HARVARD BIOSCIENCE INC
Form 10-K
March 11, 2009
Table of Contents

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, 2008

or

¨ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from to

Commission File Number 001-33957

HARVARD BIOSCIENCE, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**04-3306140**
(State or other jurisdiction of Incorporation or organization)	(I.R.S. Employer Identification No.)

84 October Hill Road, Holliston, Massachusetts 01746

(Address of Principal Executive Offices, including zip code)

(508) 893-8999

(Registrant s telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value	**The NASDAQ Stock Market LLC**
Preferred Stock Purchase Rights	

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 ¨ NO x

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 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. x

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 ¨ Accelerated filer x
Non-accelerated filer ¨ (Do not check if a smaller reporting company) Smaller reporting company ¨
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act. YES ¨ NO x

The aggregate market value of 22,200,117 shares of voting stock held by non-affiliates of the Registrant as of June 30, 2008 was approximately $103,230,544 based on the closing sales price of the Registrant s Common Stock, par value $0.01 per share (Common Stock) on that date. Shares of the Registrant s Common Stock held by each officer and director and each person known to the registrant to own 10% or more of the outstanding voting power of the registrant have been excluded in that such persons may be deemed affiliates. This determination of affiliate status is not a determination for other purposes.

At February 27, 2009, there were 29,934,869 shares of the Registrant s Common Stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company s definitive Proxy Statement in connection with the 2009 Annual Meeting of Stockholders (the Proxy Statement), to be held on May 14, 2009, are incorporated by reference into Part III of this Form 10-K. Except with respect to information specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed as part hereof.

Table of Contents

HARVARD BIOSCIENCE, INC.

TABLE OF CONTENTS

2008 ANNUAL REPORT ON FORM 10-K

FOR THE YEAR ENDED DECEMBER 31, 2008

	Item		
PART I			
	1	Business	1
	1A	Risk Factors	10
	1B	Unresolved Staff Comments	20
	2	Properties	20
	3	Legal Proceedings	20
	4	Submission of Matters to a Vote of Security Holders	20
	4A	Executive Officers of the Registrant	21
PART II			
	5	Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	22
	6	Selected Financial Data	24
	7	Management s Discussion and Analysis of Financial Condition and Results of Operations	26
	7A	Quantitative and Qualitative Disclosures About Market Risk	41
	8	Financial Statements and Supplementary Data	42
	9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	42
	9A	Controls and Procedures	42
	9B	Other Information	45
PART III			
	10	Directors, Executive Officers of the Registrant and Corporate Governance	45
	11	Executive Compensation	45
	12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	45
	13	Certain Relationships and Related Transactions, and Director Independence	45
	14	Principal Accountant Fees and Services	45
PART IV			
	15	Exhibits and Financial Statement Schedules	46
		Index to Consolidated Financial Statements	F-1
		Signatures	
		Exhibit Index	

Table of Contents

PART I

This Annual Report on Form 10-K contains statements that are not statements of historical fact and are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The forward-looking statements are principally, but not exclusively, contained in Item 1: Business and Item 7: Management s Discussion and Analysis of Financial Condition and Results of Operations. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about management s confidence or expectations, our business strategy, our ability to raise capital or borrow funds to consummate acquisitions and the availability of attractive acquisition candidates, our expectations regarding future costs of product revenues, our anticipated compliance with the covenants contained in our credit facility, the adequacy of our financial resources and our plans, objectives, expectations and intentions that are not historical facts. In some cases, you can identify forward-looking statements by terms such as may, will, should, could, would, expects, plans, anticipates, believes, estimates, projects, predicts, intends, potential and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in detail under the heading Item 1A. Risk Factors beginning on page 10 of this Annual Report on Form 10-K. You should carefully review all of these factors, as well as other risks described in our public filings, and you should be aware that there may be other factors, including factors of which we are not currently aware, that could cause these differences. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this report. We may not update these forward-looking statements, even though our situation may change in the future, unless we have obligations under the federal securities laws to update and disclose material developments related to previously disclosed information.

Item 1. ***Business.***

Overview

Harvard Bioscience, Inc., a Delaware corporation, is a global developer, manufacturer and marketer of a broad range of specialized products, primarily apparatus and scientific instruments, used to advance life science research at pharmaceutical and biotechnology companies, universities and government laboratories worldwide. We sell our products to thousands of researchers in over 100 countries primarily through our 900 page catalog (and various other specialty catalogs), our website, and through distributors, including GE Healthcare, Thermo Fisher Scientific Inc. and VWR. We have sales and manufacturing operations in the United States, the United Kingdom, Germany and Spain and sales facilities in France and Canada.

Our History

Our business began in 1901 under the name Harvard Apparatus and has grown over the intervening years with the development and evolution of modern life science tools. Our early inventions included the mechanical syringe pump in the 1950s for drug infusion and the microprocessor controlled syringe pump in the 1980s.

In March 1996, a group of investors led by our CEO and President acquired a majority of the then existing business of our predecessor, Harvard Apparatus. Following this acquisition, we redirected the focus of the Company to participate in the higher growth areas, or bottlenecks, within life science research by acquiring and licensing innovative technologies while continuing to grow the existing business through internal product development and marketing, partnerships and acquisitions. Since March 1996, we have completed 19 business or product line acquisitions related to our continuing operations and internally developed many new product lines including: new generation Harvard Apparatus syringe pumps, advanced Inspira ventilators, GeneQuant DNA/RNA/protein calculators, Ultrospec spectrophotometers, our new microliter spectrophotometer, 2D electrophoresis products, UVM plate readers and the BTX-MOS 96 well electroporation system.

Table of Contents

In July 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business was based on the fact that market conditions for the Capital Equipment Business segment had been such that this business did not meet our expectations and the decision to focus our resources on our Apparatus and Instrumentation Business segment. As a result, we began reporting our Capital Equipment Business segment as a discontinued operation in the third quarter of 2005. In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of our Belgian subsidiary, Maia Scientific, both part of our Capital Equipment Business Segment. In September 2008, we completed the sale of assets of our Union Biometrica Division including our German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment.

Unless otherwise indicated, the discussion of our business and our products is focused on our Apparatus and Instrumentation Business.

Our Strategy

Our goal is to become a leading provider of tools for life science research.

Our strategy is to have a broad range of highly specialized but relatively inexpensive products that have strong positions in niche markets in life science research:

We believe that having a broad product offering reduces the risk of being dependent on a single technology;

We believe that having relatively inexpensive products reduces the volatility associated with expensive capital equipment; and

We believe focusing on niche markets reduces head-to-head competition with the major instrument companies.

We seek to grow this range of products through internal development of new products and the acquisition of closely related products. We use acquisitions to expand our product offerings because we believe we can use our well-established brands and distribution channels to accelerate the growth of these acquired products. We also believe that our expertise in operational management frequently allows us to improve profitability at acquired companies.

Our Products

Today, our broad product range is generally targeted towards two major application areas: ADMET testing and molecular biology.

ADMET Testing

The goal of ADMET testing is to identify compounds that have toxic side effects or undesirable physiological or pharmacological properties. These pharmacological properties consist of absorption, distribution, metabolism and elimination, which together with toxicology, form the acronym ADMET. We have a wide range of products that our customers use to help their researchers conduct better experiments on cells, tissues, organs and animals.

Table of Contents

We primarily sell these products under the Harvard Apparatus, BTX, KD Scientific, Hugo Sachs Elektronik, Panlab and Warner Instruments brand names. The individual sales prices of these products are often under $5,000 but when combined into systems such as the Hugo Sachs isolated organ system the total sales price can be over $25,000. We typically sell our ADMET products through our catalogs and website with support from technical specialists, although BTX and KD Scientific branded products are primarily sold through distributors. Some of these products are described below:

Absorption Diffusion Chambers

A diffusion chamber is a small plastic chamber with a membrane separating the two halves of the chamber used to measure the absorption of a drug into the bloodstream. The membrane can either be tissue such as intestinal tissue or a cultured layer of cells such as human colon cells. This creates a miniaturized model of intestinal absorption. We entered this market with our 1999 acquisition of the assets of NaviCyte Inc., a wholly-owned subsidiary of Trega Biosciences (now SYGNIS Pharma AG) and today we manufacture and sell a wide range of tissue handling products under the Warner Instruments brand name.

Distribution 96 Well Equilibrium Dialysis Plate for Serum Protein Binding Assays

Our 96 well equilibrium dialysis plate contains 96 pairs of chambers with each pair separated by a membrane. The protein target is placed on one side of the membrane and the drug on the other. The small molecule drug diffuses through the membrane. If it binds to the target, it cannot diffuse back again. If it does not bind, it will diffuse back and forth until equilibrium is established. Once equilibrium is established, the concentration of the drug can be measured thereby indicating the strength of the binding. This product is principally used for ADMET testing to determine if a drug binds to blood proteins. A certain level of reversible binding is advantageous in order to promote good distribution of a drug through the human body. However, if the binding is too strong, it may impair normal protein function and cause toxic effects. These products are part of our sample preparation product line which we began offering in 2000 after our acquisition of Amika.

Metabolism and Elimination Organ Testing Systems

Organ testing systems use glass or plastic chambers together with stimulators and recording electrodes to study organ function. Organ testing systems enable either whole organs or strips of tissue from organs such as hearts, livers and lungs to be kept functioning outside the body while researchers perform experiments with them. This typically allows for multiple studies on a single donor animal. Studies on isolated livers are useful in determining metabolism and studies on kidneys are useful in determining elimination. We have sold basic versions of these systems for many years, but significantly expanded our product offerings through our 1999 acquisition of Hugo Sachs Elektronik and our 2007 acquisition of Panlab s.l. (Panlab).

Toxicology Precision Infusion Pumps and Behavioral Products

Infusion pumps, typically syringe pumps, are used to accurately infuse very small quantities of liquid, commonly drugs. Infusion pumps are generally used for long-term toxicology testing of drugs by infusion into animals, usually laboratory rats. We sell a wide range of different types of syringe pumps and many other products for infusing samples into and collecting samples from tissues, organs and animals. We expanded our range of infusion pumps with the acquisition of KD Scientific in 2004. We also design and manufacture behavioral products used in neuroscience, cardiology, psychological and respiratory studies to evaluate the effects of situational stimuli, drugs and nutritional infusions on motor and sensory, activity and learning and test behavior. We expanded our behavioral product offerings with the acquisition of Panlab in October 2007.

Cell Injection Systems

Cell injection systems use extremely fine bore glass capillaries to penetrate and inject drugs into or around individual cells. Cell injection systems are used to study the effects of drugs on single cells. Injection is accomplished either with air pressure or, if the drug molecule is electrically charged, by applying an electric

Table of Contents

current. We entered this market with our 1998 acquisition of the research products of Medical Systems Corporation and considerably expanded our presence in this market with our acquisitions of Clark Electromedical Instruments in 1999 and Warner Instruments in 2001.

Ventilators

Ventilators use a piston driven air pump to inflate the lungs of an anesthetized animal. Ventilators are typically used in surgical procedures common in life science research and are part of our Harvard Apparatus product line. In the late 1990 s we launched our advanced Inspira ventilators, which have significant safety and ease of use features, such as default safety settings. We further expanded our ventilator product line with the MiniVent acquired as part of our acquisition of Hugo Sachs Elektronik in 1999 and expanded our presence in anesthesia with our acquisition of International Market Supply, Ltd. in 2001.

Electroporation Products

Acquired with our purchase of the BTX division of Genetronics Biomedical Corporation in January 2003, our electroporation products include systems and generators, electrodes and accessories for research applications including in vivo, in ovo and in vitro gene delivery, electrocell fusion and nuclear transfer cloning. Through the application of precise pulsed electrical signals, electroporation systems open small pores in cell membranes allowing genes and/or drugs to pass through the cell membranes. The principal advantages of electroporation over other transfection techniques are speed, and the fact that electroporation does not require harsh chemicals that can interfere with or change cell function. In 2004, we launched our BTX MOS 96 well electroporation system, which can greatly increase the throughput of this otherwise essentially manual technique.

Distributed Products

In addition to our proprietary manufactured products, we buy and resell through our catalog products that are made by other manufacturers. We have negotiated supply agreements with the majority of the companies that provide our distributed products. These supply agreements specify pricing only and contain no minimum purchase commitments. Each of these agreements represented less than one percent of our revenues for the year ended December 31, 2008. Distributed products accounted for approximately 15% of our revenues for the year ended December 31, 2008. These distributed products enable us to provide our customers with a single source for their experimental needs. These complementary products consist of a large variety of devices, instruments and consumable items used in experiments involving cells, tissues, organs and animals in the fields of proteomics, physiology, pharmacology, neuroscience, cell biology, molecular biology and toxicology. We believe that our proprietary manufactured products are often leaders in their fields; however, researchers often need complementary products in order to conduct particular experiments. Most of these complementary products come from small companies that do not have our extensive distribution and marketing capabilities to reach these researchers.

Molecular Biology

We primarily sell these products through our distributors, including GE Healthcare, under their brand names. These products are mainly scientific instruments such as spectrophotometers and plate readers that analyze light to detect and quantify a wide range of molecular and cellular processes or apparatus such as gel electrophoresis units. The instrumentation products are typically sold for a price ranging from $5,000 to $10,000. The apparatus products typically sell for less than $5,000.

