	$ 81,550	$ (150)	— %

Revenue. Total ARP segment revenue decreased to $81.4 million for the year ended December 31, 2013 from $81.6 million in 2012. The decrease in revenue was primarily attributable to an increase of $2.6 million in other revenue, offset by a decrease of $1.5 million in system revenue and a $0.9 million decrease in assay revenue. The growth in other revenue was driven by our development agreements with Merck and U.S. government agencies. Our ARP segment sold six multiplexing analyzers and 45 automated punching systems during the year ended 2013 compared to 21 multiplexing analyzers and 68 automated punching systems in 2012. We anticipate that our increased focus on direct sales will drive the placement of reagent rental multiplexing analyzer systems in lieu of multiplexing analyzer system sales to distributors. The modest decline in assay revenue is driven primarily by decreased infectious disease assay sales. Infectious disease testing and genetic testing assays represented 67% and 33%, respectively, of total assay revenue in both 2013 and 2012. For the year ended December 31, 2013, direct assay sales comprised 97% of total assay sales compared to 72% for the year ended December 31, 2012. In 2013 we focused more resources on our direct sales channels which resulted in less reliance on our distributors. The top customer in 2013 accounted for 44% of total ARP segment revenue compared to 45% of total ARP segment revenue in 2012. No other customer accounted for more than 10% of total ARP segment revenue in 2013. In 2012, before our focus on selling directly to the end user, the second and third largest customers represented 18% and 9%, respectively of total ARP segment revenue.

Gross profit. The gross margin for the ARP segment decreased to 70% in 2013 from 73% in 2012. Gross profit for the ARP segment decreased to $57.2 million in 2013, from $59.3 million in 2012. The decrease in gross margin was primarily the result of the $2.6 million impairment of inventory and other assets related to our restructuring plan focused on our Newborn Screening Group, partially offset by a $1.0 million milestone payment attributable to our development agreement with Merck.

Research and development expense. Research and development expense increased to $32.9 million for 2013 from $27.9 million for 2012. The increase in ARP segment research and development expenses was primarily the result of the development of our next generation sample-to-answer platform for our MultiCode-RTx technology. The focus of our ARP segment research and development activities on continued development of our pipeline products and technologies remains consistent with the prior year. Research and development employees and contract employees of the ARP segment increased to 151 at December 31, 2013 from 120 at December 31, 2012, primarily as a result of some resources previously focused on TSP segment pipeline activities being prioritized towards development activities within our ARP segment.

Reclassifications. The Company reclassified certain 2012 amounts in the accompanying consolidated financial statements to conform to the 2013 presentation. These reclassifications include $2.1 million of ARP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment research and development expenses for the year ended December 31, 2012 and $12.7 million of TSP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment selling, general and administrative expenses for the year ended December 31, 2012.

Selling, general and administrative expense. Selling, general and administrative expense, including the amortization of acquired intangibles, increased to $50.9 million in 2013 from $36.5 million in 2012. The increase in selling, general, and administrative expenses is primarily the result of the termination of our molecular diagnostics distribution agreements and the related expense of $7.0 million, an increase of our allowance for bad debts of $3.9 million related to all of the aging receivables from Natural Molecular Testing Corporation (NMTC) that filed for Chapter 11 bankruptcy on October 21, 2013; and additional infrastructure and personnel focused on our direct sales channels, offset slightly by a decrease in incentive compensation based on current year financial performance.

Restructuring costs. We recorded total pre-tax restructuring charges of $5.0 million in the year ended December 31, 2013. The portion of these charges that pertained to the non-cash impairment of inventory and certain of the employee separation costs, $2.6 million, was recorded to cost of revenue. The portion of these charges that pertained to the non-cash impairment of intangible assets, fixed assets and certain employee separation costs, $2.4 million, was recorded to restructuring costs in our ARP segment operating expenses. As a result of the organizational change, the Company eliminated approximately 5% of its workforce.

Selected financial data for the year ended December 31, 2012 and 2011 of our ARP segment is as follows:

	Year Ended December 31,			
	2012	2011	Variance	Variance (%)
	(dollars in thousands)			
Revenue	$ 81,550	$ 56,560	$ 24,990	44 %
Gross profit	$ 59,286	$ 34,503	$ 24,783	72 %
Gross margin percentage	73%	61%	12%	N/A
Operating expenses	$ 64,399	$ 53,125	$ 11,274	21 %
Operating income	$ (5,113)	$ (18,622)	$ 13,509	(73)%

A breakdown of revenue in the ARP segment for the years ended December 31, 2012 and 2011 is as follows:

	Year Ended December 31,			
	2012	2011	Variance	Variance (%)
	(dollars in thousands)			
System sales	$ 3,193	$ 5,830	$ (2,637)	(45)%
Consumable sales	357	298	59	20 %
Royalty revenue	308	279	29	10 %
Assay revenue	75,020	48,670	26,350	54 %
Service revenue	556	564	(8)	(1)%
Other revenue	2,116	919	1,197	130 %
	$ 81,550	$ 56,560	$ 24,990	44 %

Revenue. Total ARP segment revenue increased 44% to $81.6 million for the year ended December 31, 2012 from $56.6 million in 2011. The increase in revenue was primarily attributable to a $26.4 million increase in assay revenue, driven primarily by the growth in our infectious disease assay products. Our assay products are currently divided into two distinct categories: infectious disease testing and genetic testing, which represented 67% and 33%, respectively, of total assay revenue in 2012 as compared to 45% and 55% in 2011, respectively. The shift towards infectious disease testing was primarily due to the increase in MultiCode based assay sales, which were predominantly infectious disease testing, and the growth in sales of GPP. For the year ended December 31, 2012, direct assay sales comprised 72% of total assay sales compared to 61% for the year ended December 31, 2011. The top five customers, by revenue, accounted for 76% of total revenue in 2012 compared to 74% in 2011. In particular, the top three customers in 2012 accounted for 72% of total revenue (45%, 18% and 9%, respectively) compared to the top three customers of 2011 which accounted for 65% of total revenue (31%, 24% and 10%, respectively). No other customers accounted for more than 10% of total ARP segment revenue during 2012. Our ARP segment sold 21 multiplexing analyzers and 68 automated punching systems during the year ended 2012 compared to 11 multiplexing analyzers and 144 automated punching systems in 2011. The decline in sales of automated punching systems was primarily the result of the unpredictable nature of activities in the world surrounding major forensic events; for example, the Japanese tsunami in 2011. Other revenue includes shipping revenue, training revenue, contract research and development fees and commercial milestone revenue.

Gross profit. The gross margin for the ARP segment increased to 73% in 2012 from 61% in 2011. Gross profit for the ARP segment increased to $59.3 million in 2012, as compared to $34.5 million in 2011. The increase in gross profit margin in 2012 was primarily attributable to increased sales of high margin assays, the decreased contribution from system sales, and the inclusion of a $3.3 million expense from recording the LMA inventory acquired at fair value on the date of acquisition in the prior year.

Research and development expense. Research and development expense increased to $27.9 million in 2012 from $22.6 million in 2011. The increase in ARP segment research and development expenses was primarily the result of increases in materials and additional personnel costs associated with the addition of employees resulting from increased activity related to product development, including clinical trials costs, together with the inclusion of $4.0 million of GenturaDx's research and development expenses in the 2012 results. Research and development employees and contract employees of the ARP segment increased to 120 at December 31, 2012 from 104 at December 31, 2011, primarily due to employees added by the biodefense group and through the acquisition of GenturaDx.

Reclassifications. The Company reclassified certain 2012 and 2011 amounts in the accompanying consolidated financial statements to conform to the 2013 presentation. These reclassifications include $2.1 million and $2.0 million of ARP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment research and development expenses for the years ended December 31, 2012 and 2011, respectively. Additionally, $12.7 million and $12.4 million of TSP segment selling, general and administrative expenses and the related headcount were reclassified to ARP segment selling, general and administrative expenses for the years ended December 31, 2012 and 2011, respectively.

Selling, general and administrative expense. Selling, general and administrative expense, including the amortization of acquired intangibles, increased to $36.5 million for 2012 from $30.5 million for 2011 but decreased as a percentage of revenue to 45% of ARP segment revenue in 2012 from 54% of ARP segment revenue in 2011. The increase in selling, general, and administrative expenses is primarily due to the inclusion of the GenturaDx acquisition related costs of $3.4 million and ongoing selling, general and administrative expenses, the inclusion of LMA for the entire year ended December 31, 2012, strategic study consulting costs and the expansion of the biodefense group. Additionally, in the fourth quarter of 2012, we ceased using the Hayward, California facility, whose operating lease commitment was acquired under the GenturaDx acquisition in July 2012, and accrued a liability of approximately $850,000 based upon the estimated fair value of the costs that will continue to be incurred under the lease, including an estimate of sublease rental income.

Liquidity and Capital Resources

	December 31, 2013	December 31, 2012
	(in thousands)	
Cash and cash equivalents	$ 67,924	$ 42,789
Short-term investments	4,517	13,607
Long-term investments	—	3,000
	$ 72,441	$ 59,396

At December 31, 2013, we held cash, cash equivalents and short-term investments of $72.4 million and had working capital of $117.9 million. At December 31, 2012, we held cash, cash equivalents and short-term and long-term investments of $59.4 million and had working capital of $101.0 million. Cash, cash equivalents and investments increased by $13.0 million during the year ended December 31, 2013. The increase in cash, cash equivalents and investments from the prior year is primarily attributable to strong operating cash flows, coupled with $8.7 million in proceeds from the Company's employee stock purchase plan and stock option exercises and $9.6 million in proceeds from the sale of of our minority interest investment in a private company, which funded the majority of our stock repurchases of $14.6 million and capital expenditures of $18.1 million.

We have funded our operations to date primarily through the issuance of equity securities (in conjunction with an initial public offering in 2000, subsequent option exercises, and our follow-on public offering in 2008) and cash generated from operations. Our cash reserves are held directly or indirectly in a variety of short-term, interest-bearing instruments, including non-government sponsored debt securities. We do not have any investments in asset-backed commercial paper, auction rate securities, or mortgage backed or sub-prime style investments.

Cash provided by operations was $26.9 million for the year ended December 31, 2013 as compared with cash provided by operations of $24.3 million for the year ended December 31, 2012. Cash provided by investing activities was $2.7 million for the year ended December 31, 2013 as compared with cash used in investing activities of $28.4 million for 2012. The change in cash flows of investing activities was primarily attributable to the $48.2 million expended on our GenturaDx acquisition in 2012 and $9.5 million in proceeds received from the sale of our minority interest investment in a private company in the current year, offset by a decrease in the net sales of our available-for-sale securities of $20.0 million and an increase of $8.3 million in purchases of property and equipment in 2013 as compared to 2012. Currently, exclusive of changes in available-for-sale securities, we expect cash used in investing activities to be primarily for purchases of property and equipment, additional cost-method investments and continued strategic investments or acquisitions.

Cash used by financing activities decreased to $4.4 million for the year ended December 31, 2013, from $11.5 million for the year ended December 31, 2012, primarily attributable a decrease in stock repurchases of $6.4 million together with an increase of $4.7 million in proceeds from the Company's employee stock purchase plan and stock option exercises offset by a decrease in excess income tax benefit from employee stock-based awards of $3.9 million in 2013 as compared to 2012.

Our future capital requirements will depend on a number of factors, including our success in developing and expanding markets for our products, payments under possible future strategic arrangements, continued progress of our research and development of potential products, the timing and outcome of regulatory approvals, the need to acquire licenses to new technology, costs associated with strategic acquisitions including integration costs and assumed liabilities, the status of competitive products and potential costs associated with both protecting and defending our intellectual property. Additionally, actions taken as a result of our ongoing internal evaluation of our business could result in expenditures not currently contemplated in our estimates for 2014. We believe, however, that our existing cash and cash equivalents are sufficient to fund our operating expenses, capital equipment requirements and other expected ordinary course liquidity requirements for the coming twelve months. Factors that could affect our capital requirements, in addition to those listed above include: (i) continued collections of accounts receivable consistent with our historical experience, (ii) our ability to manage our inventory levels consistent with past practices, (iii) signing partnership agreements which include significant up front license fees, (iv) our stock repurchase program from time to time and (v) entering into strategic investment or acquisition agreements requiring significant cash consideration. See also the "Safe Harbor Cautionary Statement" and Item 1A "Risk Factors" above.

To the extent our capital resources are insufficient to meet future capital requirements we will have to raise additional funds to continue the development and deployment of our technologies, or to supplement our position through strategic acquisitions. There can be no assurance that debt or equity funds will be available on favorable terms, if at all, particularly given the current state of the capital markets. Any downgrade in our credit rating could adversely affect our ability to raise debt capital on favorable terms, or at all. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of those securities could result in dilution to our stockholders. Moreover, incurring debt financing could result in a substantial portion of our operating cash flow being dedicated to the payment of principal and interest on such indebtedness, could render us more vulnerable to competitive pressures and economic downturns and could impose restrictions on our operations. If adequate funds are not available, we may be required to curtail operations significantly or to obtain funds through entering into agreements on unattractive terms.

Debt

On December 12, 2003, Tm Bioscience entered into an agreement with the Ministry of Industry of the government of Canada under which the government agreed to invest up to Canadian (Cdn) $7.3 million relating to the development of several genetic tests. This agreement was amended in March 2009. Funds were advanced from Technology Partnerships Canada (TPC), a special operating program. The actual payments we received were predicated on eligible expenditures made during the project period, which ended July 31, 2008. We have received Cdn $4.9 million from TPC, which is expected to be repaid along with approximately Cdn $1.6 million of imputed interest for a total of approximately Cdn $6.5 million.

We have agreed to repay the TPC funding through a royalty on revenues. Royalty payments commenced in 2007 at a rate of 1% of total LMD revenue and at a rate of 2.5% for 2008 and thereafter. Aggregate royalty repayment will continue until total advances plus imputed interest has been repaid or until December 31, 2016, whichever is earlier. The repayment obligation expires on December 31, 2016 and any unpaid balance will be cancelled and forgiven on that date. Should the term of repayment be shorter than expected due to higher than expected assay revenue, the effective interest rate would increase as repayment is accelerated. Actual future sales generating a repayment obligation will vary from our projections, are subject to adjustment based upon the U.S. and Canadian exchange rate and are subject to the risks and uncertainties described elsewhere in this report, including under Item 1A “Risk Factors” and “Safe Harbor Cautionary Statement.”

Contractual Obligations

As of December 31, 2013, we had approximately $18.8 million in non-cancellable obligations for the next 12 months. These obligations are included in our estimated cash usage during 2014. The following table reflects our total current non-cancellable obligations by period as of December 31, 2013 (in thousands):

	Payment Due By Period				
Contractual Obligations	**Total**	**Less Than 1 Year**	**1-3 Years**	**3-5 Years**	**More Than 5 Years**
Non-cancellable rental obligations	$ 18,917	$ 4,773	$ 5,609	$ 3,019	$ 5,516
Non-cancellable purchase obligations [1]	12,071	10,477	495	499	600
Long-term debt obligations [2]	1,663	1,194	469	—	—
Capital lease obligations	346	170	176	—	—
Severance and retention bonus obligations	267	267	—	—	—
Minimum royalty commitments [3]	266	39	52	53	122
Software license obligations	1,290	1,290	—	—	—
Insurance premiums	615	615	—	—	—
Total [4]	$ 35,435	$ 18,825	$ 6,801	$ 3,571	$ 6,238

(1) Purchase obligations include contractual arrangements in the form of purchase orders primarily as a result of normal inventory purchases or minimum payment obligations resulting when minimum purchase commitments are not met.

(2) We have agreed to repay the long term TPC debt obligations through a royalty on revenues. Repayments denominated in U.S. dollars are currently projected to be as shown in the table above. The amount due within one year, as shown in the table above, is our estimated repayment amount based on the sales for the full year 2013.

(3) Amounts represent minimum royalties due on net sales of products incorporating licensed technology and subject to a minimum annual royalty payment.

(4) Due to the uncertainty with respect to the timing of future cash flows associated with Luminex's unrecognized tax benefits at December 31, 2013, Luminex is unable to make reasonably reliable estimates of the timing of cash settlement with the respective taxing authority. Therefore, $2.3 million of unrecognized tax benefits have been excluded from the contractual obligations table above. See Note 13 to the Consolidated Financial Statements for a discussion on income taxes.

Inflation

We do not believe that inflation has had a direct adverse effect on our operations to date. However, a substantial increase in product and manufacturing costs and personnel related expenses could have an adverse impact on our results of operations in the event these expenses increase at a faster pace than we can increase our system, consumable and royalty revenue rates.

Recently Adopted Accounting Pronouncements

In February 2013, the FASB issued guidance on disclosures of additional information with respect to changes in accumulated other comprehensive income ("AOCI") balances by component and significant items reclassified out of AOCI. Expanded disclosures for presentation of changes in AOCI involve disaggregating the total change of each component of other comprehensive income as well as presenting separately for each such component the portion of the change in AOCI related to (1) amounts reclassified into income and (2) current-period other comprehensive income. Additionally, for amounts reclassified into income, disclosure in one location would be required, based upon each specific AOCI component, of the amounts impacting individual income statement line items. Disclosure of the income statement line item impacts will be required only for components of AOCI reclassified into income in their entirety. The disclosures required with respect to income statement line item impacts would be made in either the notes to the consolidated financial statements or parenthetically on the face of the financial statements. For the Company, this Accounting Standards Update is effective beginning January 1, 2013. Because this standard only impacts presentation and disclosure requirements, its adoption did not have a material impact on the Company's consolidated results of operations or financial condition.

Recent Accounting Pronouncements

In July 2013, the FASB issued guidance on the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The guidance requires an entity to present unrecognized tax benefits as a reduction to deferred tax assets when a net operating loss carryforward, similar tax loss or a tax credit carryforward exists, with limited exceptions. For the Company, this Accounting Standards Update is effective for fiscal years beginning on or after December 15, 2013, and for interim periods within those fiscal years. This pronouncement will have no effect on the financial statements as the Company has historically presented uncertain tax positions in accordance with this Accounting Standards Update.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk. Our interest income is sensitive to changes in the general level of domestic interest rates, particularly since our investments are in short-term and long-term instruments available-for-sale. A 50 basis point fluctuation from average investment returns at December 31, 2013 would yield a less than 0.5% variance in overall investment return, which would not have a material adverse effect on our financial condition.

Foreign Currency Risk. Our international business is subject to risks, including, but not limited to: foreign exchange rate volatility, differing tax structures, unique economic conditions, other regulations and restrictions, and changes in political climate. Accordingly, our future results could be materially adversely impacted by changes in these and other factors.

As of December 31, 2013, as a result of our foreign operations, we have costs, assets and liabilities that are denominated in foreign currencies, primarily Canadian and Australian dollars and to a lesser extent the Euro, Renminbi, and Yen. For example, some fixed asset purchases, certain expenses, and the TPC debt of our Canadian subsidiary are denominated in Canadian dollars while sales of products are primarily denominated in U.S. dollars. All transactions in our Netherlands and Japanese subsidiaries are denominated in Euros and Yen, respectively. All transactions, with the exception of our initial capital investment, in our Chinese subsidiary are denominated in Renminbi. Sales transactions in our Australian subsidiary are primarily denominated in Australian or U.S. dollars while fixed asset purchases and expenses are primarily denominated in Australian dollars. As a consequence, movements in exchange rates could cause our foreign currency denominated expenses to fluctuate as a percentage of net revenue, affecting our profitability and cash flows. A significant majority of our revenues are denominated in U.S. dollars. The impact of foreign exchange on foreign denominated balances will vary in relation to changes between the U.S. dollar, Canadian dollar, Australian dollar, Euro, Yen, and Renminbi exchange rates. A 10% change in these exchange rates in relation to the U.S. dollar would result in an income statement impact of approximately $388,000 on foreign currency denominated asset and liability balances as of December 31, 2013. As a result of our efforts to expand globally, in the future we will be exposed to additional foreign currency risk in multiple currencies; however, at this time, our exposure to foreign currency fluctuations is not currently material. We regularly assess the market to determine if additional strategies are appropriate to mitigate future risks.

In addition, the indirect effect of fluctuations in interest rates and foreign currency exchange rates could have a material adverse effect on our business financial condition and results of operations. For example, currency exchange rate fluctuations could affect international demand for our products. In addition, interest rate fluctuations could affect our customers' buying patterns. Furthermore, interest rate and currency exchange rate fluctuations may broadly influence the United States and foreign economies resulting in a material adverse effect on our business, financial condition and results of operations. As a result, we cannot give any assurance as to the effect that future changes in foreign currency rates will have on our consolidated financial position, results of operations or cash flows. Our aggregate foreign currency transaction loss of $385,000 was included in determining our consolidated results for the year ended December 31, 2013.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Luminex Corporation

We have audited Luminex Corporation's internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 Framework) (the COSO criteria). Luminex Corporation's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Luminex Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Luminex Corporation as of December 31, 2013 and 2012, and the related consolidated statements of comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2013 of Luminex Corporation and our report dated February 26, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Austin, Texas
February 26, 2014

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Luminex Corporation

We have audited the accompanying consolidated balance sheets of Luminex Corporation (the Company) as of December 31, 2013 and 2012, and the related consolidated statements of comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Luminex Corporation at December 31, 2013 and 2012 and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2013, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 Framework), and our report dated February 26, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Austin, Texas
February 26, 2014

LUMINEX CORPORATION
CONSOLIDATED BALANCE SHEET
(In thousands, except share and per share data)

	As of December 31,	
	2013	**2012**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 67,924	$ 42,789
Short-term investments	4,517	13,607
Accounts receivable (net of allowance for doubtful accounts of $4,579 and $444 at December 31, 2013 and 2012, respectively)	30,948	33,273
Inventories, net	30,487	29,937
Deferred income taxes	7,265	4,783
Prepaids and other	5,229	4,388
Total current assets	146,370	128,777
Property and equipment, net	32,793	26,229
Intangible assets, net	60,295	65,218
Deferred income taxes	11,913	14,360
Long-term investments	—	3,000
Goodwill	50,738	51,128
Other	3,937	8,463
Total assets	$ 306,046	$ 297,175
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 10,698	$ 9,650
Accrued liabilities	11,624	12,866
Deferred revenue	4,980	4,134
Current portion of long-term debt	1,194	1,138
Total current liabilities	28,496	27,788
Long-term debt	463	1,702
Deferred revenue	2,482	2,933
Other	4,985	5,085
Total liabilities	36,426	37,508
Stockholders' equity:		
Common stock, $.001 par value, 200,000,000 shares authorized; issued and outstanding: 41,133,653 shares at December 31, 2013; 40,824,932 shares at December 31, 2012	41	41
Preferred stock, $.001 par value, 5,000,000 shares authorized; no shares issued and outstanding	—	—
Additional paid-in capital	296,931	293,392
Accumulated other comprehensive income	419	1,101
Accumulated deficit	(27,771)	(34,867)
Total stockholders' equity	269,620	259,667
Total liabilities and stockholders' equity	$ 306,046	$ 297,175

See the accompanying notes which are an integral part of these Consolidated Financial Statements.

LUMINEX CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands, except per share data)

	Year Ended December 31,		
	2013	**2012**	**2011**
Revenue	$ 213,423	$ 202,582	$ 184,339
Cost of revenue	69,797	60,008	58,849
Gross profit	143,626	142,574	125,490
Operating expenses:			
Research and development	45,041	42,989	35,391
Selling, general and administrative	87,301	72,626	62,881
Amortization of acquired intangible assets	4,099	4,243	3,375
Restructuring costs	2,418	—	—
Total operating expenses	138,859	119,858	101,647
Income from operations	4,767	22,716	23,843
Interest expense from long-term debt	(76)	(198)	(308)
Other income, net	6,733	262	394
Income before income taxes	11,424	22,780	23,929
Income taxes	(4,328)	(10,373)	(9,455)
Net income	$ 7,096	$ 12,407	$ 14,474
Other comprehensive income:			
Foreign currency translation adjustments	(681)	144	(79)
Unrealized losses on available-for-sale securities, net of tax	(1)	(27)	(87)
Other comprehensive (loss) income	(682)	117	(166)
Comprehensive income	$ 6,414	$ 12,524	$ 14,308
Net income per share, basic	$ 0.17	$ 0.30	$ 0.35
Shares used in computing net income per share, basic	40,799	40,927	41,262
Net income per share, diluted	$ 0.17	$ 0.30	$ 0.34
Shares used in computing net income per share, diluted	41,986	41,884	42,537

See the accompanying notes which are an integral part of these Consolidated Financial Statements.

LUMINEX CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2013	**2012**	**2011**
Cash flows from operating activities:			
Net income	$ 7,096	$ 12,407	$ 14,474
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	15,922	14,364	11,887
Stock-based compensation	9,221	9,915	11,417
Deferred income tax benefit (expense)	551	2,699	(592)
Excess income tax benefit from employee stock-based awards	(2,569)	(6,457)	(7,614)
Gain on sale of assets	(5,173)	—	—
Non-cash restructuring charges	4,137	—	—
Other	(1,209)	1,157	232
Changes in operating assets and liabilities:			
Accounts receivable, net	2,346	(10,267)	(899)
Inventories, net	(3,005)	(5,346)	4,783
Other assets	(1,470)	(617)	(1,279)
Accounts payable	962	3,286	(2,680)
Accrued liabilities	(324)	3,463	9,324
Deferred revenue	417	(321)	(763)
Net cash provided by operating activities	26,902	24,283	38,290
Cash flows from investing activities:			
Purchases of available-for-sale securities	(10,005)	(14,987)	(47,743)
Sales and maturities of available-for-sale securities	22,128	47,117	33,753
Purchases of property and equipment	(18,088)	(9,767)	(9,554)
Business acquisition consideration, net of cash acquired	—	(48,199)	(33,914)
Purchase of cost-method investment	—	(1,000)	(2,000)
Proceeds from sale of assets and investments	9,598	—	—
Acquired technology rights	(930)	(1,592)	(1,857)
Net cash provided by (used in) investing activities	2,703	(28,428)	(61,315)
Cash flows from financing activities:			
Payments on debt	(1,105)	(1,025)	(885)
Proceeds from issuance of common stock	8,677	4,022	3,543
Payments for stock repurchases	(14,556)	(20,916)	(18,340)
Excess income tax benefit from employee stock-based awards	2,569	6,457	7,614
Net cash used in financing activities	(4,415)	(11,462)	(8,068)
Effect of foreign currency exchange rate on cash	(55)	114	(112)
Change in cash and cash equivalents	25,135	(15,493)	(31,205)
Cash and cash equivalents, beginning of year	42,789	58,282	89,487
Cash and cash equivalents, end of year	$ 67,924	$ 42,789	$ 58,282

See the accompanying notes which are an integral part of these Consolidated Financial Statements.

LUMINEX CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(In thousands, except share data)

	Common Stock					
	Number of Shares	Amount	Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2010	41,245,033	$ 41	$ 295,422	$ 1,150	$ (61,748)	$ 234,865
Exercise of stock options	304,125	1	3,543	—	—	3,544
Issuances of restricted stock, net of shares withheld for taxes	312,101	—	(2,486)	—	—	(2,486)
Stock compensation	—	—	11,417	—	—	11,417
Repurchase and retirement of common stock	(892,302)	(1)	(18,340)	—	—	(18,341)
Net income	—	—	—	—	14,474	14,474
Tax benefits associated with options	—	—	7,548	—	—	7,548
Foreign currency translation adjustments	—	—	—	(79)	—	(79)
Other	—	—	—	(87)	—	(87)
Balance at December 31, 2011	40,968,957	$ 41	$ 297,104	$ 984	$ (47,274)	$ 250,855
Exercise of stock options	486,766	1	3,516	—	—	3,517
Issuances of restricted stock, net of shares withheld for taxes	340,216	—	(3,189)	—	—	(3,189)
Stock compensation	—	—	9,915	—	—	9,915
Repurchase and retirement of common stock	(1,006,303)	(1)	(20,915)	—	—	(20,916)
Issuance of common shares under ESPP	35,296	—	504	—	—	504
Net income	—	—	—	—	12,407	12,407
Tax benefits associated with options	—	—	6,457	—	—	6,457
Foreign currency translation adjustments	—	—	—	144	—	144
Other	—	—	—	(27)	—	(27)
Balance at December 31, 2012	40,824,932	$ 41	$ 293,392	$ 1,101	$ (34,867)	$ 259,667
Exercise of stock options	834,581	1	7,561	—	—	7,562
Issuances of restricted stock, net of shares withheld for taxes	264,555	—	(2,352)	—	—	(2,352)
Stock compensation	—	—	9,214	—	—	9,214
Repurchase and retirement of common stock	(852,483)	(1)	(14,555)	—	—	(14,556)
Issuance of common shares under ESPP	71,226	—	1,102	—	—	1,102
Net income	—	—	—	—	7,096	7,096
Tax benefits associated with options	—	—	2,569	—	—	2,569
Foreign currency translation adjustments	—	—	—	(681)	—	(681)
Other	(9,158)	—	—	(1)	—	(1)
Balance at December 31, 2013	41,133,653	$ 41	$ 296,931	$ 419	$ (27,771)	$ 269,620

See the accompanying notes which are an integral part of these Consolidated Financial Statements.

NOTE 1 - DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business

Luminex Corporation, the "Company" or "Luminex," develops, manufactures and sells proprietary biological testing technologies and products with applications throughout the life sciences and diagnostics industries. The Company's xMAP technology, an open architecture, multiplexing technology, allows the Luminex systems to simultaneously perform up to 500 bioassays from a small sample volume, typically a single drop of fluid, by reading biological tests on the surface of microscopic polystyrene beads called microspheres. xMAP technology combines this miniaturized liquid array bioassay capability with small lasers, LEDs, digital signal processors and proprietary software to create a system offering advantages in speed, precision, flexibility and cost. The Company's xMAP technology is currently being used within various segments of the life sciences industry which includes the fields of drug discovery and development, and for clinical diagnostics, genetic analysis, bio-defense, food safety and biomedical research. In addition to the Company's xMAP technology, its other offerings include its proprietary MultiCode technology, used for real-time PCR and multiplexed PCR assays, as well as automation and robotics in the field of dry sample handling.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany transactions and balances have been eliminated upon consolidation.

The acquisition of GenturaDx was completed on July 11, 2012; therefore the results of operations of GenturaDx in the Company's consolidated financial statements only include GenturaDx's results since that date. The acquisition of LMA was completed on June 27, 2011; therefore the results of operations of LMA in the Company's consolidated financial statements only include LMA's results since that date.

The Company reclassified certain 2012 amounts in the accompanying consolidated financial statements to conform to the 2013 presentation. These reclassifications include $2.1 million and $2.0 million of ARP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment research and development expenses for the year ended December 31, 2012 and 2011, respectively. Additionally, $12.7 million and $12.4 million of TSP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment selling, general and administrative expenses for the year ended December 31, 2012 and 2011, respectively. These reclassifications had no effect on the Company's consolidated comprehensive income or stockholders' equity.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual amounts and results could differ from those estimates, and such differences could be material to the financial statements.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash deposits and highly liquid investments with original maturities of three months or less when purchased.

Investments

The Company determines the appropriate classification of its investments in debt and equity securities at the time of purchase and reevaluates such determinations at each balance sheet date. Marketable securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities and are reported at fair value, with unrealized gains and losses recognized in earnings. Debt securities are classified as held-to-maturity when the Company has the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at amortized cost, which approximates fair value of these investments. Debt securities for which the Company does not have the intent or ability to hold to maturity are classified as available-for-sale. Debt and marketable equity securities not classified as held-to-maturity or as trading are classified as available-for-sale, and are carried at fair market value, with the unrealized gains and losses included in the determination of comprehensive income and reported in stockholders' equity. Marketable securities are recorded as either short-term or long-term on the balance sheet based on contractual maturity date. The fair value of all securities is determined by obtaining non-binding market prices from its third-party portfolio managers on the last day of the quarter, whose sources may use quoted prices in active markets for identical assets or inputs other than quoted prices that are observable either directly or indirectly in determining fair value. Declines in fair value below the Company's carrying value deemed to be other than temporary are charged against net earnings.

Fair Value of Financial Instruments

The fair values of financial instruments are determined by obtaining non-binding market prices from its third-party portfolio managers on the last day of the quarter, whose sources may use quoted prices in active markets for identical assets or inputs other than quoted prices that are observable either directly or indirectly in determining fair value. The Company's financial instruments include cash and cash equivalents, short-term investments, accounts receivable, cost-method investments, long-term investments, accounts payable, accrued liabilities, and long-term debt. Except for the fair value of the Company's long-term debt, the fair values of these financial instruments were not materially different from their carrying or contract values at December 31, 2013 and 2012. See Note 7 for further details concerning fair value measurements and Note 14 for further details concerning the fair value of the Company's long-term debt.

Supplemental Cash Flow Statement Information (in thousands)

	Year Ended December 31,		
	2013	2012	2011
Cash paid during the period for taxes	$ 1,284	$ 761	$ 1,520
Cash paid during the period for interest and penalties	124	171	176
Effect of acquisitions:			
Fair value of tangible assets acquired	—	1,682	6,048
Liabilities assumed	—	(1,954)	(164)
Cost in excess of fair value of assets acquired	—	8,292	532
Acquired identifiable intangible assets	—	—	19,681
Deferred tax assets (liabilities), net	—	2,526	7,617
In-process research and development	—	40,100	286
	—	50,646	34,000
Less accrued contingent consideration	—	1,370	—
Less cash and cash equivalents acquired	—	1,077	86
Net cash paid for business acquisition	$ —	$ 48,199	$ 33,914

Concentration of Credit Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist of short-term and long-term investments and trade receivables. The Company's short-term investments consist of investments in high credit quality financial institutions, non-government sponsored debt securities and corporate issuers.

The Company provides credit, in the normal course of business, to a number of its customers geographically dispersed primarily throughout the U.S. The Company attempts to limit its credit risk by performing ongoing credit evaluations of its customers and maintaining adequate allowances for potential credit losses and does not require collateral.