Molecular Biology Spectrophotometers

A spectrophotometer is an instrument widely used in molecular biology and cell biology to quantify the amount of a compound in a sample by shining a beam of white light through a prism or grating to divide it into component wavelengths. Each wavelength in turn is shone through a liquid sample and the spectrophotometer measures the amount of light absorbed at each wavelength. Microliter spectrophotometry is a technique used to measure extremely small sample sizes. This enables the quantification of the amount of a compound in a sample.

Table of Contents

We sell a wide range of spectrophotometers under the names UltroSpec, NovaSpec, Libra, Biowave and Lightwave. Our Biochrom subsidiary manufactures these products, and we primarily sell them through our distribution arrangements with GE Healthcare and other distributors.

DNA/RNA/Protein Calculators

A DNA/RNA/protein calculator is a bench top instrument dedicated to quantifying the amount of DNA, RNA or protein in a sample. It uses a process similar to that of a molecular biology spectrophotometer. These are sold under the GeneQuant name. Launched in 1993, we believe that it was the first such instrument sold. Our Biochrom subsidiary manufactures these products, and we primarily sell them through GE Healthcare.

Multi-Well Plate Readers

Multi-well plate readers are widely used for high throughput screening assays in the drug discovery process. The most common format is 96 wells per plate. Plate readers use light to detect chemical interactions. We introduced a range of these products in 2001 beginning with absorbance readers and followed by luminescence readers. Our Asys Hitech subsidiary manufactures these products, and we primarily sell them through distributors. In June 2006, we expanded our multi-well plate reader offerings with the purchase of selected assets of Anthos Labtec Instruments GmbH (Anthos), a subsidiary of Beckman Coulter, Inc. We acquired Asys Hitech in December 2001 through our Biochrom subsidiary.

Amino Acid Analysis Systems

An amino acid analysis system uses chromatography to separate the amino acids in a sample and then uses a chemical reaction to detect each one in turn as they flow out of the chromatography column. Amino acids are the building blocks of proteins. In June 2000, we acquired substantially all of the amino acid analysis systems business of the Biotronik subsidiary of Eppendorf-Netheler-Hinz GmbH and integrated it with the existing amino acid analysis systems business in our Biochrom subsidiary. We sell these systems, which are more expensive than most of our products, through our Biochrom direct sales force and through distributors.

Low Volume, High-Throughput Liquid Dispensers

A liquid dispenser dispenses low volumes, typically microliters, of liquids into high density microtitre plates used in high throughput screening processes in life science research. Our unique technology enables dispensing to take place without the need for contact between the droplet and the liquid already present in the plate, thereby removing any risk of cross-contamination from the process. We primarily market these products, and we sell them under distributor brand names as well as our own Asys Hitech name. Asys Hitech develops, manufactures and markets both these liquid dispensers and a line of plate readers (see above for a description of plate readers).

Gel Electrophoresis Systems

Gel electrophoresis is a method for separating and purifying DNA, RNA and proteins. In gel electrophoresis, an electric current is run through a thin slab of gel and the DNA, RNA or protein molecules separate out based on their charge and size. The gel is contained in a plastic tank with an associated power supply. We entered this market with the acquisition of Scie-Plas in November 2001 and greatly expanded our range of gel electrophoresis products with our November 2003 acquisition of Hoefer. The majority of Hoefer revenues come from a distribution partnership with GE Healthcare but we have also added new distributors and have established a catalog/web distribution channel under the Hoefer name.

Our Customers

Our end-user customers are primarily research scientists at pharmaceutical and biotechnology companies, universities and government laboratories, including the U.S. National Institutes of Health, or NIH. Our academic customers have included major colleges and universities such as Baylor College, Cambridge University, Harvard University, Johns Hopkins University, Massachusetts Institute of Technology, Yale University and the University

Table of Contents

of Texas MD Anderson Center. Our pharmaceutical and biotechnological customers have included pharmaceutical companies and research laboratories such as Amgen, Inc., AstraZeneca plc, Genentech, Inc. and Johnson & Johnson.

We conduct direct sales in the United States, the United Kingdom, Germany, France, Spain and Canada. We also maintain distributors in other countries. Aggregate sales to our largest customer, GE Healthcare, a distributor with end-users similar to ours, accounted for approximately 15% of our revenues for the year ended December 31, 2008 compared to approximately 17% of our revenues for the year ended December 31, 2007. We have several thousand customers worldwide and no other customer accounted for more than 5% of our revenues for such periods.

Sales and Marketing

For the year ended December 31, 2008, revenues from direct sales to end-users through our Harvard Apparatus catalog (and various other specialty catalogs) represented approximately 30% of our revenues; revenues from direct sales to end-users through our direct sales force represented approximately 16% of our total revenues; and revenues from sales of our products through distributors represented approximately 54% of our revenues.

Direct Sales

We periodically produce and mail a Harvard Apparatus full line catalog, most recently launched during February 2008, which contains approximately 11,000 products on 900 pages and is printed in varying quantities ranging from 50,000 to 100,000 copies. The latest catalog, which is accessible on our website, serves as the primary sales tool for the Harvard Apparatus product line, which includes both proprietary manufactured products and complementary products from various suppliers. Our leadership position in many of our manufactured products creates traffic to the catalog and website and enables cross-selling and facilitates the introduction of new products. In addition to the comprehensive catalog, we create and mail abridged catalogs that focus on specific product areas along with direct mailers and targeted e-mailers, which introduce or promote new products. We distribute the majority of our products ordered from our catalog, through our worldwide subsidiaries. In those regions where we do not have a subsidiary, or for products which we have acquired that had distributors in place at the time of our acquisition as the distribution channel, we use distributors.

Distributors

GE Healthcare is our largest distributor, accounting for 15%, 17% and 19% of our revenues for the years ended December 31, 2008, 2007 and 2006, respectively.

Historically, GE Healthcare has been our primary distributor, marketer and seller of a significant portion of our spectrophotometer and DNA/RNA calculator product lines of our Biochrom subsidiary. In April 2008, our Biochrom subsidiary entered into a new distribution agreement with GE Healthcare. This distribution agreement between Biochrom and GE Healthcare, formerly Amersham Biosciences, is a continuation of a long standing relationship between the companies. Under the terms of the agreement, GE Healthcare will serve as the exclusive, worldwide (except Canada) distributor, marketer and seller of a significant portion of the spectrophotometer and DNA/RNA calculator product lines sold by Biochrom, including the recently launched microliter spectrophotomer to which GE Healthcare has exclusive access on a worldwide basis including Canada.

The term of the agreement expires December 31, 2012, may be extended by GE Healthcare for additional one-year periods and may be terminated by either party upon one year advance written notice after March 27, 2009. Additionally, upon breach of certain terms of the agreement by either party, the agreement may be terminated with a 60-day notice period.

In November 2003, in connection with the acquisition of Hoefer from GE Healthcare (formerly Amersham Biosciences), we entered into a separate distribution agreement with GE Healthcare for the distribution of the Hoefer products. This contract has a five year term with an automatic five-year renewal period, provides for

Table of Contents

minimum purchases for the first three years, allows us to use the Hoefer name (which we acquired in the transaction) on direct sales by us to end users or through other distributors, and may be terminated after five years with a one year advance notice upon certain circumstances. Additionally, upon breach of certain terms of the agreement, such as pricing, exclusivity and delivery, by either party, the agreement may be terminated with a 30-day notice period.

In addition to engaging GE Healthcare as the primary distributor for our Biochrom and Hoefer products, we also engage distributors for the sales of Harvard Apparatus, Warner, BTX, KD Scientific, Asys Hitech, Anthos, Panlab and SciePlas branded products in certain areas of the world and for certain product lines. In those regions where we do not have a subsidiary, and for products which we have acquired that had distributors in place at the time of our acquisition as the distribution channel, we use distributors.

Backlog

Our order backlog was approximately $7.4 million as of December 31, 2008 and $5.5 million as of December 31, 2007. We include in backlog only those orders for which we have received valid purchase orders. Purchase orders may be cancelled at any time prior to shipment. Our backlog as of any particular date may not be representative of actual sales for any succeeding period. We typically ship our backlog at any given time within 90 days.

Research and Development

Our principal research and development mission is to develop products which address growth opportunities within the life science research process, particularly for application in the areas of ADMET testing and molecular biology.

Our research and development expenditures were approximately $4.0 million, $3.7 million and $3.2 million in 2008, 2007 and 2006, respectively. We anticipate that we will continue to make investments in research and development activities as we deem appropriate given the circumstances at such time. We plan to continue to pursue a balanced development portfolio strategy of originating new products from internal research and collaborations, and acquiring products through business and technology acquisitions.

We maintain development staff in most of our manufacturing facilities to design and develop new products and to re-engineer existing products to bring them to the next generation level. In-house development is focused on our current technologies. For major new technologies, our strategy has been to partner with universities, government labs or pharmaceutical companies to develop technology into commercially viable products.

Manufacturing

We manufacture and test the majority of our products in our principal manufacturing facilities located in the United States, the United Kingdom, Spain and Germany. We have considerable manufacturing flexibility at our various facilities, and each facility can manufacture multiple products at the same time. We maintain in-house key manufacturing expertise, technologies and resources. We seek to maintain multiple suppliers for key components that are not manufactured in-house, and while some of our products are dependent on sole-source suppliers, we do not believe our dependence upon these suppliers creates any significant risks.

Our manufacturing operations are primarily to assemble and test. Our manufacturing of syringe pumps, ventilators, cell injectors, miniaturized sample preparation products and electroporation products takes place in Holliston, Massachusetts. The manufacture of our cell biology and electrophysiology products takes place in both our Holliston, Massachusetts facility and our Hamden, Connecticut facility. Our manufacturing of spectrophotometers and amino acid analysis systems takes place in our Cambridge, England facility. Our low-volume, high-throughput liquid dispensers and our plate readers are manufactured in our facility in Cambridge, England. Our manufacturing of surgery and anesthesia related products and physiology-teaching products takes place in Edenbridge, England. Our manufacturing of complete organ testing systems takes place in March-Hugstetten, Germany. Our electrophoresis products are manufactured at our Warwickshire, England facility and our San Francisco, California facility. Our manufacturing of our behavioral science products primarily takes place in our Barcelona, Spain facility.

Table of Contents

Competition

The markets into which we sell our products are highly competitive, and we expect the intensity of competition to continue or increase. We compete with many companies engaged in developing and selling tools for life science research. Many of our competitors have greater financial, operational, sales and marketing resources, and more experience in research and development and commercialization than we have. Moreover, our competitors may have greater name recognition than we do, and many offer discounts as a competitive tactic. These competitors and other companies may have developed or could in the future develop new technologies that compete with our products, which could render our products obsolete. We cannot assure you that we will be able to make the enhancements to our technologies necessary to compete successfully with newly emerging technologies. We are not aware of any significant products sold by us, which are currently obsolete.

We believe that we offer one of the broadest selections of products to companies engaged in life science research. We are not aware of any competitor that offers a product line of comparable breadth across our target markets. We have numerous competitors on a product line basis. We believe that we compete favorably with our competitors on the basis of product performance, including quality, reliability and speed, technical support, price and delivery time.

We compete with several companies that provide instruments for ADMET testing and molecular biology. In the ADMET testing area, we compete with, among others, Amaxa GmbH, Becton, Dickinson and Company, Eppendorf AG, Kent Scientific Corporation, Razel Scientific Instruments, Inc. and Ugo Basile. In the molecular biology products area, we compete with, among others, Beckman Coulter, Inc., Bio-Rad Laboratories, Inc., Eppendorf AG, Invitrogen Corporation, MDS Analytical Technologies, PerkinElmer, Inc. and Thermo Fisher Scientific Corporation.

Seasonality

Our business is generally not seasonal, however, sales and earnings in our third quarter are usually flat to down sequentially primarily because there are a large number of holidays and vacations during the quarter, especially in Europe. Our fourth quarter sales and earnings are often the highest in the fiscal year compared to the other three quarters, primarily because many of our customers tend to spend budgeted money before their own fiscal years end.

Intellectual Property

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade-secret laws, as well as confidentiality provisions in our contracts. Patents or patent applications cover many of our new technologies. Most of our more mature product lines are protected by trade names and trade secrets only.

We have implemented a patent strategy designed to provide us with freedom to operate and facilitate commercialization of our current and future products. In our continuing operations, we have 13 issued U.S. patents and 7 pending applications. Generally, U.S. patents have a term of 17 years from the date of issue for patents issued from applications filed with the U.S. Patent Office prior to June 8, 1995, and 20 years from the application filing date or earlier claimed priority date in the case of patents issued from applications filed on or after June 8, 1995. Our issued US patents will expire between 2011 and 2020. Our success depends to a significant degree upon our ability to develop proprietary products and technologies. We intend to continue to file patent applications as we develop new products and technologies.

Patents provide some degree of protection for our intellectual property. However, the assertion of patent protection involves complex legal and factual determinations and is therefore uncertain. The scope of any of our issued patents may not be sufficiently broad to offer meaningful protection. In addition, our issued patents or patents licensed to us may be successfully challenged, invalidated, circumvented or unenforceable so that our patent rights would not create an effective competitive barrier. Moreover, the laws of some foreign countries may protect our proprietary rights to a greater or lesser extent, as do the laws of the United States. In addition, the

Table of Contents

laws governing patentability and the scope of patent coverage continue to evolve, particularly in areas of interest to us. As a result, there can be no assurance that patents will be issued from any of our patent applications or from applications licensed to us. In view of these factors, our intellectual property positions bear some degree of uncertainty.