Thermo Fisher Scientific, Inc., including One Lambda, Inc. acquired in 2012, accounted for 27%, 28% and 33% of the Company's total TSP segment revenues in 2013, 2012 and 2011, respectively. Bio-Rad Laboratories, Inc. accounted for 15%, 14% and 14% of the Company's total TSP segment revenues in 2013, 2012 and 2011, respectively. EMD Millipore accounted for 11%, 13% and 11% of the Company's total TSP segment revenues in 2013, 2012, and 2011, respectively. LabCorp, including acquired Genzyme Genetics, accounted for 44%, 45%, and 31% of the Company's total ARP segment revenues in 2013, 2012 and 2011, respectively. Thermo Fisher Scientific, Inc. accounted for 0%, 18% and 24% of the Company's total ARP segment revenues in 2013, 2012 and 2011, respectively. Abbott Laboratories accounted for 2%, 9% and 10% of the Company's total ARP segment revenues in 2013, 2012 and 2011, respectively. No other customer accounted for more than 10% of total segment revenues in 2013, 2012 or 2011.

Inventories

Inventories, consisting primarily of raw materials and purchased components, are stated at the lower of cost or market, with cost determined according to the standard cost method, which approximates the first-in, first-out method. As a developer and manufacturer of high technology medical equipment, the Company may be exposed to a number of economic and industry factors that could result in portions of inventory becoming either obsolete or in excess of anticipated usage. These factors include, but are not limited to, technological changes in the Company's markets, ability to meet changing customer requirements, competitive pressures on products and prices, and reliability and replacement of and the availability of key components from suppliers. The Company's policy is to establish inventory reserves when conditions exist that suggest that inventory may be in excess of anticipated demand or is obsolete based upon the Company's assumptions about future demand for products and market conditions. The Company regularly evaluates the ability to realize the value of inventory based on a combination of factors including the following: historical usage rates, forecasted sales or usage, product expiration or end of life dates, estimated current and future market values and new product introductions. Assumptions used in determining the Company's estimates of future product demand may prove to be incorrect, in which case the provision required for excess and obsolete inventory would have to be adjusted. If inventory is determined to be overvalued, excess or obsolete, the Company would be required to record impairment charges within cost of goods sold at the time of such determination. Although considerable effort is made to ensure the accuracy of forecasts of future product demand, any significant unanticipated changes in demand or expected usage could have a significant negative impact on the value of inventory and the Company's operating results. When recorded, reserves are intended to reduce the carrying value of inventory to its net realizable value.

Property and Equipment

Property and equipment are carried at cost less accumulated amounts for amortization and depreciation. Property and equipment are typically amortized or depreciated on a straight-line basis over the useful lives of the assets, which range from two to seven years. Leasehold improvements and equipment under capital leases are amortized on a straight-line basis over the shorter of the remaining term of the lease or the estimated useful life of the improvements and equipment. The Company classifies the carrying value of Luminex xMAP Instruments placed within the reagent rental program and the instruments on loan to customers in property and equipment as "Assets on loan/rental."

Goodwill and Other Intangible Assets

Goodwill represents the excess of the cost over the fair value of the assets of the acquired business. In accordance with Accounting Standards Codification (ASC) 350 “Goodwill and Other” (ASC 350), goodwill is reviewed for impairment at least annually at the beginning of the fourth quarter, or more frequently if impairment indicators arise, on a reporting unit level. All of the Company's goodwill relates to one reporting unit, our ARP segment, for goodwill impairment testing. The Company has historically estimated the fair value of our ARP segment reporting unit using a discounted cash flow (DCF) analysis (“step one” analysis) of the Company’s projected future results. The step one analysis performed by management in the fourth quarter of 2010 indicated the fair value the ARP segment reporting unit was significantly higher than the carrying value. In 2012 and 2011, the Company applies the accounting guidance which allows an entity to first assess qualitative factors to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount (“step zero” analysis). In performing the impairment test in the fourth quarter of 2013, the Company used the "step one" analysis. This analysis requires a comparison of the carrying value of the reporting unit to the estimated fair value of the reporting unit. Determining the fair value of goodwill is subjective in nature and often involves the use of estimates and assumptions. The Company's annual test did not result in an impairment charge in 2013 as the estimated fair value of the ARP segment reporting unit continues to exceed the carrying value by a significant enough amount that any reasonably likely change in the assumptions used in the analysis would not cause the carrying value to exceed the estimated fair value for the reporting unit as determined under our "step one" analysis. No goodwill impairments were recorded in 2013, 2012 or 2011.

The Company utilizes the income approach based on a DCF analysis to determine fair value estimates, and then uses market comparisons as a reasonability check to ensure that neither the income approach nor the market comparisons yielded significantly different results. The income approach calculates the fair value by estimating the after-tax cash flows attributable to a reporting unit and then discounting the after-tax cash flows to a present value using a risk-adjusted discount rate. The Company's estimates are based on revenue projections by product line, and include judgment based on historical growth and scheduled product approvals by the various governmental authorities. The Company believes its assumptions are consistent with the plans and estimates used to manage the underlying businesses. The most significant assumptions used in the DCF methodology are the discount rate, based upon the estimated weighted average cost of capital (WACC), and the terminal growth rate, based upon strategic studies the Company commissioned and the Company's internal analysis. The Company used the following rates in 2013:

Assumptions	**2013**
WACC	15.0%
Terminal Growth Rate	2.9%

To determine the Company's WACC rate, management performed a peer company analysis and considered the weighted average return on debt and equity, the updated risk-free interest rate, beta, equity risk premium, and entity specific size risk premium. The Company's analysis yielded an estimated fair value in excess of the carrying value by over 25% for 2013.

Concurrent with the above analysis, management performed a sensitivity analysis based upon reasonably likely changes to determine if the DCF analysis would result in impairment if the following changes were made to management's assumptions: i) assumed the fair value of the reporting unit was lower by 10% or ii) future revenue was 75% of the Company's projections in the DCF model. Neither of these sensitivity analyses resulted in an estimated fair value less than the carrying amount of the reporting unit.

Intangible assets are amortized on a straight line basis over their respective estimated useful lives ranging from 5 to 15 years. As a result of the acquisition of GenturaDx in July 2012, the Company acquired in process research and development of $40.1 million. In-process research and development will be an indefinite-lived intangible asset until completion or abandonment at which point it will be accounted for as a finite-lived intangible asset or written off if abandoned.

Impairment of Long-Lived Assets

Long-lived assets held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that their net book value may not be recoverable. When such factors and circumstances exist, the Company compares the projected undiscounted future cash flows associated with the related asset or group of assets over their estimated useful lives against their respective carrying amounts. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets and is recorded in the period in which the determination was made.

Revenue Recognition and Allowance for Doubtful Accounts

Revenue is generated primarily from the sale of the Company's products and related services, which are primarily support and maintenance services on the Company's systems. The Company recognizes product revenue at the time the product is shipped provided there is persuasive evidence of an agreement, no right of return exists, the fee is fixed or determinable and collectability is probable. There is no customer right of return in the Company's sales agreements. If the criteria for revenue recognition are not met at the time of shipment, the revenue is deferred until all criteria are met.

The Company regularly enters into arrangements for system sales that are multiple-element arrangements, including services such as installation and training, and multiple products. These products or services are primarily delivered within a short time frame, approximately three to six months, of the agreement execution date and can also be performed by one of the Company's third-party partners. Based on the terms and conditions of the sale, management believes that these services can be accounted for separately from the delivered system as the delivered products have value to customers on a stand-alone basis. Items are considered to have stand-alone value when they are sold separately by any vendor or when the customer could resell the item on a stand-alone basis. Accordingly, the estimated selling price of services or products not yet performed or delivered at the time of system shipment are deferred and recognized as revenue as such services are performed. The Company has typically been able to determine the selling price of each deliverable in a multiple-element arrangement based on the price for such deliverable when it is sold separately. If vendor specific objective evidence (VSOE) is not determinable and when third-party evidence is not available, management uses the estimated selling price of a deliverable which is determined based upon the Company's pricing policies, expected margin of the deliverable, geographical location and information gathered from customer negotiations.

Within the diagnostic portion of the ARP segment, the Company provides systems and certain other hardware to customers through reagent rental agreements under which the customers commit to purchasing minimum quantities of disposable products at a stated price over a defined contract term, which is normally two to three years. Instead of rental payments, the Company recovers the cost of providing the system and other hardware in the amount charged for diagnostic assays and other disposables. Revenue is recognized over the defined contract term as assays and other disposable products are shipped. The depreciation costs associated with the system and other hardware are charged to cost of sales on a straight-line basis over the estimated life of the system. The costs to maintain these instruments in the field are charged to cost of sales as incurred.

Revenue from extended service agreements is deferred and recognized ratably over the term of the agreement. The Company may also be entitled to milestone payments that are contingent upon achieving a predefined objective. The Company follows the milestone method of recognizing revenue from milestones and milestone payments are recorded as revenue in full upon achievement of the milestone. Revenues from royalties related to agreements with strategic partners are recognized when such amounts are reported to the Company; therefore, the underlying end user sales may be related to prior periods.

Additional revenue is derived from cost-type contracts with the U.S. government. Revenue and profit under cost-plus service contracts is recognized as costs are incurred plus negotiated fees. Fixed fees on cost-plus service contracts are recognized ratably over the contract performance period as services are performed. Contract costs include labor and related employee benefits, subcontracting costs and other direct costs, as well as allocations of allowable indirect costs. For contract change orders, claims or similar items, judgment is required for estimating the amounts, assessing the potential for realization, and determining whether realization is probable. From time to time, facts develop that require revisions of revenue recognized or cost estimates. To the extent that a revised estimate affects the current or an earlier period, the cumulative effect of the revision is recognized in the period in which the facts requiring the revision become known. Reimbursements of certain costs, including certain hardware costs or out-of-pocket expenses are included in revenue with corresponding costs included in cost of revenue as costs are incurred.

The Company continuously monitors collections and payments from its customers and maintains allowances for doubtful accounts based upon its historical experience and any specific customer collection issues that have been identified. While such credit losses have historically been within the Company's expectations, there can be no assurance that the Company will continue to experience the same level of credit losses that it has in the past. A significant change in the liquidity or financial position of any one of the Company's significant customers, or a deterioration in the economic environment, in general, could have a material adverse impact on the collectability of the Company's accounts receivable and its future operating results, including a reduction in future revenues and additional allowances for doubtful accounts.

Product-Related Expenses

The Company provides for the estimated cost of initial product warranties at the time revenue is recognized. While the Company engages in product quality programs and processes, the Company's warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from the Company's estimates, revisions to the estimated warranty liability would be required. Shipping and handling costs associated with product sales are included in cost of sales. Advertising costs are charged to operations as incurred. The Company does not have any direct-response advertising. Advertising expenses, which include trade shows and conventions, were approximately $2.6 million, $2.4 million and $3.1 million for 2013, 2012 and 2011, respectively, and were included in selling, general and administrative expense in the Consolidated Statements of Operations.

Research and Development Costs

Research and development costs are generally expensed in the period incurred. Nonrefundable advance payments for research and development activities for materials, equipment, facilities, and purchased intangible assets that have an alternative future use are deferred and capitalized. The capitalized amounts are expensed as the related goods are delivered or the services are performed. In addition, the Company capitalizes certain internally developed products used for evaluation during development projects that also have alternative future uses. These internally developed assets are generally depreciated on a straight-line basis over the useful life of the assets, which range from 1 to 2 years.

Foreign Currency Translation

The financial statements of the Company's foreign subsidiaries are translated in accordance with ASC 830, "Foreign Currency Matters". The reporting currency for the Company is the U.S. dollar. With the exception of its Canadian subsidiary, whose functional currency is the U.S. dollar, the functional currency of the Company's foreign subsidiaries is their local currency. Accordingly, assets and liabilities of these subsidiaries are translated at the exchange rate in effect at each balance sheet date. Before translation, the Company re-measures foreign currency denominated assets and liabilities, including inter-company accounts receivable and payable, into the functional currency of the respective entity, resulting in unrealized gains or losses recorded in selling, general and administrative expenses in the Consolidated Statement of Comprehensive Income. Revenues and expenses are translated using average exchange rates during the respective period. Foreign currency translation adjustments are accumulated as a component of other comprehensive income as a separate component of stockholders' equity. Gains and losses arising from transactions denominated in foreign currencies are included in selling, general and administrative expenses in the Consolidated Statement of Comprehensive Income and to date have not been material.

Incentive Compensation

Management incentive plans are tied to various financial and non-financial performance metrics. Bonus accruals made throughout the year related to the various incentive plans are based on management's best estimate of the achievement of the specific metrics. Adjustments to the accruals are made on a quarterly basis as forecasts of performance are updated. At year-end, the accruals are adjusted to reflect the actual results achieved.

Income Taxes

The Company accounts for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax balances are adjusted to reflect tax rates based on currently enacted tax laws, which will be in effect in the years in which the temporary differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period of the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets unless it is more likely than not that those assets will be realized.

The Company recognizes excess tax benefits associated with share-based compensation to stockholders' equity only when realized. When assessing whether excess tax benefits relating to share-based compensation have been realized, the Company follows the with-and-without approach excluding any indirect effects of the excess tax deductions. Under this approach, excess tax benefits related to share-based compensation are not deemed to be realized until after the utilization of all other tax benefits available to the Company.

The Company accounts for uncertain tax positions in accordance with ASC 740, "Income Taxes" which clarifies the accounting for uncertainty in tax positions. These provisions require recognition of the impact of a tax position in the Company's financial statements only if that position is more likely than not of being sustained upon examination by taxing authorities, based on the technical merits of the position. Any interest and penalties related to uncertain tax positions will be reflected as a component of income tax expense.

Earnings Per Share

Basic net income per share is computed by dividing the net income for the period by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed by dividing the net income for the period by the weighted average number of common shares and potential common shares from outstanding stock options, restricted stock units and contingently issuable shares resulting from an award subject to performance or market conditions determined by applying the treasury stock method. In periods with a net loss, potentially dilutive securities composed of incremental common shares issuable upon the exercise of stock options and warrants, and common shares issuable on conversion of preferred stock, would be excluded from historical diluted loss per share because of their anti-dilutive effect.

Stock-Based Compensation

The Company accounts for stock-based employee compensation plans under the fair value recognition and measurement provisions of ASC 718 "Stock Compensation" (ASC 718). ASC 718 requires the recognition of compensation expense, using a fair-value based method, for costs related to all share-based payments including stock options, restricted stock units and shares issued under the Company's employee stock purchase plan. Pursuant to ASC 718, stock-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as expense over the requisite service period.

Segment Reporting

Management has determined that the Company has two segments for financial reporting purposes: the TSP segment and the ARP segment. See Note 19 – Segment and Geographic Information.

NOTE 2 — RESTRUCTURING

In August 2013, the Company announced a restructuring plan focused on its ARP segment's Newborn Screening Group and its Brisbane, Australia office where automated punching systems are designed and manufactured. The Company is exploring strategic alternatives for its Newborn Screening assets and related automated punching group, including a potential sale or abandonment of that business. The Company has reviewed the requirements for held-for-sale and discontinued operations presentation and has determined that this business did not qualify for this presentation at December 31, 2013. The Company will continue selling its automated punching systems while it explores strategic alternatives for this business.

The Company recorded total pre-tax restructuring charges of $5.0 million in 2013, which primarily consisted of the non-cash estimated impairment of inventory, intangible assets, property and equipment, together with employee separation costs. The Company measured and accrued the liabilities associated with employee separation costs at fair value as of the date the plan was announced and terminations were communicated to employees, which primarily included severance pay and other separation costs such as outplacement services and benefits. As a result of the organizational change, the Company eliminated approximately 5% of its workforce. In conjunction with the restructuring plan, the Company evaluated its tangible and intangible assets for estimated impairment and recorded non-cash impairment charges of $4.1 million in 2013. The Company determined the fair value of the assets based upon prices for similar assets. See Note 9 — Goodwill and Other Intangible Assets.

The Company will continue to review the remaining asset balances for possible further impairment until sale or abandonment. The Company will measure and accrue the facilities exit costs at fair value upon the Company's exit. Facilities exit costs will primarily consist of cease-use losses to be recorded upon vacating the facilities and fixed asset impairment.

Statement of Comprehensive Income	2013 Restructuring Plan
Non-cash impairment charges:	
Inventory	$ 2,326
Property and equipment	1,110
Intangible Assets	700
Employee separation costs	783
Facility exit costs	—
Other	50
Total charges	$ 4,969
Recorded to cost of revenue	2,551
Recorded to restructuring costs	$ 2,418

Rollforward of Accrued Restructuring	
Total charges	$ 4,969
Non-cash impairment charges	(4,136)
Employee separation payments	(655)
Facility exit costs	—
Foreign exchange and other adjustments	(50)
Balance at December 31, 2013	$ 128

The remaining restructuring accrual balance is expected to be paid within the next six months. As such, it is recorded as a current liability within accrued liabilities on the consolidated balance sheet as of December 31, 2013.