We also rely in part on trade-secret protection of our intellectual property. We attempt to protect our trade secrets by entering into confidentiality agreements with third parties, employees and consultants. Our employees and consultants also sign agreements requiring that they assign to us their interests in patents and copyrights arising from their work for us. Although many of our U.S. employees have signed agreements not to compete unfairly with us during their employment and after termination of their employment, through the misuse of confidential information, soliciting employees, soliciting customers and the like, the enforceability of these provisions varies from jurisdiction to jurisdiction and, in some circumstances, they may not be enforceable. In addition, it is possible that these agreements may be breached or invalidated and if so, there may not be an adequate corrective remedy available. Despite the measures we have taken to protect our intellectual property, we cannot assure you that third parties will not independently discover or invent competing technologies, or reverse engineer our trade secrets or other technologies. Therefore, the measures we are taking to protect our proprietary rights may not be adequate.

We do not believe that our products infringe on the intellectual property rights of any third party. We cannot assure you, however, that third parties will not claim such infringement by us or our licensors with respect to current or future products. We expect that product developers in our market will increasingly be subject to such claims as the number of products and competitors in our market segment grows and the product functionality in different market segments overlaps. In addition, patents on production and business methods are becoming more common and we expect that more patents will be issued in our technical field. Any such claims, with or without merit, could be time-consuming, result in costly litigation and diversion of management s attention and resources, cause product shipment delays or require us to enter into royalty or licensing agreements. Moreover, such royalty or licensing agreements, if required, may not be on terms acceptable to us, or at all, which could seriously harm our business or financial condition.

Harvard is a registered trademark of Harvard University. The marks Harvard Apparatus and Harvard Bioscience are being used pursuant to a license agreement entered into in December 2002 between Harvard University and Harvard Bioscience, Inc.

Government Regulation

We are not subject to direct governmental regulation other than the laws and regulations generally applicable to businesses in the domestic and foreign jurisdictions in which we operate. In particular, our products are not subject to pre-market approval by the United States Food and Drug Administration for use on human clinical patients. In addition, we believe we are in compliance with all relevant environmental laws.

Employees

As of December 31, 2008, we employed 315 employees, of which 300 are full-time and 15 are part-time. Geographical residence information for these employees is summarized in the table below:

United States	131
United Kingdom	119
Spain	43
Germany	14
Canada	5
France	3
Total	315

We believe that our relationship with our employees is good. None of our employees is subject to any collective bargaining agreement.

Table of Contents

Discontinued Operations

In July 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business was based on the fact that market conditions for the Capital Equipment Business segment had been such that this business did not meet our expectations and the decision to focus our resources on our Apparatus and Instrumentation Business segment. As a result, we began reporting our Capital Equipment Business segment as a discontinued operation in the third quarter of 2005.

In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of our Belgian subsidiary, MAIA Scientific, both of which were part of our Capital Equipment Business Segment, to Digilab, Inc. The purchase price paid by Digilab under the terms of the Asset Purchase Agreement consisted of $1,000,000 in cash plus additional consideration in the form of an earn-out based on 20% of the revenue generated by the acquired business as it is conducted by Digilab over a three-year period post-transaction. Any earn-out amounts will be evidenced by interest bearing promissory notes due on November 30, 2012. During the fourth quarter of 2007, we recorded a loss on this sale of $3.1 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

In September 2008, we completed the sale of assets of our Union Biometrica Division including our German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment, to UBIO Acquisition Company. The purchase price paid by UBIO Acquisition Company under the terms of the Asset Purchase Agreement consisted of $1 in cash, the assumption of certain liabilities, plus additional consideration in the form of an earn-out based on the revenue generated by the acquired business as it is conducted by UBIO Acquisition Company over a five-year post-transaction period in an amount equal to (i) 5% of the revenue generated up to and including $6,000,000 and (ii) 8% of the revenue generated above $6,000,000 each year. Any earn-out amounts will be evidenced by interest-bearing promissory notes due on September 30, 2013 or at an earlier date based on certain triggering events. During 2008, we recorded a loss on sale of the Union Biometrica business of $3.3 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

Geographic Area

Financial information regarding geographic areas in which we operate is provided in Note 17 of the Notes to Consolidated Financial Statements, which are included elsewhere in this report.

Available Information and Website

Our website is www.harvardbioscience.com. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and exhibits and amendments to those reports filed or furnished with the Securities and Exchange Commission pursuant to Section 13(a) of the Exchange Act are available for review on our website. Any such materials that we file with, or furnish to, the Securities and Exchange Commission in the future will be available on our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission. The information on our website is not incorporated by reference into this Annual Report on Form 10-K.

Item 1A. ***Risk Factors.***

As previously discussed, our actual results could differ materially from our forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed below. These and many other factors described in this report could adversely affect our business operations, performance and financial condition.

The current credit and financial market conditions may exacerbate certain risks affecting our business.

Increased concerns about credit markets, consumer confidence, economic conditions, volatile corporate profits and reduced capital spending could negatively impact demand for our products. We may experience in the future, reduced demand for our products because of the uncertainty in the general economic environment in

Table of Contents

which our customers and we operate. The current tightening of credit in financial markets may adversely affect the ability of our customers and suppliers to obtain financing, which could result in a decrease in, or deferrals or cancellations of, the sale of our products. If global economic and market conditions, or economic conditions in the United States, remain uncertain or persist, spread, or deteriorate further, we may experience a material adverse effect on our business, operating results and financial condition. Unstable economic, political and social conditions make it difficult for our customers, our suppliers and us to accurately forecast and plan future business activities. If such conditions persist, our business, financial condition and results of operations could suffer. We cannot project the extent of the impact of the economic environment specific to our industry.

Our quarterly revenues will likely be affected by various factors, including the timing of purchases by customers and the seasonal nature of purchasing in Europe.

Our quarterly revenues will likely be affected by various factors, including the seasonal nature of purchasing in Europe. Our revenues may vary from quarter to quarter due to a number of factors, including the timing of catalog mailings and new product introductions, the release of grant and budget funding, future acquisitions and our substantial sales to European customers, who in summer months often defer purchases. In particular, delays or reduction in purchase orders from the pharmaceutical and biotechnology industries could have a material adverse effect on us and could adversely affect our stock price.

The failure of any banking institution in which we deposit our funds or the failure of such banking institution to provide services in the current economic environment could have a material adverse effect on our results of operations, financial condition or access to borrowings.

The capital and credit markets have been experiencing extreme volatility and disruption. In recent months, the volatility and disruption have reached unprecedented levels. In some cases, the markets have exerted downward pressure on stock prices and credit capacity for certain issuers, as well as pressured the solvency of some financial institutions. Some of these financial institutions, including banks, have had difficulty performing regular services and in some cases have failed or otherwise been largely taken over by governments. We deposit our cash and cash equivalents with a number of financial institutions around the world. Should some or all of these financial institutions fail or otherwise be unable to timely perform requested services, we would likely have a limited ability to quickly access our cash deposited with such institutions. If we are unable to quickly access such funds, we may need to increase our use of our existing credit lines or access more expensive credit, if available. If we are unable to access some or all of our cash on deposit, either temporarily or permanently, or if we access existing or additional credit or are unable to access additional credit, it could have a negative impact on our operations, including our reported net income, or our financial position, or both.

If we engage in any acquisition, we will incur a variety of costs, and may never realize the anticipated benefits of the acquisition.

Our business strategy includes the future acquisition of businesses, technologies, services or products that we believe are a strategic fit with our business. If we undertake any acquisition, the process of integrating an acquired business, technology, service or product may result in unforeseen operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of our business. Moreover, we may fail to realize the anticipated benefits of any acquisition as rapidly as expected or at all. Future acquisitions could reduce stockholders ownership, cause us to incur debt, expose us to future liabilities and result in amortization expenses related to intangible assets with definite lives. We may incur significant expenditures in anticipation of an acquisition that is never realized.

We may not realize the expected benefits from acquisitions due to difficulties integrating the businesses, operations and product lines.

Our ability to achieve the benefits of acquisitions depends in part on the integration and leveraging of technology, operations, sales and marketing channels and personnel. The integration process is a complex, time-consuming and expensive process and may disrupt our business if not completed in a timely and efficient manner.

Table of Contents

We may have difficulty successfully integrating the acquired businesses, the domestic and foreign operations or the product lines, and as a result, we may not realize any of the anticipated benefits of the acquisitions. Additionally, we cannot assure that our growth rate will equal the growth rates that have been experienced by us and the acquired companies, respectively, operating as separate companies in the past.

We have been actively engaged in acquiring and divesting companies. As a result, we may be the subject of lawsuits from either the acquiring company s stockholders, an acquired company s previous stockholders, the divested company s stockholders or our current stockholders.

We may be the subject of lawsuits from either the acquiring company s stockholders, an acquired company s previous stockholders, the divested company s stockholders or our current stockholders. These lawsuits could result from the actions of the acquisition or divestiture target prior to the date of the acquisition or divestiture, from the acquisition or divestiture transaction itself or from actions after the acquisition or divestiture. Defending potential lawsuits could cost us significant expense and detract management s attention from the operation of the business. Additionally, these lawsuits could result in the cancellation of or the inability to renew, certain insurance coverage that would be necessary to protect our assets.

Attractive acquisition opportunities may not be available to us in the future.

We will consider the acquisition of other businesses. However, we may not have the opportunity to make suitable acquisitions on favorable terms in the future, which could negatively impact the growth of our business. In order to pursue such opportunities, we may require significant additional financing, which may not be available to us on favorable terms, if at all. The availability of such financing is limited by the recent tightening of the global credit markets. We expect that our competitors, many of which have significantly greater resources than we do, will compete with us to acquire compatible businesses. This competition could increase prices for acquisitions that we would likely pursue.

If our goodwill or intangible assets become impaired, we may be required to record a significant charge to earnings.

Under accounting principles generally accepted in the United States, we review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be tested for impairment at least annually. Factors that may be considered a change in circumstances indicating that the carrying value of our goodwill or other intangible assets may not be recoverable include declines in our stock price and market capitalization or future cash flows projections. We may be required to record a significant charge to earnings in our financial statements during the period in which any impairment of our goodwill or other intangible assets is determined.

Accounting for goodwill and other intangible assets may have a material adverse effect on us.

In accordance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets,* we assess the recoverability of identifiable intangibles with finite lives and other long-lived assets, such as property, plant and equipment, for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. In accordance with SFAS No. 142, *Goodwill and Other Intangible Assets,* goodwill and intangible assets with indefinite lives from acquisitions are evaluated annually, or more frequently, if events or circumstances indicate there may be an impairment, to determine whether any portion of the remaining balance of goodwill and indefinite lived intangibles may not be recoverable. If it is determined in the future that a portion of our goodwill and other intangible assets is impaired, we will be required to write off that portion of the asset according to the methods defined by SFAS No. 144 and SFAS No. 142, which could have an adverse effect on net income for the period in which the write off occurs. At December 31, 2008, our continuing operations had goodwill and intangible assets of $33.8 million, or 42%, of our total assets.

Table of Contents

Future changes in financial accounting standards may adversely affect our reported results of operations.

A change in accounting standards can have a significant effect on our reported results. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. These new accounting pronouncements may adversely affect our reported financial results.

If our accounting estimates are not correct, our financial results could be adversely affected.

Management judgment and estimates are necessarily required in the application of our Critical Accounting Policies. We discuss these estimates in the subsection entitled Critical Accounting Policies beginning on page 36. If our estimates are incorrect, our future financial operating results and financial condition could be adversely affected.

Our business is subject to economic, political and other risks associated with international revenues and operations.

Since we manufacture and sell our products worldwide, our business is subject to risks associated with doing business internationally. Our revenues from our non-U.S. operations represented approximately 61% of total revenues for 2008. We anticipate that revenue from international operations will continue to represent a substantial portion of our revenues in the foreseeable future. In addition, a number of our manufacturing facilities and suppliers are located outside the United States. A global economic slowdown could have a negative effect on various foreign markets in which we operate. Accordingly, our future results could be harmed by a variety of factors, including:

- the impact of recessions and other economic conditions in economies, including Europe in particular, outside the United States,
- disruptions of capital and trading markets,
- inability to collect accounts receivable,
- limitations on repatriations of funds,
- potentially negative consequences from changes in tax laws affecting the ability to expatriate profits,
- difficulty in staffing and managing widespread operations, unfavorable labor regulations applicable to European operations, such as severance and the unenforceability of non-competition agreements in the European Union, and
- other factors beyond our control, including terrorism, acts of war, natural disasters and diseases.

We are also subject to the risks of fluctuating foreign exchange rates, which could have a materially adverse effect on the sales price of our products in foreign markets, as well as the costs and expenses of our foreign subsidiaries. Currently, we do not use forward exchange contracts to hedge our foreign currency exposure.

Currency exchange rate fluctuations may have a negative impact on our reported earnings.

Approximately 56% of our business from continuing operations during 2008 was conducted in functional currencies other than the U.S. dollar, which is our reporting currency. As a result, currency fluctuations among the U.S. dollar and the currencies in which we do business have caused and will continue to cause foreign currency transaction gains and losses. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. In the future, we may undertake to manage foreign currency risk through additional hedging methods. We recognize foreign currency gains or losses arising from our operations in the period incurred. We cannot guarantee that we will be successful in managing foreign currency risk or in predicting the effects of exchange rate fluctuations upon our future operating results because of the number

of currencies involved, the variability of currency exposure and the potential volatility of currency exchange rates.