NOTE 3 – BUSINESS COMBINATIONS

2012 Acquisition

On July 11, 2012, the Company completed its acquisition of GenturaDx, Inc., a British Virgin Islands corporation with operations in Hayward, California (“GenturaDx”). GenturaDx was a molecular diagnostics company in late stage development of a fully integrated, highly automated, real-time polymerase chain reaction (PCR) system that employs a single-use cassette for sample-to-answer workflow. Under the terms of the acquisition agreement, the Company acquired all of the outstanding capital stock of GenturaDx in exchange for approximately $49.3 million cash consideration, subject to working capital adjustments, plus (i) $3.0 million in consideration contingent upon achieving certain future development and regulatory milestones by December 31, 2013, (ii) up to $7.0 million in consideration contingent upon achieving certain future development and regulatory milestones by June 30, 2014 and (iii) additional consideration contingent upon acquired products exceeding certain revenue thresholds in each of 2013, 2014 and 2015. Pursuant to ASC 805 "Business Combinations", the Company recorded an estimate of the fair value of the contingent consideration liability based upon future revenue estimates and weighted probability assumptions of development and regulatory outcomes. The discount rate is used in the estimate of fair value and was based on the weighted-average cost of capital of the acquired business plus a risk premium for a non-performance risk related to the liability. This analysis resulted in an initial contingent consideration liability of approximately $1.4 million, which was adjusted periodically as a component of other income, net based on changes in the fair value of the liability resulting from changes in the assumptions pertaining to the achievement of the defined milestones and revenue thresholds. This fair value measurement was based on significant inputs not observable in the market and thus represented a Level 3 measurement as defined in ASC 820 "Fair Value Measurements and Disclosures". This fair value measurement is directly impacted by the Company's estimate of future incremental revenue of the business. Accordingly, if actual revenue is higher or lower than the estimates within the fair value measurement, the Company would record additional charges or benefits, respectively, as appropriate. See Note 7 for further discussion of the Company's contingent consideration.

Of the approximately $8.1 million related to the GenturaDx acquisition that was deposited in escrow as security for potential indemnity claims and certain other expressly enumerated matters, approximately $5.0 million remains in escrow as of December 31, 2013. Additionally, up to 30% of the remaining milestone payments are subject to certain set-off rights of the Company for indemnification claims under the acquisition agreement. The Company's acquisition of GenturaDx was funded with cash on hand.

The results of operations for GenturaDx have been included in the Company's consolidated financial statements from the date of acquisition as part of the Company's ARP segment.

The purchase price consideration is as follows (in thousands):

Cash	$	49,276
Contingent consideration		1,370
Total purchase price	$	50,646

The acquisition of GenturaDx has been accounted for as a business combination in accordance with ASC 805 and, as such, the assets acquired and liabilities assumed have been recorded at their respective fair values. The determination of fair value for the identifiable tangible and intangible assets acquired and liabilities assumed requires extensive use of estimates and assumptions. Significant estimates and assumptions include, but are not limited to estimating future cash flows and determining the appropriate discount rate. The following table summarizes the estimated fair values of GenturaDx's assets acquired and liabilities assumed at the acquisition date (in thousands):

Net tangible liabilities assumed as of July 11, 2012	$	(272)
Intangible assets subject to amortization		40,100
Deferred tax assets, net		2,526
Goodwill		8,292
Total purchase price	$	50,646

The $40.1 million of intangible assets subject to amortization have been identified as in-process research and development (IPR&D) that had not yet reached technological feasibility as of the acquisition date. Technological feasibility is primarily established by obtaining regulatory approval to perform certain diagnostic testing on the Company's systems. The IPR&D project relates to GenturaDx's diagnostic testing prototype system designed to run sample-to-answer cassettes in clinical settings and the related cassette design. This project is expected to be completed in 2014. The fair value of the IPR&D has been estimated using the multi-period excess earnings method, a form of the income approach and cash flow projections were discounted using a rate of 29.5%, which reflects the risk associated with the intangible asset related to the other assets and the overall business operations of the Company.

The excess of the purchase price over the fair value of the tangible net assets, liabilities and intangible assets acquired was recorded to goodwill. The goodwill recognized is mainly attributable to the compatibility between the Company's MultiCode-RTx chemistry and the prototype system and the expectation that the system together with the Company's MultiCode-RTx chemistry will allow the Company to leverage years of previous assay development and make custom assay development accessible to a greater number of diagnostic labs, even those with little molecular diagnostics experience.

Acquisition related costs of $4.3 million have been included in selling, general and administrative costs for 2012. GenturaDx had no revenue and operating loss of $7.9 million from the date of acquisition to December 31, 2012, including the impact of the acquisition costs. In the fourth quarter of 2012, the Company ceased using the Hayward, California facility, whose operating lease commitment was acquired under the GenturaDx acquisition in July 2012. The Company has accrued a liability based upon the estimated fair value of the costs that will continue to be incurred under the lease, including an estimate of sublease rental income.

Unaudited Pro Forma Financial Information

GenturaDx's results of operations have been included in the Company's financial statements since the date of the acquisition. The unaudited pro forma financial information set forth below assumes that GenturaDx had been acquired at the beginning of each of the 2012 and 2011 fiscal years, and includes removal of interest expense on GenturaDx's debt extinguished at the date of acquisition, removal of acquisition costs and the impact of purchase accounting adjustments, and tax adjustments. This unaudited pro forma financial information is presented for informational purposes only and is not necessarily indicative of the results of operations that actually would have resulted had the acquisition been in effect at the beginning of the periods presented. In addition, the unaudited pro forma financial information is not intended to be a projection of future results and does not reflect any operating efficiencies or cost savings that might be achievable.

	Year Ended December 31,	
	2012	2011
	(unaudited, in thousands except per share data)	
Revenue	$ 202,582	$ 184,339
Income from operations	16,276	10,224
Net income	9,118	5,194
Net income per common share, basic	$ 0.22	$ 0.13
Shares used in computing net income per common share, basic	40,927	41,262
Net income per common share, diluted	$ 0.22	$ 0.12
Shares used in computing net income per common share, diluted	41,884	42,537

2011 Acquisition

On June 27, 2011, the Company completed its acquisition of EraGen Biosciences, Inc., a Delaware corporation, now referred to as Luminex Madison (LMA), a privately-held molecular diagnostic company in Madison, Wisconsin, which was founded in 1999, for the aggregate cash purchase price of $34.0 million. This acquisition was undertaken to provide the Company access to a portfolio of molecular diagnostic assays based on a proprietary technology called MultiCode. LMA is an innovator in molecular diagnostic testing technologies for infectious disease and genetic applications.

The results of operations for LMA have been included in the Company's consolidated financial statements from the date of acquisition as part of the Company's ARP segment. All of the purchase price deposited in escrow as security for breaches of representations and warranties and certain other expressly enumerated matters and to satisfy any post-closing adjustments has been released to LMA's former shareholders and certain other individuals as of December 31, 2013.

The acquisition of LMA has been accounted for as a business combination in accordance with ASC 805 Business Combinations and, as such, the assets acquired and liabilities assumed have been recorded at their respective fair values. The determination of fair value for the identifiable tangible and intangible assets acquired and liabilities assumed requires extensive use of estimates and assumptions. Significant estimates and assumptions include, but are not limited to estimating future cash flows and determining the appropriate discount rate. The following table summarizes the estimated fair values of LMA's assets acquired and liabilities assumed at the acquisition date (in thousands):

Net tangible assets assumed as of June 27, 2011	$ 5,884
Intangible assets subject to amortization	19,967
Deferred tax assets, net	7,617
Goodwill	532
Total purchase price	$ 34,000

Acquisition related costs of $2.1 million were included in selling, general and administrative costs for 2011. Acquired finished goods and work-in-process inventory was valued at its estimated selling price less the sum of costs of sales efforts and a reasonable profit allowance for the Company's selling effort and, with respect to work-in-process inventory, estimated costs to complete. This resulted in a fair value adjustment that increased finished goods inventory by approximately $3.3 million. As the Company sold the acquired inventory in 2011, its costs of sales reflected the increased valuation of the inventory, which reduced the Company's gross margins in 2011. LMA had revenue of $7.6 million and operating loss of $4.6 million from the date of acquisition to December 31, 2011, including the impact of the acquisition costs and the fair value adjustment to inventory above.

NOTE 4 – INVESTMENTS

Available-for-sale securities consisted of the following as of December 31, 2013 (in thousands):

	Amortized Cost	Gains in Accumulated Other Comprehensive Income (Loss)	Losses in Accumulated Other Comprehensive Income (Loss)	Estimated Fair Value
Current:				
Money Market funds	$ 46,422	$ —	$ —	$ 46,422
Non-government sponsored debt securities	4,517	—	—	4,517
Total current securities	50,939	—	—	50,939
Noncurrent:				
Non-government sponsored debt securities	—	—	—	—
Total noncurrent securities	—	—	—	—
Total available-for-sale securities	$ 50,939	$ —	$ —	$ 50,939

Available-for-sale securities consisted of the following as of December 31, 2012 (in thousands):

	Amortized Cost	Gains in Accumulated Other Comprehensive Income (Loss)	Losses in Accumulated Other Comprehensive Income (Loss)	Estimated Fair Value
Current:				
Money Market funds	$ 16,987	$ —	$ —	$ 16,987
Non-government sponsored debt securities	13,602	5	—	13,607
Total current securities	30,589	5	—	30,594
Noncurrent:				
Non-government sponsored debt securities	3,000	—	—	3,000
Total noncurrent securities	3,000	—	—	3,000
Total available-for-sale securities	$ 33,589	$ 5	$ —	$ 33,594

There were $0 and $6.0 million in proceeds from the sales of available-for-sale securities during the years ended December 31, 2013 and 2012, respectively. Realized gains and losses on sales of investments are determined using the specific identification method and are included in other income (expense) in the Consolidated Statement of Comprehensive Income. Net unrealized holding gains and losses on available-for-sale securities are included in accumulated other comprehensive gain (loss) as of December 31, 2013. All of the Company's available-for-sale securities with gross unrealized losses as of December 31, 2013 and 2012 had been in a loss position for less than 12 months.

The estimated fair value of available-for-sale debt securities at December 31, 2013, by contractual maturity, was as follows (in thousands):

	Estimated Fair Value
Due in one year or less	$ 4,517
Due after one year through two years	—
	$ 4,517

Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

NOTE 5 - ACCOUNTS RECEIVABLE AND RESERVES

The Company records an allowance for doubtful accounts based upon a specific review of all outstanding invoices, known collection issues and historical experience. The Company regularly evaluates the collectability of its trade accounts receivables and performs ongoing credit evaluations of its customers and adjusts credit limits based upon payment history and its assessment of the customer's current creditworthiness. These estimates are based on specific facts and circumstances of particular orders, analysis of credit memo data and other known factors. Accounts receivable consisted of the following at December 31 (in thousands):

	2013	2012
Accounts receivable	$ 35,527	$ 33,717
Less: Allowance for doubtful accounts	(4,579)	(444)
	$ 30,948	$ 33,273

The following table summarizes the changes in the allowance for doubtful accounts (in thousands):

Balance at December 31, 2010	$ 298
Recoveries charged to costs and expenses	(168)
Write-offs of uncollectible accounts	(13)
Balance at December 31, 2011	$ 117
Increases charged to costs and expenses	335
Write-offs of uncollectible accounts	(8)
Balance at December 31, 2012	$ 444
Increases charged to costs and expenses	4,604
Write-offs of uncollectible accounts	(469)
Balance at December 31, 2013	$ 4,579

NOTE 6 - INVENTORIES, NET

Inventories consisted of the following at December 31 (in thousands):

	2013	2012
Parts and supplies	$ 19,002	$ 18,259
Work-in-progress	4,747	4,831
Finished goods	6,738	6,847
	$ 30,487	$ 29,937

The Company has non-cancellable purchase commitments with certain of its component suppliers in the amount of approximately $12.1 million at December 31, 2013. Should production requirements fall below the level of the Company's commitments, the Company could be required to take delivery of inventory for which it has no immediate need or incur an increased cost per unit going forward.

NOTE 7 – FAIR VALUE MEASUREMENT

ASC 820 defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The ASC describes a fair value hierarchy based on the following three levels of inputs that may be used to measure fair value, of which the first two are considered observable and the last unobservable:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company determines the fair value of its investment portfolio assets by obtaining non-binding market prices from its third-party portfolio managers on the last day of the quarter, whose sources may use quoted prices in active markets for identical assets (Level 1 inputs) or inputs other than quoted prices that are observable either directly or indirectly (Level 2 inputs) in determining fair value. There were no transfers between Level 1, Level 2 or Level 3 measurements for the year ended December 31, 2013.

The following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2013 and 2012 (in thousands):

	Fair Value Measurements at December 31, 2013			
	Level 1	Level 2	Level 3	Total
Assets:				
Money Market funds	$ 46,422	$ —	$ —	$ 46,422
Non-government sponsored debt securities	—	4,517	—	4,517
Liabilities:				
Contingent consideration	—	—	—	—

	Fair Value Measurements at December 31, 2012			
	Level 1	Level 2	Level 3	Total
Assets:				
Money Market funds	$ 16,987	$ —	$ —	$ 16,987
Non-government sponsored debt securities	—	16,607	—	16,607
Liabilities:				
Contingent consideration	—	—	1,370	1,370

The Company records contingent consideration resulting from a business combination at its fair value on the acquisition date. The Company determines the fair value of the contingent consideration based primarily on the timing and probability of success of clinical events or regulatory approvals, the timing and probability of success of meeting commercial milestones, such as sales levels of a specific product, and discount rates. The Company's contingent consideration liability arose in connection with the GenturaDx acquisition. The Company re-evaluates its assumptions for its contingent consideration fair value determinations each quarter. Changes to the fair value of contingent consideration obligations can result from adjustments to discount rates, accretion of the discount rates due to the passage of time, changes in estimates of the likelihood of or timing of achieving any development or commercial milestones, changes in the probability of certain clinical events or changes in the assumed probability associated with regulatory approval. As a result of changes in assumptions surrounding the probability of success of meeting the timing of commercial milestones contemplated in the GenturaDx acquisition agreement, the Company adjusted the contingent consideration liability related to the GenturaDx acquisition from $1.4 million as of December 31, 2012 to $0 as of December 31, 2013. The assumptions related to determining the value of contingent consideration include a significant amount of judgment, and any changes in the underlying estimates could have a material impact on the amount of contingent consideration expense recorded in any given period.

Changes in the recurring fair value measurements of financial assets and liabilities using significant unobservable inputs (Level 3) during the years ended December 31, 2013 and 2012 were as follows:

	2013	2012
Beginning balance	$ 1,370	$ —
Contingent consideration recorded at acquisition	—	1,370
Fair value adjustments	(1,370)	—
Ending balance	$ —	$ 1,370

NOTE 8 - PROPERTY AND EQUIPMENT

Property and equipment consisted of the following at December 31 (in thousands):

	2013	2012
Laboratory equipment	$ 27,519	$ 21,155
Leasehold improvements	22,881	16,885
Computer equipment	7,415	7,068
Purchased software	18,843	15,756
Furniture and fixtures	4,903	4,834
Assets on loan/rental	4,027	3,499
Capital lease equipment	116	116
	85,704	69,313
Less: Accumulated amortization and depreciation	(52,911)	(43,084)
	$ 32,793	$ 26,229

Depreciation expense was $10.2 million, $8.8 million, and $7.8 million for the years ended December 31, 2013, 2012, and 2011, respectively.

NOTE 9 - GOODWILL AND OTHER INTANGIBLE ASSETS

On July 11, 2012, the Company completed the acquisition of GenturaDx. As a result, the Company recorded approximately $8.3 million of goodwill and approximately $40.1 million of other identifiable intangible assets. For impairment testing purposes, the Company has assigned all of the GenturaDx goodwill to the ARP segment. This goodwill is not expected to be deductible for tax purposes.

The changes in the carrying amount of goodwill during the period are as follows (in thousands):

	2013	2012
Balance at beginning of year	$ 51,128	$ 42,763
Acquisition of GenturaDx	—	8,292
Foreign currency translation adjustments	(390)	73
Balance at end of year	$ 50,738	$ 51,128

The current in process research and development projects are scheduled to be completed in 2014. The estimated costs to complete these projects are between $5.0 million and $8.0 million.

The Company's intangible assets are reflected in the table below (in thousands, except weighted average lives):

	Finite-lived			Indefinite-lived	
	Technology, trade secrets and know-how	Customer lists and contracts	Other identifiable intangible assets	IP R&D	Total
2012					
Balance at December 31, 2011	$ 30,000	$ 7,981	$ 1,933	$ 631	$ 40,545
Additions due to acquisition of GenturaDX	—	—	—	40,100	40,100
Write-off of IP R&D projects	—	—	—	(118)	(118)
Foreign currency translation adjustments	30	5	8	14	57
Balance at December 31, 2012	30,030	7,986	1,941	40,627	80,584
Less: accumulated amortization:					
Accumulated amortization balance at December 31, 2011	(9,999)	(768)	(341)	—	(11,108)
Amortization expense	(3,187)	(790)	(266)	—	(4,243)
Foreign currency translation adjustments	(7)	(2)	(6)	—	(15)
Accumulated amortization balance at December 31, 2012	(13,193)	(1,560)	(613)	—	(15,366)
Net balance at December 31, 2012	$ 16,837	$ 6,426	$ 1,328	$ 40,627	$ 65,218
Weighted average life (in years)	10	11	9		
2013					
Balance at December 31, 2012	$ 30,030	$ 7,986	$ 1,941	$ 40,627	$ 80,584
Write-off/Impairment	(214)	(7)	(20)	(454)	(695)
Foreign currency translation adjustments	(140)	(27)	(41)	(73)	(281)
Balance at December 31, 2013	29,676	7,952	1,880	40,100	79,608
Less: accumulated amortization:					
Accumulated amortization balance at December 31, 2012	(13,193)	(1,560)	(613)	—	(15,366)
Amortization expense	(3,172)	(787)	(140)	—	(4,099)
Foreign currency translation adjustments	93	21	38	—	152
Accumulated amortization balance at December 31, 2013	(16,272)	(2,326)	(715)	—	(19,313)
Net balance at December 31, 2013	$ 13,404	$ 5,626	$ 1,165	$ 40,100	$ 60,295
Weighted average life (in years)	10	11	9		

The estimated aggregate amortization expense for the next five years and thereafter is as follows (in thousands):

2014	$ 3,917
2015	3,232
2016	3,100
2017	2,144
2018	1,954
Thereafter	5,848
	20,195
IPR&D	40,100
	$ 60,295

NOTE 10 — OTHER COMPREHENSIVE (LOSS) INCOME

Comprehensive (loss) income represents a measure of all changes in equity that result from recognized transactions and other economic events other than those resulting from investments by and distributions to shareholders. Other comprehensive (loss) income for the Company includes foreign currency translation adjustments and net unrealized holding gains and losses on available-for-sale investments.

The following table presents the changes in each component of accumulated other comprehensive (loss) income, net of tax (in thousands):

	Foreign Currency Items	Available for Sale Investments	Accumulated Other Comprehensive Income Items
Beginning balance, December 31, 2012	$ 1,100	$ 1	$ 1,101
Other comprehensive (loss) income before reclassifications	(681)	11	(670)
Amounts reclassified from accumulated other comprehensive income	—	(12)	(12)
Net current-period other comprehensive loss	(681)	(1)	(682)
Ending balance, December 31, 2013	$ 419	$ —	$ 419

The following table presents the tax (expense) benefit allocated to each component of other comprehensive (loss) income (in thousands):

	Twelve Months Ended December 31, 2013		
	Before Tax	Tax Benefit	Net of Tax
Foreign currency translation adjustments	$ (681)	$ —	$ (681)
Unrealized (losses) gains on available-for-sale investments	(2)	1	(1)
Other comprehensive (loss) income	$ (683)	$ 1	$ (682)

NOTE 11 – OTHER ASSETS

Other assets consisted of the following at December 31 (in thousands):

	2013	2012
Purchased technology rights (net of accumulated amortization of $3,965 and $2,390 in 2013 and 2012, respectively)	$ 2,943	$ 3,765
Cost-method investments	1,000	5,081
Other	959	556
	4,902	9,402
Less: Current portion	(965)	(939)
	$ 3,937	$ 8,463

For the years ended December 31, 2013 and 2012, the Company recognized amortization expense related to the amortization of purchased technology rights of approximately $1,639,000 and $1,304,000, respectively. Future amortization expense is estimated to be $1,345,000 in 2014, $408,000 in 2015, $182,000 in 2016, $161,000 in 2017, $103,000 in 2018 and $744,000 thereafter.

Non-Marketable Securities and Other-Than-Temporary Impairment

The Company owns a minority interest in a private company based in the U.S. through its investment of $1.0 million in the third quarter of 2012. This minority interest is included at cost in other long-term assets on the Company's Consolidated Balance Sheets as the Company does not have significant influence over the investee as the Company owns less than 20% of the voting equity and the investee is not publicly traded.

The Company's other minority interest in a private company was acquired by a third party in July 2013 and, as a result, the Company's minority interest in that private company was sold. The Company realized a gain of $5.4 million on this minority interest investment in the third quarter of 2013.

The Company regularly evaluates the carrying value of cost-method investments for impairment and whether any events or circumstances are identified that would significantly harm the fair value of the investments. The primary indicators the Company utilizes to identify these events and circumstances are the investee's ability to remain in business, such as the investee's liquidity and rate of cash use, and the investee's ability to secure additional funding and the value of that additional funding. In the event a decline in fair value is judged to be other-than-temporary, the Company will record an other-than-temporary impairment charge in other income, net in the Consolidated Statements of Operations. As the inputs utilized for the Company's periodic impairment assessment are not based on observable market data, these cost-method investments are classified within Level 3 of the fair value hierarchy. To determine the fair value of these investments, the Company uses all available financial information related to the entities, including information based on recent or pending third-party equity investments in these entities. In certain instances, a cost-method investment's fair value is not estimated as there are no identified events or changes in the circumstances that may have a significant adverse effect on the fair value of the investment and to do so would be impractical.

NOTE 12 - ACCRUED WARRANTY COSTS

Sales of certain of the Company's systems are subject to a warranty. System warranties typically extend for a period of twelve months from the date of installation or no more than 15 months from the date of shipment. The Company estimates the amount of warranty claims on sold products that may be incurred based on current and historical data. The actual warranty expense could differ from the estimates made by the Company based on product performance. Warranty expenses are evaluated and adjusted periodically.

The following table summarizes the changes in the warranty accrual (in thousands):

Accrued warranty costs at December 31, 2010	$ 477
Warranty expenses	(1,131)
Accrual for warranty costs	1,335
Accrued warranty costs at December 31, 2011	681
Warranty expenses	(1,119)
Accrual for warranty costs	1,041
Accrued warranty costs at December 31, 2012	603
Warranty expenses	(1,150)
Accrual for warranty costs	1,268
Accrued warranty costs at December 31, 2013	$ 721

NOTE 13 - INCOME TAXES

The components of income before income taxes for the years ended December 31 are as follows (in thousands):

	2013	2012	2011
Domestic	$ 20,301	$ 28,241	$ 26,373
Foreign	(8,877)	(5,461)	(2,444)
Total	$ 11,424	$ 22,780	$ 23,929

The components of the provision (benefit) for income taxes attributable to continuing operations for the years ended December 31 are as follows (in thousands):

	2013	2012	2011
Current:			
Federal	$ 4,024	$ 4,158	$ 8,630
Foreign	406	(129)	494
State	720	928	1,420
Total current	$ 5,150	$ 4,957	$ 10,544
Deferred:			
Federal	(381)	3,945	(604)
Foreign	(1)	1,179	(207)
State	(440)	292	(278)
Total deferred	(822)	5,416	(1,089)
Total provision for income taxes	$ 4,328	$ 10,373	$ 9,455

The provision for income taxes differs from the amount computed by applying the statutory federal rate to pretax income as follows (in percentages):

	Year Ended December 31,		
	2013	2012	2011
Statutory tax rate	35.0 %	35.0 %	35.0 %
State taxes, net of federal benefit	0.3 %	3.9 %	2.7 %
Permanent items	(4.6)%	2.0 %	5.3 %
Effect of foreign operations	3.1 %	0.5 %	(0.4)%
Research and incentive tax credit generated	(43.0)%	(7.1)%	(2.5)%
Valuation allowance	42.6 %	11.6 %	(1.3)%
Income tax reserves	4.9 %	0.1 %	0.5 %
Other	(0.4)%	(0.5)%	0.2 %
	37.9 %	45.5 %	39.5 %

The federal research and experimentation tax credit was extended on January 2, 2013 by the signing of the American Taxpayer Relief Act of 2012 (the Act). The Act retroactively extended this credit from January 1, 2012 through December 31, 2013. Because the Act was enacted during 2013, an income tax benefit of $664,000 related to the 2012 research and experimentation tax credit is reflected in the 2013 income tax provision along with an income tax benefit of $1.3 million related to the 2013 research and experimentation credit. The federal research and experimentation tax credit expired on December 31, 2013 and, if not renewed under similar terms as in prior years, will impact the Company's future financial results.

The Company accounts for income taxes using the liability method in accordance with ASC 740 "Income Taxes". Under this method, deferred income taxes are recognized for the future tax consequences of differences between the tax and financial accounting bases of assets and liabilities at the end of each reporting period. Deferred income taxes are based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized. Significant components of the Company's deferred tax assets and liabilities as of December 31 are as follows (in thousands):

	2013	2012	2011
Deferred tax assets:			
Current deferred tax assets			
Accrued liabilities and other	$ 7,114	$ 6,082	$ 6,830
Deferred revenue	1,820	—	—
Gross current deferred tax assets	8,934	6,082	6,830
Valuation allowance	(792)	(536)	(839)
Net current deferred tax assets	8,142	5,546	5,991
Noncurrent deferred tax assets			
Net operating loss and credit carryforwards	68,973	67,018	48,633
Deferred revenue	927	2,729	2,867
Depreciation and amortization	7,899	8,370	7,568
Stock compensation	4,871	5,851	5,904
Gross noncurrent deferred tax assets	82,670	83,968	64,972
Valuation allowance	(49,294)	(44,132)	(39,229)
Net noncurrent deferred tax assets	$ 33,376	$ 39,836	$ 25,743
Deferred tax liabilities:			
Current deferred tax liabilities			
Accrued liabilities and other	$ (877)	$ (763)	$ —
Total current deferred tax liabilities	(877)	(763)	—
Net current deferred tax asset	7,265	4,783	5,991
Noncurrent deferred tax liabilities			
Depreciation and amortization	(19,788)	(22,784)	(9,352)
Stock compensation	(53)	(61)	(92)
Acquired intangibles	(1,622)	(2,631)	(3,482)
Total noncurrent deferred tax liabilities	(21,463)	(25,476)	(12,926)
Net noncurrent deferred tax asset	11,913	14,360	12,817
Net deferred tax assets	$ 19,178	$ 19,143	$ 18,808

Under ASC 740, the Company can only recognize a deferred tax asset to the extent that it is "more likely than not" that these assets will be realized. In evaluating the need for a valuation allowance, all available evidence, both positive and negative, is considered to determine whether, based on the weight of that evidence, a valuation allowance is needed. The Company has established a valuation allowance against a portion of its remaining deferred tax assets because it is more likely than not that certain deferred tax assets will not be realized. In determining whether deferred tax assets are realizable, the Company considered numerous factors including historical profitability, the amount of future taxable income and the existence of deferred tax liabilities that can be used to realize deferred tax assets. The valuation allowance increased approximately $5.4 million in 2013 from 2012 primarily due to the Canadian and Australian subsidiaries which have a full valuation allowance recorded against their net deferred tax assets.

At December 31, 2013, the Company had gross federal, state and foreign net operating loss carryforwards of approximately $79.9 million, $53.8 million, and $28.5 million respectively. These losses expire beginning in 2015, except for $4.9 million of losses that have unlimited carryforward periods. Approximately $20.1 million of the federal net operating loss carryforward is attributable to excess employee stock option deductions, the benefit from which will be allocated to additional paid-in capital rather than current earnings if subsequently realized. Federal and state net operating losses of approximately $59.8 million and $53.8 million, respectively, were acquired as part of the acquisitions of U.S. companies. These acquired net operating losses are subject to annual limitations due to the "change of ownership" provisions of Section 382 of the Internal Revenue Code of 1986 and similar state provisions. The Company has federal, state, and foreign credit carryforwards of approximately $10.4 million, $1.8 million, and $10.9 million, respectively. These credits begin to expire in 2018, except for approximately $4.4 million which have an indefinite carryforward period. Approximately $6.9 million of the federal credits are attributable to excess employee stock option deductions, the benefit of which has been allocated to additional paid-in capital rather than current earnings when subsequently realized. State credits of approximately $1.1 million were acquired as part of the acquisition of GenturaDx in 2012 and are subject to annual limitations due to the "change of ownership" provisions of Section 382 of the Internal Revenue Code of 1986 and similar California state tax provisions. In addition, the Company has a gross scientific research and experimental development pool in Canada of approximately $57.2 million which has an indefinite carryforward period.

Undistributed earnings of the Company's foreign subsidiaries are considered permanently reinvested and, accordingly, no provision for U.S. federal or state income taxes has been provided thereon. The cumulative amount of undistributed earnings of the Company's non-US subsidiaries was approximately $920,000 at December 31, 2013, $1.2 million at December 31, 2012, and $2.1 million at December 31, 2011. Determination of the amount of unrecognized deferred income tax liabilities on these earnings is not practicable at this time because such liability, if any, is dependent upon circumstances existing if and when remittance occurs.

As of December 31, 2013 and December 31, 2012, the Company had recorded gross unrecognized tax benefits of approximately $2.3 million and $1.8 million, respectively. All of the unrecognized tax benefits as of December 31, 2013, if recognized, would impact the effective tax rate. The Company recognizes interest expense and penalties associated with uncertain tax positions as a component of income tax expense. During the years ended December 31, 2013 and 2012, the Company recognized approximately $14,000 and $14,000 in tax related interest and penalties, respectively. Reserves for interest and penalties as of December 31, 2013 and 2012 are not significant as the Company has net operating loss carryovers.

A reconciliation of the beginning and ending balance of unrecognized tax benefits is as follows (in thousands):

	2013	2012
Balance at beginning of year	$ 1,760	$ 1,370
Additions based on tax positions related to the current year	335	390
Additions for tax positions of prior years	238	—
Reductions for tax positions of prior years	—	—
Settlements	—	—
Lapse of statute of limitations	—	—
Cumulative translation adjustment	—	—
Balance at end of year	$ 2,333	$ 1,760

As of December 31, 2013, there were no unrecognized tax benefits that the Company expects would change significantly over the next 12 months.

The Company files U.S., state, and foreign income tax returns in jurisdictions with varying statutes of limitations. In the United States and Canada, the statute of limitations with respect to the federal income tax returns for tax years after 2009 are open to audit; however, since the Company has net operating losses, the taxing authority has the ability to review tax returns prior to the 2009 tax year and make adjustments to these net operating loss carryforwards. There are numerous other income tax jurisdictions for which tax returns are not yet settled, none of which are individually significant. The Company is currently under audit in Canada for its scientific research and experimental development pool claims for the 2009 through 2011 tax years. Although the Company does not expect a material adjustment, the outcome of the audit is not known at this time. The Company is not under audit in any other major taxing jurisdictions at this time.

NOTE 14 - LONG-TERM DEBT

On December 31, 2013, long-term debt consisted of a loan payable to TPC valued at $0.5 million and the related short term payable of $1.2 million.

On December 12, 2003, Tm Bioscience entered into an agreement with the Ministry of Industry of the government of Canada under which the Government agreed to invest up to $7.3 million (Cdn) relating to the development of several genetic tests. This agreement was amended in March 2009. Funds were advanced from Technology Partnerships Canada (TPC), a special operating program. The actual payments received by the Company were predicated on eligible expenditures made during the amended project period, which ended July 31, 2008. As of December 31, 2013, the Company had received $4.5 million from TPC ($4.9 million (Cdn)), which is expected to be repaid along with approximately $1.5 million of imputed interest for a total of approximately $6.1 million ($6.5 million (Cdn)). Approximately $4.4 million ($4.7 million (Cdn)) of the interest and advances has been repaid as of December 31, 2013.

Tm Bioscience agreed to repay the TPC funding through a royalty on revenues. This liability was assumed by the Company as part of the acquisition of TM Bioscience and the liability was recorded at fair value as of the date of acquisition. This liability is subject to adjustments for foreign currency translation effects as it is a foreign currency denominated balance. Royalty payments commenced in 2007 at a rate of 1% of total LMD revenue and at a rate of 2.5% for 2008 and thereafter. Aggregate royalty repayment will continue until total advances plus imputed interest has been repaid or until December 31, 2016, whichever is earlier. The repayment obligation expires on December 31, 2016 and any unpaid balance will be cancelled and forgiven on that date. Should the term of repayment be shorter than expected due to higher than expected assay revenue, the effective interest rate would increase as repayment is accelerated. Repayments denominated in U.S. Dollars are currently projected to be as shown in the table below, but actual future sales generating a repayment obligation will vary from this projection and are subject to the risks and uncertainties described elsewhere in this report, including under “Risk Factors” and “Safe Harbor Cautionary Statement.” Furthermore, payments reflected in U.S. Dollars are subject to adjustment based upon applicable exchange rates as of the reporting date.

Estimated repayments on the debt for the next five years and thereafter are as follows (in thousands):

2014	$	1,194
2015		469
2016		—
2017		—
2018		—
Thereafter		—
	$	1,663
Less: Amount representing implied interest		(6)
Total principal repayments	$	1,657
Discount		—
Total long-term debt	$	1,657
Less: Current portion of long-term debt		(1,194)
	$	463

In 2013 and 2012, the Company had imputed interest expense related to its long-term debt of $48,000 and $89,000, respectively. The effective interest rate was 3.90% as of December 31, 2013 and 2012. At December 31, 2013 and 2012, the fair value of the Company’s long-term debt was approximately $1.5 million and $2.5 million, respectively. The Company’s long-term debt is classified as a Level 3 instrument and the Company has used a discounted cash flow (DCF) model to determine the estimated fair value as of December 31, 2013 and 2012. The assumptions used in preparing the DCF model include estimates for (i) the amount and timing of future interest and principal payments and (ii) the rate of return indicative of the investment risk in the ownership of the TPC debt. In making these assumptions, the Company considered relevant factors including the likely timing of principal repayments and the probability of full repayment considering the timing of royalty payments based upon total revenue.