Table of Contents

If we are not able to manage our growth, our operating profits or losses may be adversely impacted.

Our success will depend on the expansion of our operations through both organic growth and acquisitions. Effective growth management will place increased demands on management, operational and financial resources and expertise. To manage growth, we must expand our facilities, augment our operational, financial and management systems, and hire and train additional qualified personnel. Failure to manage this growth effectively could impair our ability to generate revenue or could cause our expenses to increase more rapidly than revenue, resulting in operating losses or reduced profitability.

We may incur additional restructuring costs or not realize the expected benefits of our initiatives to reduce operating expenses.

During the quarter ended March 31, 2008, we committed to an ongoing initiative to consolidate business functions to reduce operating expenses. Our actions in 2008 have been related to the separation of our electrophoresis product lines from our spectrophotometer and plate reader product lines. As part of these initiatives, we have made changes in management, completed the consolidation of the Hoefer electrophoresis administrative and marketing operations from San Francisco, California to the headquarters of the Harvard Apparatus subsidiary in Holliston, Massachusetts and consolidated the activities of our Asys Hitech subsidiary in Austria to our Biochrom subsidiary s facility located in Cambridge, UK.

We plan to consolidate parts of our electrophoresis operations during 2009. We expect that we will save approximately $0.005 per share on a full year basis and about half that amount during 2009. We anticipate that we will incur restructuring costs associated with this consolidation of approximately $0.5 million in the first half of 2009. We may incur additional restructuring costs and we may not be able to realize fully the expected benefits of these initiatives. See Note 9 to our consolidated financial statements Restructuring and Other Exit Costs.

If we fail to retain key personnel and hire, train and retain qualified employees, we may not be able to compete effectively, which could result in reduced revenue or increased costs.

Our success is highly dependent on the continued services of key management, technical and scientific personnel. Our management and other employees may voluntarily terminate their employment at any time upon short notice. The loss of the services of any member of the senior management team, including the Chief Executive Officer, Chane Graziano, the President, David Green, the Chief Operating Officer, Susan Luscinski, the Chief Financial Officer, Thomas McNaughton, or any of the managerial, technical or scientific staff may significantly delay or prevent the achievement of product development and other business objectives. Our future success will also depend on our ability to identify, recruit and retain additional qualified scientific, technical and managerial personnel. Competition for qualified personnel in the technology area is intense, and we operate in several geographic locations where labor markets are particularly competitive, including Boston, Massachusetts and London and Cambridge, England, and where demand for personnel with these skills is extremely high and is likely to remain high. As a result, competition for qualified personnel is intense, particularly in the areas of general management, finance, information technology, engineering and science, and the process of hiring suitably qualified personnel is often lengthy and expensive, and may become more expensive in the future. If we are unable to hire and retain a sufficient number of qualified employees, our ability to conduct and expand our business could be seriously reduced.

Our competitors and potential competitors may develop products and technologies that are more effective or commercially attractive than our products.

We expect to encounter increased competition from both established and development-stage companies that continually enter the market. We anticipate that these competitors will include:

companies developing and marketing life sciences research tools,

health care companies that manufacture laboratory-based tests and analyzers,

diagnostic and pharmaceutical companies,

14

Table of Contents

analytical instrument companies, and

companies developing life science or drug discovery technologies.

Currently, our principal competition comes from established companies that provide products that perform many of the same functions for which we market our products. Our competitors may develop or market products that are more effective or commercially attractive than our current or future products. Many of our competitors have substantially greater financial, operational, marketing and technical resources than we do. Moreover, these competitors may offer broader product lines and tactical discounts, and may have greater name recognition. In addition, we may face competition from new entrants into the field. We may not have the financial resources, technical expertise or marketing, distribution or support capabilities to compete successfully in the future.

Our products compete in markets that are subject to technological change, and therefore one or more of our products could be made obsolete by new technologies.

Because the market for life science tools is characterized by technological change and frequent new product introductions, our product lines may be made obsolete unless we are able to continually improve existing products and develop new products. To meet the evolving needs of its customers, we must continually enhance our current and planned products and develop and introduce new products. However, we may experience difficulties that may delay or prevent the successful development, introduction and marketing of new products or product enhancements. In addition, our product lines are based on complex technologies that are subject to change as new technologies are developed and introduced in the marketplace. We may have difficulty in keeping abreast of the changes affecting each of the different markets we serve or intend to serve. Our failure to develop and introduce products in a timely manner in response to changing technology, market demands or the requirements of our customers could cause our product sales to decline, and we could experience significant losses.

We offer and plan to offer a broad product line and have incurred and expect to continue to incur substantial expenses for development of new products and enhanced versions of our existing products. The speed of technological change in our market may prevent us from being able to successfully market some or all of our products for the length of time required to recover development costs. Failure to recover the development costs of one or more products or product lines could decrease our profitability or cause us to experience significant losses.

Our $20.0 million credit facility contains certain financial and negative covenants, the breach of which may adversely affect our financial condition.

We have a $20.0 million credit facility with Brown Brothers Harriman & Co. We had no borrowings under this facility as of December 31, 2008. The credit facility contains various financial and other covenants, including covenants relating to income, debt coverage and cash flow and minimum working capital requirements. If we are not in compliance with certain of these covenants, in addition to other actions the creditor may require, the amounts drawn on the $20.0 million facility may become immediately due and payable. This immediate payment may negatively impact our financial condition.

Our $20.0 million credit facility expires on December 1, 2009, and if we are unable to obtain a new credit facility, our ability to obtain financing for acquisitions could be materially impacted.

We are in the process of negotiating a new credit facility with our lenders. While we do not currently anticipate a problem obtaining a new facility, there can be no assurance, in light of the current credit market, that we will successfully obtain a new facility with terms favorable to us. In addition, although we do not expect our lenders under our existing credit facility or any future facility to be unable to provide us with financing under such facilities, there can be no assurance that our lenders will not be materially affected by current market conditions and have difficulty or not be able to provide such financing when we need to obtain it.

Table of Contents

Failure to raise additional capital or generate the significant capital necessary to implement our acquisition strategy, expand our operations and invest in new products could reduce our ability to compete and result in lower revenue.

We anticipate that our financial resources, which include available cash, cash generated from operations, and debt and equity capacity, will be sufficient to finance operations and capital expenditures for at least twelve months. However, this expectation is premised on the current operating plan, which may change as a result of many factors, including market acceptance of new products and future opportunities with collaborators. Consequently, we may need additional funding sooner than anticipated. Our inability to raise sufficient capital on favorable terms and on a timely basis (if at all) could seriously harm our business, product development and acquisition efforts.

If we raise additional funds through the sale of equity or convertible debt or equity-linked securities, existing percentages of ownership in our common stock will be reduced. In addition, these transactions may dilute the value of our outstanding common stock. We may issue securities that have rights, preferences and privileges senior to our common stock. If we raise additional funds through collaborations or licensing arrangements, we may relinquish rights to certain of our technologies or products, or grant licenses to third parties on terms that are unfavorable. In addition, our credit facility with Brown Brothers Harriman contains limitations on our ability to incur additional indebtedness and requires creditor approval for acquisitions funded with cash in excess of $6.0 million and acquisitions funded with equity in excess of $10.0 million. If future financing is not available or is not available on acceptable terms, we may have to alter our operations or change our business strategy. We cannot assure you that the capital required to fund operations or our acquisition strategy will be available in the future.

If GE Healthcare (formerly Amersham Biosciences) terminates its distribution agreements with us, fails to renew such agreements on favorable terms or fails to perform its obligations under the distribution agreements, it could impair the marketing and distribution efforts for some of our products and result in lost revenues.

During 2004, General Electric Company acquired Amersham plc, the parent of Amersham Biosciences. In connection with the acquisition, Amersham Biosciences was renamed GE Healthcare. While GE Healthcare has indicated its intention to continue Amersham s presence in the life science market, and we believe our relationship with GE Healthcare is good, we cannot guarantee that the distribution agreements will be renewed, that GE Healthcare will aggressively market our products in the future or that GE Healthcare will continue the partnership. If any of these events occurs, our marketing and distribution efforts for some of our products may be impaired and our revenues may be adversely impacted.

For 2008, approximately 15% of our revenues were generated through two distribution agreements with GE Healthcare.

In April 2008, our Biochrom subsidiary entered into a new distribution agreement with GE Healthcare. This distribution agreement between Biochrom and GE Healthcare, formerly Amersham Biosciences, is a continuation of a long standing relationship between the companies. Under the terms of the agreement, GE Healthcare will serve as the exclusive, worldwide (except Canada) distributor, marketer and seller of a significant portion of the spectrophotometer and DNA/RNA calculator product lines sold by Biochrom, including the recently launched microliter spectrophotometer to which GE Healthcare has exclusive access to on a worldwide basis including Canada. We are restricted from allowing another person or entity to distribute, market and sell into the life sciences market the products that Biochrom makes specifically for GE Healthcare. We have little or no control over GE Healthcare s marketing and sales activities or the use of its resources. GE Healthcare may fail to purchase sufficient quantities of products from us or perform appropriate marketing and sales activities. The failure by GE Healthcare to perform these activities could materially adversely affect our business and growth prospects. In addition, our inability to enter into a new agreement with GE Healthcare for product distribution could materially impede the growth of our business and our ability to generate sufficient revenue. The term of the agreement expires December 31, 2012, may be extended by GE Healthcare for additional one-year periods and

Table of Contents

may be terminated by either party upon one year advance written notice after March 27, 2009. Additionally, upon breach of certain terms of the agreement by either party, the agreement may be terminated with a 60-day notice period.

The second distribution agreement, between Hoefer, Inc., our subsidiary, and GE Healthcare was entered into in November 2003 in connection with our acquisition of certain assets of the Hoefer 1-D gel electrophoresis business, including the Hoefer name, from Amersham Bioscience. The agreement provides that Hoefer will be the exclusive supplier of 1-D gel electrophoresis products to GE Healthcare. Hoefer also has the right to develop, manufacture and market 2-D gel electrophoresis products, which would be offered to GE Healthcare for sale under the GE Healthcare s brand name. Hoefer has the right to sell any of its products, under the Hoefer brand name or any other non-GE Healthcare brand name, through other distribution channels, both direct and indirect. This contract has a five-year term with an automatic five-year renewal period, and may be terminated after five years with a one-year advance notice under certain circumstances. Additionally, upon breach of certain terms of the agreement, such as pricing, exclusivity and delivery, by either party, the agreement may be terminated with a 30-day notice period.

If we are unable to effectively protect our intellectual property, third parties may use our technology, which would impair our ability to compete in our markets.

Our continued success will depend in significant part on our ability to obtain and maintain meaningful patent protection for certain of our products throughout the world. Patent law relating to the scope of claims in the technology fields in which we operate is still evolving. The degree of future protection for our proprietary rights is uncertain. In our continuing operations, we have 13 issued U.S. patents and 7 pending applications. We also own numerous U.S. registered trademarks and trade names and have applications for the registration of trademarks and trade names pending. We rely on patents to protect a significant part of our intellectual property and to enhance our competitive position. However, our presently pending or future patent applications may not issue as patents, and any patent previously issued to us may be challenged, invalidated, held unenforceable or circumvented. Furthermore, the claims in patents which have been issued or which may be issued to us in the future may not be sufficiently broad to prevent third parties from producing competing products similar to our products. In addition, the laws of various foreign countries in which we compete may not protect our intellectual property to the same extent, as do the laws of the United States. If we fail to obtain adequate patent protection for our proprietary technology, our ability to be commercially competitive will be materially impaired.

In addition to patent protection, we also rely on protection of trade secrets, know-how and confidential and proprietary information. To maintain the confidentiality of trade-secrets and proprietary information, we generally seek to enter into confidentiality agreements with our employees, consultants and strategic partners upon the commencement of a relationship. However, we may not be able to obtain these agreements in all circumstances in part due to local regulations. In the event of unauthorized use or disclosure of this information, these agreements, even if obtained, may not provide meaningful protection for our trade-secrets or other confidential information. In addition, adequate remedies may not exist in the event of unauthorized use or disclosure of this information. The loss or exposure of our trade secrets and other proprietary information would impair our competitive advantages and could have a material adverse effect on our operating results, financial condition and future growth prospects.

We may be involved in lawsuits to protect or enforce our patents that would be expensive and time-consuming.

In order to protect or enforce our patent rights, we may initiate patent litigation against third parties. We may also become subject to interference proceedings conducted in the patent and trademark offices of various countries to determine the priority of inventions. Several of our products are based on patents that are closely surrounded by patents held by competitors or potential competitors. As a result, we believe there is a greater likelihood of a patent dispute than would be expected if our patents were not closely surrounded by other patents. The defense and prosecution, if necessary, of intellectual property suits, interference proceedings and related legal and administrative proceedings would be costly and divert our technical and management personnel from their normal responsibilities. We may not prevail in any of these suits. An adverse determination of any litigation or defense proceedings could put our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Table of Contents

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. For example, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments in the litigation. Securities analysts or investors may perceive these announcements to be negative, which could cause the market price of our stock to decline.

Our success will depend partly on our ability to operate without infringing on or misappropriating the intellectual property rights of others.