NOTE 15 - NET INCOME PER SHARE

The following table sets forth the computation of basic and diluted net income per share (in thousands, except share and per share data):

	Year Ended December 31,		
	2013	2012	2011
Numerator:			
Net income	$ 7,096	$ 12,407	$ 14,474
Denominator:			
Denominator for basic net income per share - weighted average common stock outstanding	40,799	40,927	41,262
Effect of dilutive securities:			
Stock options and awards	1,187	957	1,275
Denominator for diluted net income per share - weighted average shares outstanding - diluted	41,986	41,884	42,537
Basic net income per share	$ 0.17	$ 0.30	$ 0.35
Diluted net income per share	$ 0.17	$ 0.30	$ 0.34

Restricted stock awards (RSAs) and stock options to acquire 381,000, 364,000, and 141,000 shares for the years ended December 31, 2013, 2012 and 2011, respectively, were excluded from the computations of diluted earnings per share because the effect of including the RSAs and stock options would have been anti-dilutive.

NOTE 16 - STOCKHOLDERS' EQUITY, EMPLOYEE BENEFIT PLANS AND STOCK-BASED COMPENSATION

Preferred Stock

The Company's Board of Directors has the authority to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the Company's stockholders. At December 31, 2013 and 2012, there was no preferred stock issued and outstanding.

Stock-Based Compensation

At December 31, 2013, the Company has one stock-based employee compensation plan pursuant to which grants may be made: the Second Amended and Restated 2006 Equity Incentive Plan (the "Equity Incentive Plan") which was approved at the Company's Annual Meeting on May 25, 2006 and amended at the Company's Annual Meetings on each of May 21, 2009 and May 17, 2012. No further grants shall be made pursuant to the 2000 Long-Term Incentive Plan (the "2000 Plan"), the 2001 Broad-Based Stock Option Plan (the "2001 Plan") or the 2006 Management Stock Purchase Plan (the "MSPP"), which was terminated effective March 7, 2012. In addition, at December 31, 2013, the Company has one plan pursuant to which discount purchases may be made by the participants in such plan: the Luminex Corporation Employee Stock Purchase Plan (the "ESPP"), which was approved at the Company's Annual Meeting on May 17, 2012.

Equity Incentive Plans

Under the Company's Equity Incentive Plan, 2000 Plan, and the 2001 Plan, certain employees, consultants and non-employee directors have been granted RSAs, restricted share units (RSUs) and options to purchase shares of common stock. The options, RSAs, and RSUs generally vest in installments over a four to five year period, and the options expire either five or ten years after the date of grant. Under the Equity Incentive Plan, certain employees, directors of, and consultants to the Company are eligible to be granted RSAs, RSUs, and options to purchase common stock. The ESPP provides for the granting of rights to certain employees of the Company to defer an elected percentage, up to 15%, of their base salary through the purchase of the Company's common stock, discounted by 15%. As of December 31, 2013, there were approximately 3.9 million shares authorized for future issuance under the Company's Equity Incentive Plan and approximately 393,000 shares eligible for purchase pursuant to the terms and conditions of the ESPP as more fully described below.

The Equity Incentive Plan, the ESPP, the 2000 Plan and the 2001 Plan are administered by the Compensation Committee of the Board of Directors. The Compensation Committee has the authority to determine the terms and conditions under which awards will be granted from the Equity Incentive Plan, including the number of shares, vesting schedule and term, as applicable. Any option award exercise prices, as set forth in the Equity Incentive Plan, will be equal to the fair market value on the date of grant. Under certain circumstances, the Company may repurchase previously granted RSAs and RSUs.

On March 9, 2010, March 25, 2011, March 7, 2012 and March 19, 2013 the Compensation Committee of the Board adopted the Luminex Corporation 2010 Long Term Incentive Plan (the "2010 LTIP"), the Luminex Corporation 2011 Long Term Incentive Plan (the "2011 LTIP") the the Luminex Corporation 2012 Long Term Incentive Plan (the "2012 LTIP") and the 2013 Long Term Incentive Plan (the "2013 LTIP"), respectively. Awards under all of the LTIP plans were granted by the Compensation Committee in the form of RSUs and are to be treated as Performance Awards under the Equity Incentive Plan. Grants of RSUs under the LTIP plans shall initially be unvested and represent the maximum amount of shares that participants may receive under the plan, assuming achievement of the maximum level of performance goals established for the grant, and subject to adjustment for certain transactions and other extraordinary or non-recurring events that may affect Luminex or its financial performance.

On March 9, 2010, the Company's Chief Executive Officer was granted an award for an unvested RSU under the 2010 LTIP for up to $2,200,000 worth of shares (grant date fair value) of Luminex common stock, and the Company's Chief Financial Officer was granted an award for an unvested RSU under the 2010 LTIP for up to $825,000 worth of shares (grant date fair value) of Luminex common stock. The actual maximum number of shares of 132,930 shares and 49,848 shares for the CEO and CFO, respectively, was determined on March 11, 2010, based upon the closing price of the stock on that date. Performance goals under the grants are based on the following components, with the following weights given to each: 50% on the trading price of Luminex common stock at the end of the performance period and 50% on Luminex's operating cash flows per diluted share at the end of the performance period.

The 2010 LTIP performance goals are as described below:

- Partial or complete achievement of the trading price goal is dependent upon the average closing price of Luminex's common stock for the twenty consecutive trading days ending December 31, 2012, inclusive, subject to certain adjustments as described in the 2010 LTIP. There is a range of trading price targets as follows: a minimum threshold of $22.22 per share, a target of $25.25 per share, and a maximum goal of $40.09 per share. No shares were earned for this goal under the 2010 LTIP.

- Partial or complete achievement of the operating cash flow goal is dependent upon the total operating cash flows per diluted share for the four quarters ended December 31, 2012, as further described in the 2010 LTIP. Total operating cash flows means Luminex's GAAP net cash provided by operating activities as shown on its financial statements for the 12 month period ended December 31, 2012, as further described in the 2010 LTIP. There is a range of targets as follows: a minimum threshold of $0.212 per share, a target of $0.241 per share, and a maximum goal of $0.382 per share. The final determination and certification of the shares earned for this goal was made by the compensation committee of the Board of Directors on February 27, 2013 resulting in the Chief Executive Officer earning 18,835 shares and the Chief Financial Officer earning 7,063 shares.

On March 25, 2011, the Company's Chief Executive Officer was granted an award for an unvested RSU under the 2011 LTIP for up to $2,200,000 worth of shares (grant date fair value) of Luminex common stock, and the Company's Chief Financial Officer was granted an award for an unvested RSU under the 2011 LTIP for up to $825,000 worth of shares (grant date fair value) of Luminex common stock. The actual maximum number of shares of 119,304 shares and 44,740 shares for the CEO and CFO, respectively, was determined on March 25, 2011, based upon the closing price of the stock on that date. Performance goals under the grants are based on the following components, with the following weights given to each: 50% on the trading price of Luminex common stock at the end of the performance period and 50% on Luminex's total income from operations per diluted share at the end of the performance period.

The 2011 LTIP performance goals are as described below:

- Partial or complete achievement of the trading price goal is dependent upon the average closing price of Luminex's common stock for the twenty consecutive trading days ending December 31, 2013, inclusive, subject to certain adjustments as described in the 2011 LTIP. There is a range of trading price targets as follows: a minimum threshold of $28.50 per share, a target of $32.38 per share, and a maximum goal of $51.42 per share. No shares were earned for this goal under the 2011 LTIP.

- Partial or complete achievement of the income from operations goal is dependent upon the total income from operations per diluted share for the year ended December 31, 2013, as further described in the 2011 LTIP. Total income from operations means Luminex's income from operations as reflected on the Company's Consolidated Statement of Comprehensive Operations for the year ended December 31, 2013, as further described in the 2011 LTIP. There is a range of targets as follows: a minimum threshold of $0.73 per share, a target of $0.81 per share, and a maximum goal of $1.19 per share. The final determination and certification of the shares earned for this goal will be made by the compensation committee after the filing of this Annual Report on Form 10-K.

On March 7, 2012, the Company's Chief Executive Officer was granted an award for an unvested RSU under the 2012 LTIP for up to $2,200,000 worth of shares (grant date fair value) of Luminex common stock, and the Company's Chief Financial Officer was granted an award for an unvested RSU under the 2012 LTIP for up to $550,000 worth of shares (grant date fair value) of Luminex common stock. The actual maximum number of shares of 98,434 shares and 24,608 shares for the CEO and CFO, respectively, was determined on March 7, 2012, based upon the closing price of the stock on that date. Performance goals under the grants are based on the following components, with the following weights given to each: 50% on the trading price of Luminex common stock at the end of the performance period and 50% on Luminex's total income from operations at the end of the performance period.

The 2012 LTIP performance goals are as described below:

- Partial or complete achievement of the trading price goal is dependent upon the average closing price of Luminex's common stock for the twenty consecutive trading days ending December 31, 2014, inclusive, subject to certain adjustments as described in the 2012 LTIP. There is a range of trading price targets as follows: a minimum threshold of $29.29 per share, a target of $32.54 per share, and a maximum goal of $39.75 per share.

- Partial or complete achievement of the total income from operations goal is dependent upon the total income from operations for the year ended December 31, 2014, as further described in the 2012 LTIP. Total income from operations means Luminex's income from operations as reflected on the Company's Consolidated Statement of Comprehensive Operations for the year ended December 31, 2014, as further described in the 2012 LTIP. There is a range of targets as follows: a minimum threshold of $58,663,000, a target of $67,286,000, and a maximum goal of $85,831,000.

On March 19, 2013, the Company's Chief Executive Officer was granted an award for an unvested RSU under the 2013 LTIP for up to $1,200,000 worth of shares (grant date fair value) of Luminex common stock, and the Company's Chief Financial Officer was granted an award for an unvested RSU under the 2013 LTIP for up to $300,000 worth of shares (grant date fair value) of Luminex common stock. The actual maximum number of shares of 71,727 shares and 17,931 shares for the CEO and CFO, respectively, was determined on March 19, 2013, based upon the closing price of the stock on that date. The performance goal under the grants is based on Luminex's fully diluted earnings per share at the end of the performance period (Adjusted EPS Goal).

The 2013 LTIP performance goal is as described below:

- Partial or complete achievement of the Adjusted EPS Goal is dependent upon Luminex's fully diluted earnings per share for the year ended December 31, 2015, as further described in the 2013 LTIP. There is a range of targets as follows: a minimum threshold of $1.06 per share, a target of $1.18 per share, and a maximum goal of $1.36 per share.

In the event that a participant achieves less than the maximum level of the performance goal, the total number of shares represented by such RSU shall be reduced to reflect where actual performance lies in the range of performance goals and weighted aggregate corresponding payout opportunities established for the grant. Calculation of shares between threshold and maximum performance shall be determined based on straight-line interpolation.

Accounting for Stock Compensation

Stock-based compensation costs are generally based on the fair value calculated from the Black-Scholes option-pricing model on the date of grant for stock options and market value on the date of grant for RSAs. The fair values of stock are amortized as compensation expense on a straight-line basis over the vesting period of the grants.

In accordance with ASC 718 the Company evaluates the assumptions used in the Black-Scholes model at each grant date using a consistent methodology for computing expected volatility, expected term and risk-free rate of return. Calculation of expected volatility is based on historical volatility. The expected term is calculated using the contractual term of the options as well as an analysis of the Company's historical exercises of stock options. The estimate of the risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant. The Company has never paid cash dividends and does not currently intend to pay cash dividends, and thus has assumed a 0% dividend yield. The assumptions used are summarized in the following table:

	2013	2012	2011
Dividend yield	—%	—%	—%
Expected volatility	0.5	0.5	0.5
Risk-free rate of return	1.2%	1.2%	2.3%
Expected life	7 years	7 years	7 years
Weighted average fair value at grant date	$ 8.79	$ 7.78	$ 7.67

As part of the requirements of ASC 718, the Company is required to estimate potential forfeitures of stock grants and adjust compensation cost recorded accordingly. The estimate of forfeitures is based on historical forfeiture performance and will be adjusted over the requisite service period to the extent that actual forfeitures differ, or are expected to differ, from such estimates. Changes in estimated forfeitures will be recognized through a cumulative catch-up adjustment in the period of evaluation and will also impact the amount of stock compensation expense to be recognized in future periods.

The Company's stock option activity for the years ended December 31, 2011, 2012 and 2013 is as follows:

Stock Options	Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2010	2,367	$ 10.82		
Granted	84	18.26		
Exercised	(304)	11.65		
Cancelled or expired	(127)	23.74		
Outstanding at December 31, 2011	2,020	$ 10.19		
Granted	160	22.53		
Exercised	(487)	7.22		
Cancelled or expired	(17)	20.37		
Outstanding at December 31, 2012	1,676	$ 12.13		
Granted	159	17.24		
Exercised	(835)	9.06		
Cancelled or expired	(33)	19.80		
Outstanding at December 31, 2013	967	$ 15.35	4.65	$ 4,417
Vested at December 31, 2013 and expected to vest	965	$ 15.34	4.64	$ 4,413
Exercisable at December 31, 2013	701	$ 13.91	3.14	$ 4,066

During the years ended December 31, 2013, 2012 and 2011, the total exercise intrinsic value of stock options exercised was $8.7 million, $6.9 million and $2.9 million, respectively, and the total fair value of stock options that vested was $2.5 million, $2.0 million and $1.9 million, respectively. Exercise intrinsic value represents the difference between the market value of the Company's common stock at the time of exercise and the strike price of the stock option. The Company had $1.9 million of total unrecognized compensation costs related to stock options at December 31, 2013 that are expected to be recognized over a weighted-average period of 1.7 years.

The Company's restricted share activity for the years ended December 31, 2011, 2012 and 2013 is as follows:

Restricted Stock Awards	Shares (in thousands)	Weighted Average Grant Price
Non-vested at December 31, 2010	1,093	$ 16.41
Granted	239	18.73
Vested	(362)	16.11
Cancelled or expired	(67)	16.57
Non-vested at December 31, 2011	903	$ 17.13
Granted	329	22.50
Vested	(339)	16.75
Cancelled or expired	(75)	18.59
Non-vested at December 31, 2012	818	$ 19.32
Granted	354	17.28
Vested	(267)	18.83
Cancelled or expired	(79)	19.15
Non-vested at December 31, 2013	826	$ 18.62

Restricted Stock Units	Shares (in thousands)	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value (in thousands)
Non-vested at December 31, 2010	768		
Granted	269		
Vested	(58)		
Cancelled or expired	(152)		
Non-vested at December 31, 2011	827		
Granted	246		
Vested	(80)		
Cancelled or expired	(118)		
Non-vested at December 31, 2012	875		
Granted	199		
Vested	(79)		
Cancelled or expired	(162)		
Non-vested at December 31, 2013	833	1.82	$ 16,167
Vested at December 31, 2013 and expected to vest	578	1.81	$ 10,439
Exercisable at December 31, 2013	40	0.00	$ 766

As of December 31, 2013, there was $17.1 million of unrecognized compensation cost related to RSAs and RSUs. That cost is expected to be recognized over a weighted average-period of 2.6 years. The total fair value of restricted shares vested during the year ended December 31, 2013, 2012 and 2011 was $7.2 million, $8.3 million, and $7.3 million, respectively.

RSAs and RSUs may be granted at the discretion of the Board of Directors under the Equity Incentive Plan in connection with the hiring or retention of key employees and are subject to certain conditions. Restrictions expire at certain dates after the grant date in accordance with specific provisions in the applicable agreement. During the year ended December 31, 2013, the Company awarded 353,537 shares of restricted stock awards, which had a fair value at the date of grant ranging from $16.18–$18.11. During the year ended December 31, 2012, the Company awarded 329,096 shares of restricted stock awards, which had a fair value at the date of grant ranging from $17.26–$22.71. During the year ended December 31, 2011, the Company awarded 238,812 shares of restricted stock awards, which had a fair value at the date of grant ranging from $18.26–$21.00. During the year ended December 31, 2013, the Company awarded 199,051 shares of restricted stock units, which had a fair value at the date of grant ranging from $16.73–$20.51. During the year ended December 31, 2012, the Company awarded 246,205 shares of restricted stock units, which had a fair value at the date of grant ranging from $16.16–$23.82. During the year ended December 31, 2011, the Company awarded 268,882 shares of restricted stock units, which had a fair value at the date of grant ranging from $18.26–$20.92. Compensation under these restricted stock awards and units was charged to expense over the restriction period and amounted to $7.5 million, $8.4 million, and $10.2 million in 2013, 2012 and 2011, respectively.

There were no significant stock compensation costs capitalized into assets as of December 31, 2013, 2012 or 2011.

The Company received $7.6 million, $3.5 million, and $3.5 million for the exercise of stock options during the years ended December 31, 2013, 2012 and 2011, respectively. Cash was not used to settle any equity instruments previously granted. The Company issued shares pursuant to grants relating to each of the Equity Incentive Plan, 2000 Plan and 2001 Plan from reserves upon the exercise of stock options and vesting of RSAs.

Employee Savings Plans and Other Benefit Plans

Effective January 1, 2001, the Company began sponsoring a retirement plan authorized by section 401(k) of the Internal Revenue Code for the Company's employees in the United States. In accordance with the 401(k) plan, all employees are eligible to participate in the plan on the first day of the month following the commencement of full time employment. For 2013, 2012 and 2011, each employee could contribute a percentage of compensation up to a maximum of $17,500, $17,000, and $16,500 per year, respectively, with the Company matching 50% of each employee's contributions. Effective January 1, 2010, the Company began contributing to a deferred profit sharing plan for its Canadian employees. All Canadian employees are eligible to participate in the plan. The Company's contributions to these plans for 2013, 2012 and 2011 were $2.4 million, $2.1 million, and $1.6 million, respectively.

Several of the Company's Netherlands employees are covered by a defined benefit plan. The cost and total liability to the Company is not significant. Effective January 1, 2011, all of the Company's new hires in the Netherlands are eligible to participate in a defined contribution plan.

Employee Stock Purchase Plan

In May 2012, the Company's stockholders approved the ESPP Plan, which provides for the granting of up to 500,000 shares of the Company's common stock to eligible employees. The ESPP period is semi-annual and allows participants to purchase the Company's common stock at 85% of the lesser of (i) the closing market value per share of the common stock on the first trading date of the option period or (ii) the closing market value per share of the common stock on the last trading date of the option period. The first plan option period began on July 1, 2012. As of December 31, 2013 and 2012, 106,522 shares and 35,296 shares, respectively had been issued out of the ESPP. The related stock-based compensation expense was $0.4 million and $0.2 million for 2013 and 2012, respectively.

The Company uses the Black-Scholes model to estimate the fair value of shares to be issued as of the grant date using the following weighted average assumptions:

	2013
Assumptions:	
Risk-free interest rates	.09% to 0.15%
Expected life	0.5 years
Expected volatility	.51
Dividend yield	—%

The following are the stock-based compensation costs recognized in the Company's consolidated statements of comprehensive income (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Cost of revenue	$ 856	$ 947	$ 917
Research and development	2,553	2,034	2,126
Selling, general and administrative	5,812	6,934	8,374
Stock-based compensation costs reflected in net income	$ 9,221	$ 9,915	$ 11,417

Reserved Shares of Common Stock

At December 31, 2013 and 2012, the Company had reserved 4,275,753 and 4,827,116 shares of common stock, respectively, for the issuance of common stock upon the exercise of options, issuance of RSAs, RSUs, purchase of common stock pursuant to the ESPP or other awards issued pursuant to the Company's equity plans and arrangements. The following table summarizes the reserved shares by plan as of December 31, 2013:

	Options Outstanding	Shares Available for Future Issuance	Total Shares Reserved
2000 Plan	97,000	—	97,000
2001 Plan	27,060	—	27,060
2006 Equity Incentive Plan	1,715,876	3,882,275	5,598,151
ESPP Plan	—	393,478	393,478
Balthrop Option	200,000	—	200,000
	2,039,936	4,275,753	6,315,689

NOTE 17 - COMMITMENTS AND CONTINGENCIES

Lease Arrangements

The Company has operating leases related primarily to its office and manufacturing facilities with original lease periods of up to ten years. Rental and lease expense for these operating leases for the years 2013, 2012 and 2011 totaled approximately $5.1 million, $5.5 million, and $3.6 million, respectively.

In the fourth quarter of 2012, the Company ceased using the Hayward, California facility, whose operating lease commitment was acquired under the GenturaDx acquisition in July 2012. The Company has accrued a liability based upon the estimated fair value of the costs that will continue to be incurred under the lease, including an estimate of sublease rental income.

Minimum annual lease commitments as of December 31, 2013 under non-cancellable leases for each of the next five years and in the aggregate were as follows (in thousands):

2014	$ 4,120
2015	2,785
2016	1,811
2017	1,498
2018	1,310
Thereafter	5,516
Total	$ 17,040

These non-cancellable lease commitments related to facilities include certain rent escalation provisions which have been included in the minimum annual rental commitments shown above. These amounts are recorded to expense on a straight-line basis over the life of the lease. In addition, some of the Company's leases contain options to renew the lease for five to ten years at the then prevailing market rental rate, right of first refusal to lease additional space that becomes available, or leasehold improvement incentives.

Non-Cancellable Purchase Commitments

As of December 31, 2013 the Company had approximately $12.1 million in purchase commitments with several of its inventory suppliers. These commitments require delivery of minimum amounts of components through 2018.

Employment Contracts

The Company has entered into employment contracts with certain of its key executives. Generally, certain amounts may become payable in the event the Company terminates the executives' employment without cause or the executive resigns for good reason.

Legal Proceedings

On August 30, 2012 Abbott Laboratories (Abbott) was named as a defendant in the complaint filed by ENZO Life Sciences, Inc. (ENZO) in U.S. District Court in Delaware for alleged infringement of its US Patent 7,064,197 as a result of Abbott's distribution of the Company's xTAG Respiratory Viral Panel. The Company and Abbott have entered into an agreement requiring Luminex to defend and indemnify Abbott for any alleged infringement resulting from its distribution of the Respiratory Viral Panel. The complaint seeks unspecified monetary damages and injunctive relief. Abbott filed an answer to the complaint on October 15, 2012. On November 30, 2012, the Company intervened in the lawsuit. On January 2, 2013 ENZO filed additional claims against the Company, alleging infringement of US Patent 7,064,197 resulting from the Company's sale of its xTAG, FlexScript LDA, SelecTAG, and xMAP Salmonella Serotyping Assay products and alleging infringement of US Patent 8,097,405 resulting from the Company's sale of Multicode products. The Company filed an answer to ENZO's additional claims on January 28, 2013. On October 2, 2013 ENZO filed additional claims against the Company, alleging infringement of U.S. Patent 6,992,180 resulting from the Company's sale of Multicode products. The Company filed an answer to ENZO's additional claims on October 21, 2013. A trial date has not been set. The parties to the lawsuit have engaged in the discovery process.

On November 1, 2013 Irori Technologies, Inc. filed a complaint against the Company in U.S. District Court in the Southern District of California, alleging infringement of its U.S. Patent numbers 6,372,428, 6,416,714, and 6,352,854 resulting from the Company's sale of its xMAP and xTAG based products. The complaint seeks unspecified monetary damages and injunctive relief. The Company filed a motion to dismiss on January 9, 2014. Irori filed its response to our motion to dismiss on February 7, 2014. The matter is currently before the court. A trial date has not been set.

When and if it appears probable in management's judgment that the Company will incur monetary damages or other costs in connection with any claims or proceedings, and such costs can be reasonably estimated, liabilities will be recorded in the financial statements and charges will be recorded against earnings. There can be no assurance that the Company will successfully defend this suit or that a judgment against the Company would not materially adversely affect operating results.

Other Matters

In January 2013, the Company finalized the termination of its molecular diagnostics distribution agreements and an expense of $7.0 million was recorded in selling, general and administrative expenses in the first quarter of 2013. All payments were made in the second quarter of 2013.

NOTE 18 - GUARANTEES

The terms and conditions of the Company's development and supply and license agreements with its strategic partners generally provide for a limited indemnification of such partners, arising from the sale of Luminex systems and consumables, against losses, expenses and liabilities resulting from third-party claims based on an alleged infringement on an intellectual property right of such third party. The terms of such indemnification provisions generally limit the scope of and remedies for such indemnification obligations to a multiple of amounts paid by such strategic partner to Luminex during the previous annual period(s). To date, the Company has not had to reimburse any of its strategic partners for any losses arising from such indemnification obligations.

NOTE 19 – SEGMENT AND GEOGRAPHIC INFORMATION

The Chief Operating Decision Maker (CODM) is Luminex's Chief Executive Officer. The CODM allocates resources to and assesses the performance of each operating segment using information about its revenue and projections. The Company's reporting segments reflect the nature of the products offered to customers and the markets served and are comprised of the following:

TSP segment - represents the Company's base business and consists of system sales to partners, raw bead sales, royalties, service and support of the technology, and other miscellaneous items.

ARP segment - primarily involved in the development and sale of assays on xMAP technology for use on Luminex's installed base of systems, as well as the sale of automated punching systems.

Intersegment sales are recorded at fixed prices which approximate the prices charged to third party strategic partners and are not a measure of segment operating earnings. Intersegment sales of approximately $10.7 million, $11.7 million, and $8.8 million for the years ended December 31, 2013, 2012 and 2011 have been eliminated upon consolidation, respectively.

The Company reclassified certain 2012 amounts in the accompanying consolidated financial statements to conform to the 2013 presentation. These reclassifications include $2.1 million of ARP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment research and development expenses for the year ended December 31, 2012 and $12.7 million of TSP segment selling, general and administrative expenses and the related headcount reclassified to ARP segment selling, general and administrative expenses for the year ended December 31, 2012. These reclassifications had no effect on the Company's consolidated comprehensive income or stockholders' equity.

Following is selected information for the years ended December 31, 2013 and 2012 or as of December 31, 2013 and 2012 (in thousands):

	2013			2012		
	TSP Segment	ARP Segment	Consolidated	TSP Segment	ARP Segment	Consolidated
Revenues from external customers	$ 132,023	$ 81,400	$ 213,423	$ 121,032	$ 81,550	$ 202,582
Depreciation and amortization	7,990	7,932	15,922	6,930	7,434	14,364
Operating profit (loss)	33,761	(28,994)	4,767	27,829	(5,113)	22,716
Segment assets	154,174	151,872	306,046	140,896	156,279	297,175

The table below provides information regarding long-term assets and product revenues from the Company's sales to customers within the United States and in foreign countries for the years ended December 31 (in thousands):

	Sales to Customers			Long-Term Assets		
	2013	2012	2011	2013	2012	2011
Domestic	$ 178,276	$ 167,924	$ 152,480	$ 109,448	$ 113,700	$ 66,094
Foreign:						
Europe	16,690	17,376	16,029	1,012	1,433	978
Asia	12,287	10,877	9,481	234	212	280
Canada	3,025	3,753	2,892	46,535 [1]	48,929 [1]	52,028 [1]
Australia	1,299	963	1,344	2,443 [2]	4,108 [3]	4,252 [3]
Other	1,846	1,689	2,113	4	16	38
	$ 213,423	$ 202,582	$ 184,339	$ 159,676	$ 168,398	$ 123,670

[1] $39.6 million of the long-term assets in Canada represents goodwill from the acquisition of Tm Bioscience.
[2] $2.3 million of the long-term assets in Australia represent goodwill from the acquisition of BSD.
[3] $2.7 million of the long-term assets in Australia represent goodwill from the acquisition of BSD.

The Company's aggregate foreign currency transaction losses of $385,000 and $215,000 were included in determining the consolidated results for the years ended December 31, 2013 and 2012, respectively.

NOTE 20 - RECENT ACCOUNTING PRONOUNCEMENTS

In February 2013, the FASB issued guidance on disclosures of additional information with respect to changes in accumulated other comprehensive income ("AOCI") balances by component and significant items reclassified out of AOCI. Expanded disclosures for presentation of changes in AOCI involve disaggregating the total change of each component of other comprehensive income as well as presenting separately for each such component the portion of the change in AOCI related to (1) amounts reclassified into income and (2) current-period other comprehensive income. Additionally, for amounts reclassified into income, disclosure in one location would be required, based upon each specific AOCI component, of the amounts impacting individual income statement line items. Disclosure of the income statement line item impacts will be required only for components of AOCI reclassified into income in their entirety. The disclosures required with respect to income statement line item impacts would be made in either the notes to the consolidated financial statements or parenthetically on the face of the financial statements. For the Company, this Accounting Standards Update is effective beginning January 1, 2013. Because this standard only impacts presentation and disclosure requirements, its adoption did not have a material impact on the Company's consolidated results of operations or financial condition.

In July 2013, the FASB issued guidance on the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The guidance requires an entity to present unrecognized tax benefits as a reduction to deferred tax assets when a net operating loss carryforward, similar tax loss or a tax credit carryforward exists, with limited exceptions. For the Company, this Accounting Standards Update is effective for fiscal years beginning on or after December 15, 2013, and for interim periods within those fiscal years. This pronouncement will have no effect on the financial statements as the Company has historically presented uncertain tax positions in accordance with this Accounting Standards Update.

NOTE 21 - SELECTED QUARTERLY RESULTS (UNAUDITED)

The following table sets forth certain quarterly financial data for the periods indicated (in thousands, except per share data):

	Quarter Ended			
	March 31, 2013	June 30, 2013	September 30, 2013	December 31, 2013
Revenue	$ 53,200	$ 54,287	$ 50,780	$ 55,156
Gross profit	37,957	38,057	30,781	36,831
Income (loss) from operations	(1,552)	5,041	(4,194)	5,472
Net income (loss)	(2,511)	3,695	796	5,116
Basic income (loss) per common share	(0.06)	0.09	0.02	0.12
Diluted income (loss) per common share	(0.06)	0.09	0.02	0.12

	Quarter Ended			
	March 31, 2012	June 30, 2012	September 30, 2012	December 31, 2012
Revenue	$ 48,727	$ 48,273	$ 50,047	$ 55,535
Gross profit	33,760	34,412	35,045	39,357
Income from operations	5,608	6,486	3,367	7,255
Net income	3,527	2,952	1,676	4,252
Basic income per common share	0.09	0.07	0.04	0.10
Diluted income per common share	0.08	0.07	0.04	0.10

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934 (Exchange Act), which are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. We carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of the end of the period covered by this report. Based on the evaluation and criteria of these disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2013 based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2013. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our independent registered public accounting firm, Ernst & Young LLP, has issued a report on their assessment of the effectiveness of our internal control over financial reporting, which is provided at Item 8, page 60.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Exchange Act Rule 13a-15(d) during the fourth quarter of 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM *9B. OTHER INFORMATION*

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item concerning our directors, audit committee, and audit committee financial experts, code of ethics and compliance with Section 16(a) of the Exchange Act is incorporated by reference to information under the captions "Proposal 1 - Election of Class I Directors", "Corporate Governance" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive proxy statement for our 2014 Annual Meeting of Stockholders to be held on or about May 15, 2014 (Proxy Statement). It is anticipated that our Proxy Statement will be filed with the Securities and Exchange Commission on or about March 31, 2014.

Pursuant to General Instruction G(3), certain information with respect to our executive officers is set forth under the caption "Executive Officers of the Registrant as of February 24, 2014" in Item 1 of this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this Item is incorporated by reference to the section of the Proxy Statement entitled "Executive and Director Compensation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this Item is incorporated by reference to the section of the Proxy Statement entitled "Security Ownership of Certain Beneficial Owners and Management."

Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth, as of December 31, 2013, certain information with respect to shares of our common stock authorized for issuance under our equity compensation plans.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A))
	(A)	(B)	(C)
Equity compensation plans approved by security holders	1,812,876	$ 6.94	4,275,753
Equity compensation plans not approved by security holders (1)	227,060	$ 9.97	—
Total	2,039,936		4,275,753

(1) Includes 27,060 shares of common stock subject to unexercised options and awards under the 2001 Plan and unexercised options to purchase 200,000 shares of the Company's common stock issued to Patrick J. Balthrop, Sr. on May 15, 2004 in connection with his hiring. Such option grants were issued separate and apart from the Company's stockholder approved equity incentive plans.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this Item is incorporated by reference to the sections of the Proxy Statement entitled "Certain Relationships and Related Party Transactions" and "Corporate Governance."

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required by this Item is incorporated by reference to the section of the Proxy Statement entitled "Ratification of Appointment of Independent Registered Public Accounting Firm."

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as a part of this Annual Report on Form 10-K:

(1) Financial Statements:

The Financial Statements required by this item are submitted in Part II, Item 8 of this report.

(2) Financial Statement Schedules:

All schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or in the notes thereto.

(3) Exhibits:

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
2.1	Agreement and Plan of Merger, dated July 9, 2012, by and among Luminex Corporation, Grouper Merger Sub, Inc., GenturaDx, Inc. and the Seller Representative (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed on July 12, 2012).*
3.1	Restated Certificate of Incorporation of the Company (Previously filed as an Exhibit to the Company's Registration Statement on Form S-1 (File No. 333-96317), filed February 7, 2000, as amended).
3.2	Amended and Restated Bylaws of the Company (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed September 16, 2008).
10.1#	2000 Long-Term Incentive Plan of the Company, as amended (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the quarterly period ended March 31, 2002).
10.2#	Form of Stock Option Award Agreement for the 2000 Long-Term Incentive Plan (Previously filed as an Exhibit to the Company's Registration Statement on Form S-1 (File No. 333-96317), filed February 7, 2000, as amended).
10.3#	2001 Broad-Based Stock Option Plan of the Company (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 30, 2001).
10.4#	Form of Option Grant Certificate for the 2001 Broad-Based Stock Option Plan (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 30, 2001).
10.5#	Form of Indemnification Agreement between the Company and each of the directors and executive officers of the Company (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed September 16, 2008).
10.6	Lease Agreement between Aetna Life Insurance Company, as Landlord, and Luminex Corporation, as Tenant, dated October 19, 2001 (Previously filed as an Exhibit to the Company's Form 10-Q (File No. 000-30109) for the quarterly period ended September 30, 2001).
10.7	First Amendment to Lease Agreement between Aetna Life Insurance Company, as Landlord, and Luminex Corporation as Tenant, dated July 25, 2002. (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the period ended June 30, 2002).
10.8	Lease Amendment between McNeil 4 & 5 Investors, LP, as Landlord, and Luminex Corporation, as Tenant, dated January 27, 2003 (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 31, 2002).
10. 9#	Employment Agreement, effective as of October 1, 2003, by and between Luminex Corporation and Harriss T. Currie (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 31, 2003).
10.10#	Employment Agreement effective as of October 1, 2003, by and between Luminex Corporation and David S. Reiter (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 31, 2003).