We may be sued for infringing on the intellectual property rights of others, including the patent rights, trademarks and trade names of third parties. Intellectual property litigation is costly and the outcome is uncertain. If we do not prevail in any intellectual property litigation, in addition to any damages we might have to pay, we could be required to stop the infringing activity, or obtain a license to or design around the intellectual property in question. If we are unable to obtain a required license on acceptable terms, or are unable to design around any third party patent, we may be unable to sell some of our products and services, which could result in reduced revenue.

Many of our current and potential customers are from the pharmaceutical and biotechnology industries and are subject to risks faced by those industries.

We derive a substantial portion of our revenues from pharmaceutical and biotechnology companies. We expect that pharmaceutical and biotechnology companies will continue to be one of our major sources of revenues for the foreseeable future. As a result, we are subject to risks and uncertainties that affect the pharmaceutical and biotechnology industries, such as pricing pressures as third-party payers continue challenging the pricing of medical products and services, government regulation, ongoing consolidation and uncertainty of technological change, and to reductions and delays in research and development expenditures by companies in these industries.

In particular, the biotechnology industry is largely dependent on raising capital to fund its operations. If biotechnology companies are unable to obtain the financing necessary to purchase our products, our business and results of operations could be materially adversely affected. As it relates to both the biotechnology and pharmaceutical industries, many companies have significant patents that have expired or are about to expire, which could result in reduced revenues for those companies. If pharmaceutical companies suffer reduced revenues as a result of these patent expirations, they may be unable to purchase our products, and our business and results of operations could be materially adversely affected.

In addition, we are dependent, both directly and indirectly, upon general health care spending patterns, particularly in the research and development budgets of the pharmaceutical and biotechnology industries, as well as upon the financial condition and purchasing patterns of various governments and government agencies. Many of our customers, including universities, government research laboratories, private foundations and other institutions, obtain funding for the purchase of products from grants by governments or government agencies. There exists the risk of a potential decrease in the level of governmental spending allocated to scientific and medical research, which could substantially reduce or even eliminate these grants. If government funding necessary to purchase our products were to decrease, our business and results of operations could be materially adversely affected.

Customer, vendor and employee uncertainty about the effects of any of our acquisitions could harm us.

We and the customers of any companies we acquire may, in response to the consummation of the acquisitions, delay or defer purchasing decisions. Any delay or deferral in purchasing decisions by customers could adversely affect our business. Similarly, employees of acquired companies may experience uncertainty about their future role until or after we execute our strategies with regard to employees of acquired companies. This may adversely affect our ability to attract and retain key management, sales, marketing and technical personnel following an acquisition.

Table of Contents

Ethical concerns surrounding the use of our products and misunderstanding of the nature of our business could adversely affect our ability to develop and sell our existing products and new products.

Some of our products may be used in areas of research involving cloning, stem cells, human tissue and organ transplants, animal research and other techniques presently being explored in the life science industry. These techniques have drawn much negative attention recently in the public forum. Government authorities may regulate or prohibit any of these activities. Additionally, the public may disfavor or reject these activities.

Our stock price has fluctuated in the past and could experience substantial declines in the future and, as a result, management s attention may be diverted from tasks that are more productive.

The market price of our common stock has experienced significant fluctuations and may become volatile and could decline in the future, perhaps substantially, in response to various factors including:

- the recent unprecedented volatility of the financial markets,
- uncertainty regarding the prospects of the domestic and foreign economies,
- technological innovations by competitors or in competing technologies,
- revenues and operating results fluctuating or failing to meet the expectations of management, securities analysts, or investors in any quarter,
- termination or suspension of equity research coverage by securities analysts,
- comments of securities analysts and mistakes by or misinterpretation of comments from analysts, downward revisions in securities analysts estimates or management guidance,
- investment banks and securities analysts may themselves be subject to lawsuits that may adversely affect the perception of the market,
- conditions or trends in the biotechnology and pharmaceutical industries,
- announcements of significant acquisitions or financings or changes in strategic partnerships,
- non-compliance with the internal control standards pursuant to the Sarbanes-Oxley Act of 2002, and
- a decrease in the demand for our common stock.

In addition, public stock markets have recently experienced extreme price and trading volatility. The stock market and the NASDAQ Global Market in general, and the biotechnology industry and small cap markets in particular, have experienced significant price and volume fluctuations that at times may have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors may further harm the market price of our common stock, regardless of our operating performance. In the past, securities class

action litigation has often been instituted following periods of volatility in the market price of a company s securities. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management s attention and resources.

Provisions of Delaware law, of our charter and bylaws and our Shareholder Rights Plan may make a takeover more difficult, which could cause our stock price to decline.

Provisions in our certificate of incorporation and bylaws and in the Delaware corporate law may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt, which is opposed by management and the board of directors. Public stockholders who might desire to participate in such a transaction may not have an opportunity to do so. In February 2008, our Board of Directors adopted a Shareholder Rights Plan that could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of our common stock. A third party that acquires 20% or more of our common stock (an acquiring person) could suffer substantial dilution of its ownership interest under the terms of the Shareholder Rights Plan through the issuance of common stock to all shareholders other than the acquiring person. We also have a staggered board of directors that makes it difficult for stockholders to

Table of Contents

change the composition of the board of directors in any one year. These anti-takeover provisions could substantially impede the ability of public stockholders to change our management and board of directors. Such provisions may also limit the price that investors might be willing to pay for shares of our common stock in the future.

An active trading market for our common stock may not be sustained.

Although our common stock is quoted on the NASDAQ Global Market, an active trading market for the shares may not be sustained.

Future issuance of preferred stock may dilute the rights of our common stockholders.

Our board of directors has the authority to issue up to 5,000,000 shares of preferred stock and to determine the price, privileges and other terms of these shares. The board of directors may exercise this authority without any further approval of stockholders. The rights of the holders of common stock may be adversely affected by the rights of future holders of preferred stock.

Cash dividends will not be paid on our common stock.

Currently, we intend to retain all of our earnings to finance the expansion and development of our business and do not anticipate paying any cash dividends to holders of our common stock in the near future. As a result, capital appreciation, if any, of our common stock will be a stockholder s sole source of gain for the near future.

As a public company, we have and will continue to incur significant legal, accounting and other expenses.

Item 1B. ***Unresolved Staff Comments*.**
None.

Item 2. ***Properties.***
The Company s eight principal facilities incorporate manufacturing, development, sales and marketing, and administration functions. Our facilities consist of:

- a leased 52,370 square foot facility in Holliston, Massachusetts, which is our corporate headquarters,
- a leased 28,000 square foot facility in Cambridge, England,
- a leased 25,070 square foot facility in Barcelona, Spain,
- a leased 22,600 square foot facility in San Francisco, California,
- a leased 18,000 square foot facility in Warwickshire, England,
- an owned 15,500 square foot facility in Edenbridge, England,

a leased 12,031 square foot facility in March-Hugstetten, Germany, and

a leased 7,500 square foot facility in Hamden, Connecticut.

We also lease additional facilities for sales and administrative support in Les Ulix, France, St. Augustin, Germany and Montreal, Canada and warehouse space in Madrid, Spain.

We sublease 15,000 square feet of space of our Holliston, Massachusetts facility.

Item 3. ***Legal Proceedings.***

From time to time, we may be involved in various claims and legal proceedings arising in the ordinary course of business. We are not currently a party to any such claims or proceedings.

Item 4. ***Submission of Matters to a Vote of Security Holders.***

None.

Table of Contents

Item 4.A. ***Executive Officers of the Registrant***

The following table shows information about our executive officers as of December 31, 2008.

Name	Age	Position
Chane Graziano	70	Chief Executive Officer and Chairman of the Board of Directors
David Green	44	President and Director
Thomas McNaughton	48	Chief Financial Officer and Treasurer
Susan Luscinski	52	Chief Operating Officer

Chane Graziano has served as the Company s Chief Executive Officer and Chairman of the Board of Directors of the Company since March 1996. Prior to joining the Company, Mr. Graziano served as the President of Analytical Technology Inc., an analytical electrochemistry instruments company, from 1993 to 1996 and as the President and Chief Executive Officer of its predecessor, Analytical Technology Inc.-Orion, an electrochemistry instruments and laboratory products company, from 1990 until 1993. Mr. Graziano served as the President of Waters Corporation, an analytical instrument manufacturer, from 1985 until 1989. Mr. Graziano has over 45 years experience in the laboratory products and analytical instruments industry. Mr. Graziano serves on the Board of Directors of Nova Holdings LLC and certain of its subsidiaries, including Nova Ventures Corporation, and Advion BioSciences, Inc.

David Green has served as the Company s President and a member of the Board of Directors of the Company since March 1996. Prior to joining the Company, Mr. Green was a strategy consultant with Monitor Company, a strategy consulting company, in Cambridge, Massachusetts and Johannesburg, South Africa from June 1991 until September 1995 and a brand manager for household products with Unilever PLC, a packaged consumer goods company, in London from September 1985 to February 1989. Mr. Green currently serves on the Board of Directors of the Harvard Business School Healthcare Industry Alumni Association, the Advisory Board of the Harvard Business School Student Healthcare Club and on the Executive Advisory Board of The University of Massachusetts Lowell Nanomanufacturing Center. Mr. Green graduated from Oxford University with a B.A. Honors degree in physics and holds a M.B.A. degree with distinction from Harvard Business School.

Thomas McNaughton has served as our Chief Financial Officer and Treasurer since November 14, 2008. Prior to joining Harvard Bioscience, Mr. McNaughton provided, from January 2008 to September 2008 financial consulting services, primarily to an angel-investing group and a silicon manufacturing start-up. From 2005 to 2007, Mr. McNaughton served as Vice President Finance and Chief Financial Officer for Tivoli Audio, LLC, a venture capital-backed global manufacturer of premium audio systems. Prior to joining Tivoli Audio, LLC, from 1990 to 2005, Mr. McNaughton served in various managerial positions in the areas of financial reporting, treasury, investor relations, and acquisitions within Cabot Corporation, a global manufacturer of fine particulate products, and served from 2002 to 2005 as Finance Director, Chief Financial Officer of Cabot Supermetals, a $350 million Cabot division that provides high purity tantalum and niobium products to the electronics and semiconductor industries. Mr. McNaughton practiced from 1982 to 1990 as a Certified Public Accountant in the audit services group of Deloitte & Touche, LLP. Mr. McNaughton holds a B.S. in accounting and finance from Babson College. Mr. McNaughton is a certified public accountant.

Susan Luscinski has served as our Chief Operating Officer since August 2004 and served as our Principal Accounting Officer from May 2008 through November 2008. Ms. Luscinski served as our Chief Financial Officer from August 2001 until August 2004 and Vice President of Finance and Administration from May 1999 until August 2001. Ms. Luscinski served as our Corporate Controller from May 1988 until May 1999 and has served in various other positions at our company and its predecessor since January 1985.

Table of Contents

PART II

Item 5. ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

Price Range of Common Stock

Our common stock has been quoted on the NASDAQ Global Market since our initial public offering on December 7, 2000, and currently trades under the symbol HBIO. The following table sets forth the range of the high and low sales prices per share of our common stock as reported on the NASDAQ Global Market for the quarterly periods indicated.

Year Ended December 31, 2008	High	Low
First Quarter	$ 5.14	$ 3.85
Second Quarter	$ 5.19	$ 4.49
Third Quarter	$ 5.12	$ 4.01
Fourth Quarter	$ 4.58	$ 1.70

Year Ended December 31, 2007	High	Low
First Quarter	$ 5.50	$ 4.50
Second Quarter	$ 6.18	$ 4.78
Third Quarter	$ 5.63	$ 4.22
Fourth Quarter	$ 5.10	$ 3.62

On February 27, 2009, the closing sale price of our common stock on the NASDAQ Global Market was $2.57 per share. There were 203 holders of record of our common stock as of February 27, 2009. We believe that the number of beneficial owners of our common stock at that date was substantially greater.

Stock Repurchase Program

The following table provides the information as of December 31, 2008 with respect to the shares of common stock repurchased by the Company during the fourth quarter of 2008:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
October 1, 2008 October 31, 2008	264,915	$ 3.51	264,915	$ 8,818,971
November 1, 2008 November 30, 2008	271,376	$ 2.47	271,376	$ 8,147,732
December 1, 2008 December 31, 2008	297,974	$ 2.50	297,974	$ 7,403,516
Total	834,265	$ 2.81	834,265	

On December 6, 2007, our Board of Directors authorized the repurchase by the Company of up to $10 million of its common stock in the open market or through privately negotiated transactions over the next 24 months. Under the program, shares may be repurchased from time to time and in such amounts as market conditions warrant, subject to regulatory considerations and any applicable contractual restrictions.

Dividend Policy

We have never declared or paid cash dividends on our common stock in the past and do not intend to pay cash dividends on our common stock in the foreseeable future. Any future determination to pay dividends will be at the discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements and other factors our Board of Directors deems relevant.

Table of Contents

Stockholder Return Performance Graph

The following graph provides a comparison of the cumulative total stockholder return on the Company s Common Stock from December 31, 2003 to December 31, 2008 with the cumulative return of the Russell 2000 Index and the Nasdaq Biotechnology Index over the same period. The five-year cumulative return assumes an initial investment of $100 in the Company s Common Stock and in each index on December 31, 2003. The total return for the Company s Common Stock and the indices used assumes the reinvestment of all dividends.

	12/03	12/04	12/05	12/06	12/07	12/08
Harvard Bioscience, Inc.	$ 100.00	$ 52.02	$ 50.00	$ 57.64	$ 51.46	$ 29.78
Russell 2000	$ 100.00	$ 118.33	$ 123.72	$ 146.44	$ 144.15	$ 95.44
NASDAQ Biotechnology	$ 100.00	$ 112.17	$ 130.53	$ 130.05	$ 132.24	$ 122.10

Table of Contents

Item 6. ***Selected Financial Data.***

	For The Years Ended December 31,				
	2008	2007	2006	2005	2004
	(in thousands, except per share data)				
Statement of Operations Data:					
Revenues	$ 88,049	$ 83,407	$ 76,181	$ 67,431	$ 64,745
Cost of product revenues(1)	45,893	43,161	38,094	34,156	33,312
Gross profit	42,156	40,246	38,087	33,275	31,433
Operating expenses(1)	33,677	30,713	29,397	25,351	23,049
Operating income	8,479	9,533	8,690	7,924	8,384
Other income (expense), net	(829)	35	(294)	(784)	(751)
Income from continuing operations before income taxes	7,650	9,568	8,396	7,140	7,633
Income taxes	2,240	1,970	1,775	899	3,115
Income from continuing operations	5,410	7,598	6,621	6,241	4,518
Discontinued operations(1)(2)					
Loss from discontinued operations, net of tax	(457)	(5,864)	(8,962)	(38,118)	(2,189)
Loss on disposition of discontinued operations, net of tax	(3,280)	(3,088)			
Total loss from discontinued operations, net of tax	(3,737)	(8,952)	(8,962)	(38,118)	(2,189)
Net income (loss)	$ 1,673	$ (1,354)	$ (2,341)	$ (31,877)	$ 2,329
Income (loss) per share:					
Basic earnings per common share from continuing operations	$ 0.18	$ 0.25	$ 0.22	$ 0.20	$ 0.15
Discontinued operations	(0.12)	(0.29)	(0.29)	(1.25)	(0.07)
Basic earnings (loss) per common share	$ 0.05	$ (0.04)	$ (0.08)	$ (1.05)	$ 0.08
Diluted earnings per common share from continuing operations	$ 0.17	$ 0.24	$ 0.21	$ 0.20	$ 0.15
Discontinued operations	(0.12)	(0.29)	(0.29)	(1.24)	(0.08)
Diluted earnings (loss) per common share	$ 0.05	$ (0.04)	$ (0.08)	$ (1.04)	$ 0.07
Weighted average common shares:					
Basic	30,882	30,646	30,519	30,442	30,269
Diluted	31,354	31,405	31,148	30,781	31,103

	As of December 31,				
	2008	2007	2006	2005	2004
	(in thousands)				
Balance Sheet Data:					
Cash and cash equivalents	$ 13,698	$ 17,889	$ 9,357	$ 7,632	$ 13,867
Working capital	32,249	37,970	38,601	42,400	45,245
Total assets(3)	81,271	98,853	93,228	92,035	139,881
Long-term debt, net of current portion	59	5,578	3,000	8,500	16,520
Stockholders equity(3)	66,718	74,137	71,883	68,416	104,357

(1) On January 1, 2006, we adopted SFAS No. 123 (revised 2004), Share-Based Payment, which requires us to recognize compensation expense for all share-based payment awards made to employees and directors including employee stock options and employee stock purchases related to the Employee Stock Purchase Plan (employee stock purchases). We adopted SFAS No. 123(R) using the modified prospective transition method, which requires the application of the accounting standard as of January 1, 2006, the first day of our

Table of Contents

fiscal year 2006. In accordance with the modified prospective transition method, our consolidated financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS No. 123(R).

Stock-based compensation expense recognized under SFAS No. 123(R) for the years ended December 31, 2008, 2007 and 2006 was $2.0 million, $2.4 million and $2.1 million, respectively, which consisted of stock-based compensation expense related to employee stock options and the employee stock purchase plan, as applicable, and was recorded as a component of cost of product revenues, operating expenses and discontinued operations, net of tax.

(2) During the quarter ended September 30, 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business segment was based on the fact that market conditions for the Capital Equipment Business have been such that this business has not met our expectations and the decision to focus our resources on the Apparatus and Instrumentation Business segment. As a result, we began reporting the Capital Equipment Business segment as a discontinued operation in the third quarter of 2005. During 2005, we recorded abandonment, impairment and write-down charges related to our Capital Equipment Business segment of approximately $28.7 million on goodwill and other long-lived assets. During the year ended December 31, 2006, we utilized a market approach and re-evaluated the fair value less costs to sell of the assets that comprise the Capital Equipment Business segment. Based on this evaluation, we recorded additional asset impairment charges of approximately $3.9 million.

During the year ended December 31, 2007, we utilized a market approach and re-evaluated the fair value less costs to sell of the assets that comprise the Capital Equipment Business segment. Based on our evaluation, additional asset impairment charges of approximately $2.9 million were recorded during 2007.

In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of our Belgian subsidiary, MAIA Scientific, both of which were part of our Capital Equipment Business Segment, to Digilab, Inc. The purchase price paid by Digilab under the terms of the Asset Purchase Agreement consisted of $1,000,000 in cash plus additional consideration in the form of an earn-out based on 20% of the revenue generated by the acquired business as it is conducted by Digilab over a three-year period post-transaction. Any earn-out amounts will be evidenced by interest bearing promissory notes due on November 30, 2012. During the fourth quarter of 2007, we recorded a loss on this sale of $3.1 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

On September 30, 2008, we completed the sale of assets of our Union Biometrica Division including its German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment, to UBIO Acquisition Company. The purchase price paid by UBIO Acquisition Company under the terms of the Asset Purchase Agreement consisted of $1 in cash, the assumption of certain liabilities, plus additional consideration in the form of an earn-out based on the revenue generated by the acquired business as it is conducted by UBIO Acquisition Company over a five-year post-transaction period in an amount equal to (i) 5% of the revenue generated up to and including $6,000,000 and (ii) 8% of the revenue generated above $6,000,000 each year. Any earn-out amounts will be evidenced by interest-bearing promissory notes due on September 30, 2013 or at an earlier date based on certain triggering events. During 2008, we recorded a loss on sale of the Union Biometrica business of $3.3 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

The operating results of the Capital Equipment Business segment and the asset impairment charges described above are classified under the caption Discontinued Operations.

(3) In September 2006, the Financial Accounting Standards Board (FASB) issued SFAS No. 158, *Employers Accounting for Defined Benefit Pension and Other Postretirement Plans-an amendment of FASB Statements No. 87, 88, 106 and 132(R)*. This statement requires balance sheet recognition of the overfunded or underfunded status of pension and postretirement benefit plans. Under SFAS No. 158, actuarial gains and

Table of Contents

losses, prior service costs or credits, and any remaining transition assets or obligations that have not been recognized under previous accounting standards must be recognized in other accumulated comprehensive income, net of tax effects, until they are amortized as a component of net periodic benefit cost. The requirement to recognize the funded status of a benefit plan and the disclosure requirements in SFAS No. 158 are effective as of the end of the first fiscal year ending after December 15, 2006. We adopted SFAS No. 158 effective December 31, 2006.

The incremental effect in our consolidated balance sheet of applying SFAS No. 158 as of December 31, 2006 is reflected in the following table:

	Before Application of SFAS No. 158	Adjustments Increase (Decrease) (in thousands)	After Application of SFAS No. 158
Deferred income tax assets	$ 10	$ 685	$ 695
Total assets	92,543	685	93,228
Other liabilities non-current	36	2,283	2,319
Total liabilities	19,062	2,283	21,345
Accumulated other comprehensive income	7,772	(1,598)	6,174
Total stockholders equity	73,481	(1,598)	71,883

Item 7. ***Management s Discussion and Analysis of Financial Condition and Results of Operations.***

Forward-Looking Statements

The following section of this Annual Report on Form 10-K entitled Management s Discussion and Analysis of Financial Condition and Results of Operations contains statements that are not statements of historical fact and are forward-looking statements within the meaning of federal securities laws. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Factors that may cause our actual results to differ materially from those in the forward-looking statements include those factors described in Item 1A. Risk Factors beginning on page 10 of this Annual Report on Form 10-K. You should carefully review all of these factors, as well as the comprehensive discussion of forward-looking statements on page 1 of this Annual Report on Form 10-K.

Overview

During the second quarter of 2005, we realigned our lines of business into two business segments, the Apparatus and Instrumentation Business segment and our Capital Equipment Business segment. Our business had previously been arranged in a single segment.

In July 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business was based on the fact that market conditions for the Capital Equipment Business segment had been such that this business did not meet our expectations and the decision to focus our resources on our Apparatus and Instrumentation Business segment. As a result, we began reporting our Capital Equipment Business segment as a discontinued operation in the third quarter of 2005. In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of our Belgian subsidiary, MAIA Scientific, both of which were part of our Capital Equipment Business Segment, to Digilab, Inc. In September 2008, we completed the sale of assets of our Union Biometrica Division including our German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment. Accordingly, unless otherwise indicated, the discussion of our business is focused on our continuing operations, which constitute our Apparatus and Instrumentation businesses.

From 1997 to 2008, the revenues from our continuing operations grew from $11.5 million to $88.0 million, an annual compounded growth rate of approximately 20%. Since the second half of 2005, when we made the

Table of Contents

decision to divest the Capital Equipment Business segment, we refocused our resources on our core apparatus and instrumentation business, which has been the cornerstone to our success over the last decade.

In March 2008, we outlined five major initiatives. These initiatives included:

- the launch of a new major Harvard Apparatus catalog during February 2008;
- the launch of Panlab products into US markets;
- the signing of a new contract with GE Healthcare and the full launch of our new microliter spectrophotometer;
- the launch of new 2-D electrophoresis products through our Hoefer subsidiary; and
- the consolidation of business functions to reduce operating expenses.

We made the following progress on these five initiatives during the year:

- We launched our new major catalog in February 2008 with a second mailing tranche in April 2008. During the fourth quarter of 2008, we also launched a Panlab catalog and an electrophysiology catalog featuring our Warner and BTX product lines. The addition of Panlab products to the Harvard Apparatus business unit portfolio of products has been well received.
- We entered into a new distributor contract with GE Healthcare in April 2008, which led to healthy sales of our new microliter spectrophotometer in the first half of the year, however sales of our other spectrophotometers through GE Healthcare declined significantly. We are currently working with GE Healthcare to reverse the decline in this business.
- We made significant progress consolidating certain business functions; in particular, we consolidated the marketing and administrative functions of Hoefer into the Harvard Apparatus business and consolidated the complete operations of Asys into our Biochrom business. While we have reduced expenses at both Hoefer and Asys, at Hoefer the decline in electrophoresis revenue through GE Healthcare partially offset these savings.
- While we did launch the new Hoefer 2-D electrophoresis products in the second quarter of 2008, the uptake of this product has been slower than expected.

The goals of these initiatives were to improve our organic growth rates and drive operational efficiencies.

For 2009, our goal is to drive organic growth through both new product development and direct marketing. The key elements of the growth plan for 2009 are the following:

- the launch of Biochrom US, a new subsidiary, to drive growth of the Biochrom spectrophotometer and Asys plate reader products in the US market;

the full year impact of Warner and Panlab catalogs mailed at the end of 2008;

the continued search engine optimization of our websites;

the launch of a new catalog to drive the Hoefer/SciePlas electrophoresis products in Q2;

the launch of a new product in Q2; and

the development of new products that will have little impact on 2009 revenue but should position us well for future growth.

We expect that these initiatives will drive organic growth in the low single digit range in 2009.

We also expect to continue the program of operational improvements we began last year and have recently announced the consolidation of part of our electrophoresis operations that we expect will save approximately $0.005 per share on a full year basis and about half that amount during 2009. We anticipate that we will incur restructuring costs associated with this consolidation of approximately $0.5 million in the first half of 2009.

Table of Contents

Accordingly, we remain committed to our goal of high revenue and profit growth through a combination of organic growth, tuck under acquisitions and operational improvements. While we expect the initiatives discussed above will positively impact our business, the success of these initiatives is subject to a number of factors including the fluctuations in foreign exchange rates, the current economic and financial crisis and their impact on our customers, the competitiveness of our new products, the strength of our intellectual property underlying these products, the success of our marketing efforts and those of our distributors and the other factors described under the heading Item 1A. Risk Factors .

Generally, management evaluates the financial performance of its operations before the effects of stock compensation expense, restructuring charges, certain one-off items and before the effects of purchase accounting and amortization of intangible assets related to our acquisitions. Our goal is to develop and sell products that improve life science research and as such, we monitor our operating metrics and when appropriate, effect organizational changes to leverage infrastructure and distribution channels. These changes may be effected as a result of various events, including acquisitions, the worldwide economy, general market conditions and personnel changes.

During 2003, we entered into a $20.0 million credit facility with Brown Brothers Harriman & Co. On December 1, 2006, we amended the terms of the credit facility. The amended credit facility expires on December 1, 2009. We are working with our existing banks to obtain a new facility so adequate financing at appropriate maturities will continue to be available for acquisitions. Over the past several months, the global credit markets have suffered through a liquidity contraction. We believe that the lack of liquidity in the market at large has not had a significant impact on us or on our current negotiations with our banks to obtain a new credit facility, with the exception that we believe the new facility will be at prevailing interest rates. Prevailing interest rates currently exceed the rates we pay under the existing credit facility at this time, by an estimated 0.5%. We expect to secure this extended debt financing on a timely basis to avoid being constrained in pursuing our acquisition strategy. See Note 10-Long-Term Debt.