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
10.11#	Employment Agreement effective as of May 15, 2004, by and between Luminex Corporation and Patrick J. Balthrop (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed May 18, 2004).
10.12#	Employment Agreement effective as of May 23, 2005, by and between Luminex Corporation and Russell W. Bradley (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed May 25, 2005).
10.13#	Form of Restricted Stock Agreement for the 2000 Long-Term Incentive Plan and 2001 Broad-Based Stock Option Plan (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the quarterly period ended September 30, 2004).
10.14#	Form of Non-Qualified Stock Option Agreement dated as of May 15, 2004, by and between Luminex Corporation and Patrick J. Balthrop (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed May 18, 2004).
10.15#	Form of Amendment to Executive Employment Agreements (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2005).
10.16#	Luminex Corporation Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.17#	Form of Non-Qualified Stock Option Agreement for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.18#	Form of Restricted Share Award Agreement for Officers & Employees for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.19#	Form of Restricted Share Award Agreement for Directors for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.20#	Form of Restricted Share Unit Agreement for Officers & Employees for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.21#	Form of Restricted Share Unit Agreement for Directors for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.22#	Employment Agreement effective as of March 1, 2007, by and between Luminex Corporation, Tm Bioscience and Jeremy Bridge-Cook (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 31, 2006).
10.23#	Amendment to Restricted Stock Agreement, dated as of March 25, 2007, by and between Luminex Corporation and Patrick J. Balthrop, Sr. (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the quarterly period ended March 31, 2007).
10.24#	Amendment to Luminex Corporation Amended and Restated 2000 Long-Term Incentive Plan dated as of May 24, 2007 (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the quarterly period ended June 30, 2007).
10.25#	Amendment to Luminex Corporation 2001 Broad-Based Stock Option Plan dated as of May 24, 2007 (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the quarterly period ended June 30, 2007).
10.26#	Employment Agreement, dated as of July 1, 2009, by and between Luminex Corporation and Michael F. Pintek (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2009).
10.27#	Luminex Corporation 2009 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 17, 2009).
10.28#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2009 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 17, 2009).
10.29#	Luminex Corporation 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Proxy Statement (File No. 000-30109) for its Annual Meeting of Shareholders held on May 25, 2006).

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
10.30#	Form of Non-Qualified Stock Option Agreement for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed May 25, 2006).
10.31#	Form of Restricted Share Award Agreement for Officers & Employees for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed May 25, 2006).
10.32#	Form of Restricted Share Award Agreement for Directors for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File No. 000-30109), filed May 25, 2006).
10.33#	Form of Restricted Share Unit Agreement for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File No. 000-30109) for the fiscal year ended December 31, 2006).
10.34#	Form of Amendments to Equity Award Agreements (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File No. 000-30109) for the quarterly period ended June 30, 2007).
10.35#	Luminex Corporation 2010 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K/A, filed March 16, 2010).
10.36#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2010 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 15, 2010).
10.37#	Management Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 15, 2010).
10.38#	Luminex Corporation 2011 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 31, 2011).
10.39#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2011 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 31, 2011).
10.40#	Luminex Corporation 2012 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 13, 2012).
10.41#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2012 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 13, 2012).
10.42#	Luminex Corporation Second Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Annex to the Company's Proxy Statement for its Annual Meeting of Stockholders held on May 17, 2012).
10.43#	Luminex Corporation Employee Stock Purchase Plan (Previously filed as an Annex to the Company's Proxy Statement for its Annual Meeting of Stockholders held on May 17, 2012).
10.44#	Amendment to Employment Agreement, effective as of December 31, 2012, by and between Luminex Corporation and its Executives.
10.45#	Second Amendment to Employment Agreement, effective as of December 31, 2012, by and between Luminex Corporation and Patrick J. Balthrop.
10.46#	Luminex Corporation 2013 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 25, 2013).
10.47#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2013 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 25, 2013).
21.1	Subsidiaries of the Company.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney (incorporated in the signature page of this report).
31.1	Certification by CEO pursuant to Securities and Exchange Act Rules 13a-14(a) and 15d – 14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
31.2	Certification by CFO pursuant to Securities and Exchange Act Rules 13a-14(a) and 15d – 14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by CEO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by CFO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from Luminex Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, formatted in XBRL: (i) Condensed Consolidated Balance Sheets; (ii) Condensed Consolidated Statements of Operations; (iii) Condensed Consolidated Statement of Cash Flows; and (iv) Notes to Condensed Consolidated Financial Statements.

Management contract or compensatory plan or arrangement.

* Schedules, annexes and exhibits omitted pursuant to Item 601(b)(2) of Regulation S-K. Luminex agrees to furnish a supplemental copy of omitted schedules to the Securities and Exchange Commission upon request.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) 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.

LUMINEX CORPORATION

By: /s/ Patrick J. Balthrop
Patrick J. Balthrop
President and Chief Executive Officer
Date: February 26, 2014

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Patrick J. Balthrop and Harriss T. Currie, each his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

SIGNATURES	TITLE	DATE
/s/ Patrick J. Balthrop Patrick J. Balthrop	President and Chief Executive Officer, Director (Principal Executive Officer)	February 26, 2014
/s/ Harriss T. Currie Harriss T. Currie	Chief Financial Officer, Senior Vice President of Finance (Principal Financial Officer and Principal Accounting Officer)	February 26, 2014
/s/ Robert J. Cresci Robert J. Cresci	Director	February 26, 2014
/s/ Thomas W. Erickson Thomas W. Erickson	Director	February 26, 2014
/s/ Fred C. Goad, Jr. Fred C. Goad, Jr.	Director	February 26, 2014
/s/ Jay B. Johnston Jay B. Johnston	Director	February 26, 2014
/s/ Jim D. Kever Jim D. Kever	Director	February 26, 2014
/s/ G. Walter Loewenbaum II G. Walter Loewenbaum II	Chairman of the Board of Directors, Director	February 26, 2014
/s/ Kevin M. McNamara Kevin M. McNamara	Director	February 26, 2014
/s/ Edward A. Ogunro Edward A. Ogunro	Director	February 26, 2014

EXHIBIT INDEX

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2.1	Agreement and Plan of Merger, dated July 9, 2012, by and among Luminex Corporation, Grouper Merger Sub, Inc., GenturaDx, Inc. and the Seller Representative (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed on July 12, 2012).*
3.1	Restated Certificate of Incorporation of the Company (Previously filed as an Exhibit to the Company's Registration Statement on Form S-1 (File No. 333-96317), filed February 7, 2000, as amended).
3.2	Amended and Restated Bylaws of the Company (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed September 16, 2008).
10.1#	2000 Long-Term Incentive Plan of the Company, as amended (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File 000-30109) for the quarterly period ended March 31, 2002).
10.2#	Form of Stock Option Award Agreement for the 2000 Long-Term Incentive Plan (Previously filed as an Exhibit to the Company's Registration Statement on Form S-1 (File No. 333-96317), filed February 7, 2000, as amended).
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10.8	Lease Amendment between McNeil 4 & 5 Investors, LP, as Landlord, and Luminex Corporation, as Tenant, dated January 27, 2003 (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File 000-30109) for the fiscal year ended December 31, 2002).
10. 9#	Employment Agreement, effective as of October 1, 2003, by and between Luminex Corporation and Harriss T. Currie (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File 000-30109) for the fiscal year ended December 31, 2003).
10.10#	Employment Agreement effective as of October 1, 2003, by and between Luminex Corporation and David S. Reiter (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File 000-30109) for the fiscal year ended December 31, 2003).
10.11#	Employment Agreement effective as of May 15, 2004, by and between Luminex Corporation and Patrick J. Balthrop (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed May 18, 2004).
10.12#	Employment Agreement effective as of May 23, 2005, by and between Luminex Corporation and Russell W. Bradley (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed May 25, 2005).
10.13#	Form of Restricted Stock Agreement for the 2000 Long-Term Incentive Plan and 2001 Broad-Based Stock Option Plan (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File 000-30109) for the quarterly period ended September 30, 2004).
10.14#	Form of Non-Qualified Stock Option Agreement dated as of May 15, 2004, by and between Luminex Corporation and Patrick J. Balthrop (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed May 18, 2004).
10.15#	Form of Amendment to Executive Employment Agreements (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2005).

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
10.16#	Luminex Corporation Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.17#	Form of Non-Qualified Stock Option Agreement for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.18#	Form of Restricted Share Award Agreement for Officers & Employees for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.19#	Form of Restricted Share Award Agreement for Directors for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.20#	Form of Restricted Share Unit Agreement for Officers & Employees for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.21#	Form of Restricted Share Unit Agreement for Directors for the Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed May 21, 2009).
10.22#	Employment Agreement effective as of March 1, 2007, by and between Luminex Corporation, Tm Bioscience and Jeremy Bridge-Cook (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File 000-30109) for the fiscal year ended December 31, 2006).
10.23#	Amendment to Restricted Stock Agreement, dated as of March 25, 2007, by and between Luminex Corporation and Patrick J. Balthrop, Sr. (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File 000-30109) for the quarterly period ended March 31, 2007).
10.24#	Amendment to Luminex Corporation Amended and Restated 2000 Long-Term Incentive Plan dated as of May 24, 2007 (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File 000-30109) for the quarterly period ended June 30, 2007).
10.25#	Amendment to Luminex Corporation 2001 Broad-Based Stock Option Plan dated as of May 24, 2007 (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File 000-30109) for the quarterly period ended June 30, 2007).
10.26#	Employment Agreement, dated as of July 1, 2009, by and between Luminex Corporation and Michael F. Pintek (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2009).
10.27#	Luminex Corporation 2009 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 17, 2009).
10.28#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2009 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 17, 2009).
10.29#	Luminex Corporation 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Proxy Statement (File 000-30109) for its Annual Meeting of Shareholders held on May 25, 2006).
10.30#	Form of Non-Qualified Stock Option Agreement for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed May 25, 2006).
10.31#	Form of Restricted Share Award Agreement for Officers & Employees for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed May 25, 2006).
10.32#	Form of Restricted Share Award Agreement for Directors for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K (File 000-30109), filed May 25, 2006).
10.33#	Form of Restricted Share Unit Agreement for the 2006 Equity Incentive Plan (Previously filed as an Exhibit to the Company's Annual Report on Form 10-K (File 000-30109) for the fiscal year ended December 31, 2006).
10.34#	Form of Amendments to Equity Award Agreements (Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q (File 000-30109) for the quarterly period ended June 30, 2007).
10.35#	Luminex Corporation 2010 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K/A, filed March 16, 2010).

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
10.36#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2010 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 15, 2010).
10.37#	Management Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 15, 2010).
10.38#	Luminex Corporation 2011 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 31, 2011).
10.39#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2011 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 31, 2011).
10.40#	Luminex Corporation 2012 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 13, 2012).
10.41#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2012 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 13, 2012).
10.42#	Luminex Corporation Second Amended and Restated 2006 Equity Incentive Plan (Previously filed as an Annex to the Company's Proxy Statement for its Annual Meeting of Stockholders held on May 17, 2012).
10.43#	Luminex Corporation Employee Stock Purchase Plan (Previously filed as an Annex to the Company's Proxy Statement for its Annual Meeting of Stockholders held on May 17, 2012).
10.44#	Amendment to Employment Agreement, effective as of December 31, 2012, by and between Luminex Corporation and its Executives.
10.45#	Second Amendment to Employment Agreement, effective as of December 31, 2012, by and between Luminex Corporation and Patrick J. Balthrop.
10.46#	Luminex Corporation 2013 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 25, 2013).
10.47#	Form of Restricted Share Unit Award Agreement for Awards under the Luminex Corporation 2013 Long Term Incentive Plan (Previously filed as an Exhibit to the Company's Current Report on Form 8-K, filed March 25, 2013).
21.1	Subsidiaries of the Company.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney (incorporated in the signature page of this report).
31.1	Certification by CEO pursuant to Securities and Exchange Act Rules 13a-14(a) and 15d – 14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by CFO pursuant to Securities and Exchange Act Rules 13a-14(a) and 15d – 14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by CEO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by CFO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from Luminex Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, formatted in XBRL: (i) Condensed Consolidated Balance Sheets; (ii) Condensed Consolidated Statements of Operations; (iii) Condensed Consolidated Statement of Cash Flows; and (iv) Notes to Condensed Consolidated Financial Statements.

Management contract or compensatory plan or arrangement.

* Schedules, annexes and exhibits omitted pursuant to Item 601(b)(2) of Regulation S-K. Luminex agrees to furnish a supplemental copy of omitted schedules to the Securities and Exchange Commission upon request.

Exhibit 21.1

LIST OF SUBSIDIARIES

Luminex International, Inc., a Delaware corporation
Luminex B.V., a Netherlands Private Company with limited liability
Luminex 2 B.V., a Netherlands Private Company with limited liability
Luminex 3 B.V., a Netherlands Private Company with limited liability
Luminex Debt Holding, LLC, a Delaware limited liability company
Luminex Molecular Diagnostics, Inc., an Ontario, Canadian corporation
Luminex Trading (Shanghai) Company Limited, a limited liability company under the laws of the PRC
Luminex Japan Corporation Ltd., a Japanese KK
Luminex (Australia) Pty. Ltd, an Australian Proprietary company, limited by shares (d/b/a BSD Robotics)
Labpac Pty Ltd, an Australian Proprietary company, limited by shares
Bizpac (Australia) Pty Ltd., an Australian Proprietary company, limited by shares
GenturaDx, Inc., a British Virgin Islands international business company
Luminex Hong Kong Limited, a Hong Kong company limited by shares

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-181485) pertaining to the Luminex Corporation Employee Stock Purchase Plan, in the Registration Statement (Form S-8 No. 333181484) pertaining to the Luminex Corporation Second Amended and Restated 2006 Equity Incentive Plan, in the Registration Statement (Form S-8 No. 333-141042) pertaining to the Tm Bioscience Corporation Share Option Plan, in the Registration Statement (Form S-8 No. 333-134450) pertaining to the Luminex Corporation 2006 Equity Incentive Plan and the Luminex Corporation 2006 Management Stock Purchase Plan, in the Registration Statement (Form S-8 No. 333-46686) pertaining to the 2000 Long-Term Incentive Plan of Luminex Corporation, in the Registration Statement (Form S-8 No. 333-87918) pertaining to the 2001 Broad-Based Stock Option Plan of Luminex Corporation, in the Registration Statement (Form S-8 No. 333-118772) pertaining to the Balthrop Non-Qualified Stock Option Agreement of Luminex Corporation, in the Registration Statement (Form S-8 No. 333-159382) pertaining to the Amended and Restated 2006 Equity Incentive Plan and in the Registration Statement (Form S-3 No. 333-151691) pertaining to the Automatic Shelf Registration of Securities of Luminex Corporation of our reports dated February 26, 2014, with respect to the consolidated financial statements of Luminex Corporation, and the effectiveness of internal control over financial reporting of Luminex Corporation, included in this Annual Report (Form 10-K) for the year ended December 31, 2013.

/s/ Ernst & Young LLP
Austin, Texas
February 26, 2014

Exhibit 31.1

CERTIFICATIONS

I, Patrick J. Balthrop, certify that:

1. I have reviewed this report on Form 10-K of Luminex 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(s) 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(s) 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.

Date: February 26, 2014

By: /s/ Patrick J. Balthrop

Patrick J. Balthrop

President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Harriss T. Currie, certify that:

1. I have reviewed this report on Form 10-K of Luminex 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(s) 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(s) 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.

Date: February 26, 2014

By: /s/ Harriss T. Currie

Harriss T. Currie

Chief Financial Officer, Senior Vice President of Finance

Exhibit 32.1

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

In connection with the Annual Report of Luminex Corporation (the "Company") on Form 10-K for the period ended December 31, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Patrick J. Balthrop, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ PATRICK J. BALTHROP
Patrick J. Balthrop
President and Chief Executive Officer
February 26, 2014

A SIGNED ORIGINAL OF THIS WRITTEN STATEMENT REQUIRED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 HAS BEEN PROVIDED TO LUMINEX CORPORATION AND WILL BE RETAINED BY LUMINEX CORPORATION AND FURNISHED TO THE SECURITIES AND EXCHANGE COMMISSION OR ITS STAFF UPON REQUEST.

Exhibit 32.2

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

In connection with the Annual Report of Luminex Corporation (the "Company") on Form 10-K for the period ended December 31, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Harriss T. Currie, Senior Vice President – Finance, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ HARRISS T. CURRIE
Harriss T. Currie
Chief Financial Officer, Senior Vice President of Finance
February 26, 2014

A SIGNED ORIGINAL OF THIS WRITTEN STATEMENT REQUIRED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 HAS BEEN PROVIDED TO LUMINEX CORPORATION AND WILL BE RETAINED BY LUMINEX CORPORATION AND FURNISHED TO THE SECURITIES AND EXCHANGE COMMISSION OR ITS STAFF UPON REQUEST.