Historically, we have funded acquisitions with debt, capital raised by issuing equity and cash flow from operations. In order to continue the acquisition portion of our growth strategy beyond what our current cash balances and cash flow from operations can support, we will need to raise more capital, either by incurring additional debt, issuing equity or a combination.

In the table below, we provide an overview of selected operating metrics.

	2008	% of Revenue	2007	% of Revenue	2006	% of Revenue
			($ in thousands)			
Total revenues	$ 88,049		$ 83,407		$ 76,181	
Cost of product revenues	45,893	52.1%	43,161	51.7%	38,094	50.0%
Sales and marketing expenses	10,970	12.5%	10,352	12.4%	9,499	12.5%
General & administrative expenses	15,134	17.2%	14,829	17.8%	15,047	19.8%
Research & development expenses	4,048	4.6%	3,708	4.4%	3,154	4.1%

Revenues. We generate revenues by selling apparatus, instruments, devices and consumables through our catalog, our direct sales force, our distributors and our website.

For products primarily priced under $10,000, every one to three years, we typically distribute a new, comprehensive catalog initially in a series of bulk mailings, first to our existing customers, followed by mailings to targeted markets of potential customers. Over the life of the catalog, distribution will also be made periodically to potential and existing customers through direct mail and trade shows and in response to e-mail and telephone inquiries. From time to time, we also intend to distribute catalog supplements that promote selected areas of our catalog or new products to targeted subsets of our customer base. Future distributions of our comprehensive catalog and our catalog supplements will be determined primarily by the incidence of new product introductions, which cannot be predicted. Our end user customers are research scientists at pharmaceutical and biotechnology companies, universities and government laboratories. Revenue from catalog sales in any period is influenced by the amount of time elapsed since the last mailing of the catalog, the number of catalogs mailed and the number of

Table of Contents

new items included in the catalog. We launched our latest comprehensive catalog in February 2008, with approximately 900 pages and approximately 60,000 copies printed. Revenues from direct sales to end users, derived through our catalog and the electronic version of our catalog on our website, represented approximately 30% and 31% of our revenues for the years ended December 31, 2008 and 2007, respectively.

Products sold under brand names of distributors including GE Healthcare, are typically priced in the range of $5,000-$15,000. They are mainly scientific instruments like spectrophotometers and plate readers that analyze light to detect and quantify a very wide range of molecular and cellular processes or apparatus like gel electrophoresis units. We also use distributors for both our catalog products and our higher priced products, for sales in locations where we do not have subsidiaries or where we have distributors in place for acquired businesses. For the years ended December 31, 2008 and 2007, approximately 54% and 59%, respectively, of our revenues were derived from sales to distributors.

For the years ended December 31, 2008 and 2007, approximately 85% and 87%, respectively, of our revenues were derived from products we manufacture. The remaining 15% and 13%, respectively, of our revenues for the years ended December 31, 2008 and 2007, were derived from complementary products we distribute in order to provide the researcher with a single source for all equipment needed to conduct a particular experiment. For the years ended December 31, 2008 and 2007, approximately 60% and 58%, respectively, of our revenues were derived from sales made by our non-U.S. operations. A large portion of our international sales during both 2008 and 2007 consisted of sales to GE Healthcare (formerly Amersham Biosciences), the distributor for our spectrophotometers. GE Healthcare distributes these products to customers around the world, including to many customers in the United States, from its distribution center in Upsalla, Sweden. As a result, we believe our international sales would have been a lower percentage of our revenues if we had shipped our products directly to our end-users. Changes in the relative proportion of our revenue sources between catalog sales, direct sales, and distribution sales are primarily the result of a different sales proportion of acquired companies.

Cost of product revenues. Cost of product revenues includes material, labor and manufacturing overhead costs, obsolescence charges, packaging costs, warranty costs, shipping costs and royalties. Our cost of product revenues may vary over time based on the mix of products sold. We sell products that we manufacture and products that we purchase from third parties. The products that we purchase from third parties have higher cost of goods sold because the profit is effectively shared with the original manufacturer. We anticipate that our manufactured products will continue to have a lower cost of product revenues as a percentage of revenues as compared with the cost of non-manufactured products for the foreseeable future. Additionally, our cost of product revenues as a percent of product revenues will vary based on mix of direct to end user sales and distributor sales, mix by product line and mix by geography.

Sales and marketing expenses. Sales and marketing expense consists primarily of salaries and related expenses for personnel in sales, marketing and customer support functions. We also incur costs for travel, trade shows, demonstration equipment, public relations and marketing materials, consisting primarily of the printing and distribution of our approximately 900 page catalog, supplements and various other specialty catalogs, and the maintenance of our websites. We may from time to time expand our marketing efforts by employing additional technical marketing specialists in an effort to increase sales of selected categories of products in our catalog. We may also from time to time expand our direct sales organizations in an effort to concentrate on key accounts or promote certain product lines.

General and administrative expenses. General and administrative expense consists primarily of salaries and other related costs for personnel in executive, finance, accounting, information technology and human relations functions. Other costs include professional fees for legal and accounting services, non-inventory related restructuring costs, facility costs, investor relations, insurance and provision for doubtful accounts.

Research and development expenses. Research and development expense consists primarily of salaries and related expenses for personnel and capital resources used to develop and enhance our products and to support collaboration agreements. Other research and development expense includes fees for consultants and outside service providers, and material costs for prototype and test units. We expense research and development costs as incurred. We believe that investment in product development is a competitive necessity and plan to continue to make these investments in order to realize the potential of new technologies that we develop, license or acquire.

Table of Contents

Stock compensation expenses. On January 1, 2006, we adopted SFAS No. 123 (revised) 2004), *Share-Based Payment*, which requires us to recognize compensation expense for all share-based payment awards made to employees and directors including employee stock options and employee stock purchases related to the Employee Stock Purchase Plan (employee stock purchases). We adopted SFAS No. 123(R) using the modified prospective transition method, which requires the application of the accounting standard as of January 1, 2006, the first day of our fiscal year 2006. Stock-based compensation expense recognized under SFAS No. 123(R) for the year ended December 31, 2008 was $2.0 million and $9,000 in our continuing operations and discontinued operations, respectively. Stock-based compensation expense recognized under SFAS No. 123(R) for the year ended December 31, 2007 was $2.3 million and $0.1 million in our continuing operations and discontinued operations, respectively. Stock-based compensation expense recognized under SFAS No. 123(R) for the year ended December 31, 2006 was $1.9 million and $0.2 million in our continuing operations and discontinued operations, respectively. This stock-based compensation expense was related to employee stock options and the employee stock purchase plan and was recorded as a component of cost of product revenues, sales and marketing expenses, general and administrative expenses, research and development expenses and discontinued operations.

Results of Operations

Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

Revenues.

Revenues increased $4.6 million, or 5.6%, to $88.0 million for the year ended December 31, 2008 compared to $83.4 million for the same period in 2007. The Company s Panlab subsidiary, acquired during the fourth quarter of 2007, accounted for a $6.8 million increase in revenues. A strengthening of the U.S. dollar during 2008 had a $3.0 million negative impact on revenues during the year. Excluding the effect of currency rate changes, the Company s Harvard Apparatus business reported a slight revenue decrease (less than 1%), and the Biochrom business reported 3% organic growth compared with 2007. Biochrom s organic growth came primarily from sales of its new microliter spectrophotometer product.

Cost of product revenues.

Cost of product revenues increased $2.7 million, or 6.3%, to $45.9 million for the year ended December 31, 2008 from $43.2 million for the year ended December 31, 2007. The Company s Panlab subsidiary was acquired in the fourth quarter of 2007, and only that quarter s operating results were included in the Company s results in 2007. Therefore, Panlab accounted for a $4.4 million increase in cost of product revenues during 2008. At Biochrom, the additional production costs of its organic sales growth were in large part offset by cost savings derived from consolidating the Asys manufacturing operation into Biochrom s site. The effects of a strengthened U.S. dollar reduced 2008 cost of product revenues by $1.9 million compared with 2007. Gross profit as a percentage of revenues decreased to 47.9% for the year ended December 31, 2008 compared with 48.3% for the same period in 2007. The decrease in gross profit as a percentage of revenues was primarily due to certain inventory write-downs related to our consolidation plan. The Panlab business, acquired in October 2007, has lower than average gross margins than the Company s consolidated average but the effect of Panlab s lower margins on the Company s overall gross margin was offset by improved mix across our other businesses. See Note 9 of our consolidated financial statements Restructuring and Other Exit Costs.

Sales and marketing expense.

Sales and marketing expenses increased $0.6 million, or 6.0%, to $11.0 million for the year ended December 31, 2008 compared to $10.4 million for the year ended December 31, 2007. The inclusion of a full year of sales and marketing costs at our Panlab subsidiary caused an increase of $0.8 million in 2008. That increase was partially offset by the effects of changes in currency exchange rates, which reduced sales and marketing expenses by $0.1 million in 2008 compared with 2007.

Table of Contents

General and administrative expense.

General and administrative expenses increased $0.3 million, or 2.0%, to $15.1 million for the year ended December 31, 2008 compared with $14.8 million for the year ended December 31, 2007. The inclusion of a full year s results of our Panlab subsidiary caused an increase in general and administrative expenses of $0.6 million in 2008. Additionally, the implementation of the Company s shareholder rights plan during 2008 cost $0.1 million. Those increases were partially offset by the effects of changes in currency exchange rates, which reduced general and administrative expenses by $0.3 million in 2008 compared with 2007.

Research and development expense.

Research and development expenses were $4.0 million, an increase of $0.3 million for the year ended December 31, 2008 compared to $3.7 million for the year ended December 31, 2007. The increase in research and development expenses was primarily due to expenses of $0.5 million at Panlab, partially offset by the effects of currency rate changes.

Amortization of intangible assets.

Amortization of intangibles was $2.0 million and $1.8 million for the years ended December 31, 2008 and 2007, respectively.

Other income (expense), net.

Other expense, net, was $0.8 million for the year ended December 31, 2008 compared to other income net of $35,000 for the year ended December 31, 2007. Included in other expense, net for the year ended December 31, 2008 was $0.5 million in costs related to an asset write-off and $0.3 million related to acquisition initiatives in 2008. Included in other income, net for the year ended December 31, 2007 was $30,000 of costs related to acquisition initiatives. Net interest expense was $17,000 and $0.3 million for the years ended December 31, 2008 and 2007, respectively. The decrease in net interest expense was primarily the result of lower average long-term debt balances during 2008 compared to 2007. Other income, net, also included foreign exchange gains of $0.1 million and $45,000 for the years ended December 31, 2008 and 2007, respectively. These exchange gains were primarily the result of currency fluctuations on intercompany transactions between our subsidiaries.

Income taxes.

Income tax expense from continuing operations was approximately $2.2 million and $2.0 million for the years ended December 31, 2008 and 2007, respectively. The effective income tax rate for continuing operations was 29.3% for the year ended December 31, 2008, compared with 20.6% for the same period of 2007. The difference between our effective tax rate and the US statutory tax rate is principally attributable to foreign tax rate differential and changes in our valuation allowance.

Restructuring

During the quarter ended March 31, 2008, the management of Harvard Bioscience committed to an ongoing initiative to consolidate business functions to reduce operating expenses. Our recent actions have been related to the separation of our electrophoresis product lines from our spectrophotometer and plate reader product lines. As part of these initiatives, we have made changes in management, completed the consolidation of the Hoefer electrophoresis administrative and marketing operations from San Francisco, California to the headquarters of the Harvard Apparatus subsidiary in Holliston, Massachusetts and consolidated the activities of our Asys Hitech subsidiary in Austria to the Company s Biochrom subsidiary s facility located in Cambridge, UK.

During the year ended December 31, 2008, we recorded restructuring charges of approximately $1.8 million. These charges were comprised of $1.0 million in severance payments, $0.3 million in inventory impairment charges related to the discontinuance of certain product lines (included in cost of product revenues), $0.1 million in facility closure costs and $0.4 million in various other costs.

Table of Contents

Discontinued Operations

In July 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business based on the fact that market conditions for the Capital Equipment Business were such that this business had not met our expectations and the decision to focus Company resources on the Apparatus and Instrumentation Business segment. As a result, we began reporting the Capital Equipment Business segment as a discontinued operation in the third quarter of 2005.

In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of our Belgian subsidiary, MAIA Scientific, both of which were part of our Capital Equipment Business Segment, to Digilab, Inc. The purchase price paid by Digilab under the terms of the Asset Purchase Agreement consisted of $1,000,000 in cash plus additional consideration in the form of an earn-out based on 20% of the revenue generated by the acquired business as it is conducted by Digilab over a three-year period post-transaction. Any earn-out amounts will be evidenced by interest bearing promissory notes due on November 30, 2012. During the fourth quarter of 2007, we recorded a loss on this sale of $3.1 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain. The COPAS flow cytometry product line held by our Union Biometrica US and German subsidiaries was not included in this sale.

On September 30, 2008, we completed the sale of assets of our Union Biometrica Division including its German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment, to UBIO Acquisition Company. The purchase price paid by UBIO Acquisition Company under the terms of the Asset Purchase Agreement consisted of $1 in cash, the assumption of certain liabilities, plus additional consideration in the form of an earn-out based on the revenue generated by the acquired business as it is conducted by UBIO Acquisition Company over a five-year post-transaction period in an amount equal to (i) 5% of the revenue generated up to and including $6,000,000 and (ii) 8% of the revenue generated above $6,000,000 each year. Any earn-out amounts will be evidenced by interest-bearing promissory notes due on September 30, 2013 or at an earlier date based on certain triggering events. During 2008, we recorded a loss on sale of the Union Biometrica business of $3.3 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

The loss from discontinued operations, net of tax, excluding the loss on sale was $0.5 million for the year ended December 31, 2008. The loss from discontinued operations, net of tax for the year ended December 31, 2008 includes the operating results of our former Union Biometrica US and German subsidiaries. The loss from discontinued operations, net of tax, excluding the loss on sale was $5.9 million for the year ended December 31, 2007. The loss from discontinued operations, net of tax for the year ended December 31, 2007 includes the operating results from our former Genomic Solutions Division, MAIA Scientific subsidiary and our Union Biometrica US and German subsidiaries.

Year Ended December 31, 2007 Compared to Year Ended December 31, 2006

Revenues. Revenues increased $7.2 million, or 9.5%, to $83.4 million for the year ended December 31, 2007 compared to $76.2 million for the same period in 2006. The increase in revenue is primarily due to revenues in 2007 of $2.9 million from our Panlab subsidiary acquired in October 2007 and an increase in sales of $1.5 million from our Anthos product line acquired in June 2006. In addition, revenues increased by $3.0 million, or 3.9%, during 2007 due to favorable foreign exchange on sales denominated in foreign currencies.

Cost of product revenues. Cost of product revenues increased $5.1 million, or 13.3%, to $43.2 million for the year ended December 31, 2007 from $38.1 million for the year ended December 31, 2006. The increase in cost of product revenues is mainly due to the increase in revenues resulting from the acquisition of our Panlab subsidiary acquired in October 2007 and our Anthos product line acquired in June 2006. In addition, cost of product revenues increased by $1.8 million due to an increase in foreign exchange rates. Gross profit as a percentage of revenues decreased to 48.3% for the year ended December 31, 2007 compared with 50.0% for the same period in 2006. The decrease in gross profit as a percentage of revenues was primarily due to sales from our Panlab subsidiary, which sells at lower gross margins than our historical consolidated gross margins due to

Table of Contents

Panlab s mix of distributed products compared to manufactured products, and from sales from our lower margin products and sales channels, primarily from our Anthos product lines.

Sales and marketing expense. Sales and marketing expenses increased $0.9 million, or 9.0%, to $10.4 million for the year ended December 31, 2007 compared to $9.5 million for the year ended December 31, 2006. This increase was primarily due to an increase of $0.3 million due to changes in foreign exchange rates, expenses from our recently acquired Panlab subsidiary of $0.2 million and other employee related costs of $0.4 million.

General and administrative expense. General and administrative expenses were $14.8 million, a decrease of $0.2 million, or 1.4%, for the year ended December 31, 2007 compared to $15.0 million for the year ended December 31, 2006. The decrease in general and administrative expenses was primarily due to decreases in bonus expense of $0.7 million, professional fees of $0.3 million and pension expense of $0.2 million. This decrease was partially offset by expenses from our recently acquired Panlab subsidiary of $0.2 million and increases of $0.3 million due to changes in foreign exchange rates and $0.4 million due to increased stock-based compensation.

Research and development expense. Research and development expenses were $3.7 million, an increase of $0.6 million, or 17.6%, for the year ended December 31, 2007 compared to $3.2 million for the year ended December 31, 2006. The increase in research and development expenses was primarily due to consulting and other costs associated with recently developed products of $0.2 million, an increase of $0.1 million due to our acquisition of Panlab and an increase of $0.1 million due to changes in foreign exchange rates.

Amortization of intangible assets. Amortization of intangibles was $1.8 and $1.7 million for the years ended December 31, 2007 and 2006, respectively.

Other income (expense), net. Other income, net, was $35,000 for the year ended December 31, 2007 compared to other expense, net of $0.3 million for the year ended December 31, 2006. Net interest expense was $48,000 for the year ended December 31, 2007 compared to net interest expense of $0.2 million for the same period in 2006. The decrease in net interest expense was primarily the result of lower average long-term debt balances during 2007 compared to 2006. Other expense, net also included foreign exchange gains of $45,000 and $33,000 for the years ended December 31, 2007 and 2006, respectively. These exchange gains were primarily the result of currency fluctuations on intercompany transactions between our subsidiaries.

Income taxes. Income tax expense from continuing operations was $2.0 million for the year ended December 31, 2007 compared to $1.8 million for the year ended December 31, 2006. The effective income tax rate for continuing operations was 20.5% for the year ended December 31, 2007, compared with 21.1% for the same period in 2006.

Discontinued Operations. During the quarter ended September 30, 2005, the Company announced plans to divest its Capital Equipment Business segment. The decision to divest this business segment was based on the fact that market conditions for the Capital Equipment Business had been such that this business did not meet the Company s expectations and the decision to focus Company resources on the Apparatus and Instrumentation Business segment. As a result, we began reporting the Capital Equipment Business segment as a discontinued operation in the third quarter of 2005.

In November 2007, the Company completed the sale of the assets of its Genomic Solutions Division and the stock of its Belgian subsidiary, MAIA Scientific, both of which were part of its Capital Equipment Business Segment, to Digilab, Inc. The purchase price paid by Digilab under the terms of the Asset Purchase Agreement consisted of $1,000,000 in cash plus additional consideration in the form of an earn-out based on 20% of the revenue generated by the acquired business as it is conducted by Digilab over a three-year period post-transaction. Any earn-out amounts will be evidenced by interest bearing promissory notes due on November 30, 2012. During the fourth quarter of 2007, we recorded a loss on this sale of $3.1 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

The loss from discontinued operations, net of tax, was approximately $5.9 million for the year ended December 31, 2007 compared to a loss of $9.0 million for the same period in 2006. The loss from discontinued

Table of Contents

operations, net of tax includes the operating results from our former Genomic Solutions Division and MAIA Scientific subsidiary, and our current Union Biometrica US and German subsidiaries, both of which are still included in discontinued operations.

Liquidity and Capital Resources

Historically, we have financed our business through cash provided by operating activities, the issuance of common stock and preferred stock, and bank borrowings. Our liquidity requirements have arisen primarily from investing activities, including funding of acquisitions, working capital and capital expenditures.

In our consolidated statements of cash flows, we have elected to combine the cash flows from both continuing and discontinued operations within each category, as allowed by SFAS No. 95, *Statement of Cash Flows*. Unless specifically noted otherwise, our discussion of our cash flows below refers to combined cash flows from both continuing and discontinued operations.

We ended 2008 with cash and cash equivalents of $13.7 million compared to cash and cash equivalents of $18.2 million, of which $17.9 million was held by our continuing operations and $0.3 million was held by our discontinued operations, at December 31, 2007. As of December 31, 2008, we had no borrowings outstanding on our revolving credit facility compared to $5.5 million at December 31, 2007. Additionally, our Panlab subsidiary had $1.4 million in notes payable at December 31, 2008 compared to $2.3 million in notes payable at December 31, 2007.

Overview of Cash Flows for the years ended December 31,

	2008	2007	2006
		(in thousands)	
Cash flows from operations:			
Net income (loss)	$ 1,673	$ (1,354)	$ (2,341)
Changes in assets and liabilities	(1,564)	2,349	(297)
Other adjustments to operating cash flows	9,093	11,060	10,994
Net cash provided by operating activities	9,202	12,055	8,356
Investing activities:			
Acquisitions and divestitures	(752)	(5,089)	(1,118)
Other investing activities	(1,876)	(1,463)	(2,663)
Net cash used in investing activities	(2,628)	(6,552)	(3,781)
Financing activities:			
Proceeds (repayments) of debt, net	(6,270)	2,308	(5,521)
Other financing activities	(1,685)	722	235
Net cash (used in) provided by financing activities	(7,955)	3,030	(5,286)
Effect of exchange rate changes on cash	(3,125)	(80)	691
(Decrease) increase in cash and cash equivalents	$ (4,506)	$ 8,453	$ (20)

Our operating activities generated cash of $9.2 million for the year ended December 31, 2008 compared to $12.1 million for the year ended December 31, 2007. The decrease in cash flows from operations was primarily due to working capital fluctuations during 2008, particularly decreases in accounts payable and accrued expenses that were primarily due to the timing of payments.

Our investing activities used cash of $2.6 million during the year ended December 31, 2008 compared to $6.6 million for the same period in 2007. The caption Other investing activities typically includes purchases of property, plant and equipment and expenditures for our 900-page Harvard Apparatus catalog. Catalog costs related to the Harvard Apparatus catalog, and to a lesser extent our Panlab and electrophysiology catalogs, were $0.6 million for the year ended December 31, 2008 compared to $11,000 for the year ended December 31, 2007. We spent $1.3 million on capital expenditures in the year ended December 31, 2008 compared to $1.5 million for

34

Table of Contents

the year ended December 31, 2007. During the next twelve months, we expect to spend approximately $1.5 million on capital expenditures. During the year ended December 31, 2008, other investing activities also included $0.8 million for cash conveyed with the disposition of the remaining portion of our Capital Equipment Business segment.

Our financing activities have historically consisted of borrowings and repayments under a revolving credit facility with Brown Brothers Harriman & Co., long-term debt and the issuance of preferred stock and common stock, including the common stock issued in our initial public offering. As of December 31, 2008, we had no borrowings outstanding on our revolving credit facility compared to $5.5 million at December 31, 2007. During the year ended December 31, 2008, financing activities used cash of $8.0 million. We repaid $6.3 million of debt, and we repurchased in the open market approximately 0.9 million shares of our common stock at a total cost of $2.6 million, including commissions.

Borrowing Arrangements

During 2003, we entered into a $20.0 million credit facility with Brown Brothers Harriman & Co. On December 1, 2006, we amended the terms of the credit facility. This amendment changed the terms of our current $20.0 million credit facility, by allowing borrowing of up to $10.0 million in British Pound Sterling or Eurocurrency and extending the maturity date from January 1, 2007 to December 1, 2009. The amended credit facility bears interest at either (1) the base rate announced by BBH from time to time, (2) the London Interbank Offered Rate (LIBOR) or (3) the Eurocurrency base rate, plus, in the case of LIBOR or the Eurocurrency base rate, a margin of 2.5% or 2.75% depending on our debt service leverage ratio. As of December 31, 2008, we were in compliance with the financial covenants contained in the credit facility involving income, debt coverage and cash flow, as well as minimum working capital requirements. Additionally, the credit facility also contains limitations on our ability to incur additional indebtedness and requires creditor approval for acquisitions funded with cash, promissory notes and/or other consideration in excess of $6.0 million and for acquisitions funded solely with equity in excess of $10.0 million. We do not believe that these requirements will be a significant constraint on our operations or on the acquisition portion of our growth strategy. As of December 31, 2008, we had no borrowings outstanding under the credit facility compared to $5.5 million outstanding as of December 31, 2007. We were not subject to any borrowing restrictions under the covenants and we had available borrowing capacity under our revolving credit facility of $20.0 million as of December 31, 2008.

Our credit facility matures on December 1, 2009. We are working with our existing banks to obtain a new facility so adequate financing at appropriate maturities will continue to be available for acquisitions. Over the past several months, the global credit markets have suffered through a liquidity contraction. We believe the lack of liquidity in the market at large has not had a significant impact on us or on our current negotiations with our banks to obtain a new credit facility, with the exception that we believe the new facility will be at prevailing interest rates. Prevailing interest rates currently exceed the rates we pay under the existing credit facility at this time, by an estimated 0.5%. Although we believe we may secure this new debt financing on a timely basis to avoid being constrained in pursuing our acquisition strategy there can be no assurance that, in light of the current market conditions, we will obtain a new facility, and if we do obtain a new facility, that it will be on terms favorable to us.

Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary as a result of a number of factors. Based on our current operations and current operating plans, we expect that our available cash, cash generated from current operations and debt capacity will be sufficient to finance current operations and capital expenditures for 12 months and beyond. However, we may use substantial amounts of capital to accelerate product development or expand our sales and marketing activities. We may need to raise additional capital in order to make significant acquisitions. Additional capital raising activities will dilute the ownership interests of existing stockholders to the extent we raise capital by issuing equity securities and we cannot assure you that we will be successful in raising additional capital on favorable terms or at all.

Table of Contents

Off-Balance Sheet Arrangements

We do not use special purpose entities or other off-balance sheet financing arrangements.

Contractual Obligations

The following schedule represents our contractual obligations for our continuing operations, excluding interest, as of December 31, 2008.

	Total	2009	2010	2011	2012	2013	2014 and Beyond
			(in thousands)				
Notes payable	$ 1,420	$ 1,361	$ 59	$	$	$	$
Operating leases	3,622	1,190	824	735	592	241	40
Total	$ 5,042	$ 2,551	$ 883	$ 735	$ 592	$ 241	$ 40

Critical Accounting Policies

We believe that our critical accounting policies are as follows:

- revenue recognition;
- accounting for income taxes;
- inventory;
- valuation of identifiable intangible assets and in-process research and development in business combinations;
- valuation of long-lived and intangible assets and goodwill; and
- stock-based compensation.

Revenue recognition. We follow the provisions of SEC Staff Accounting Bulletin (SAB) No. 101, *Revenue Recognition in the Financial Statements,* as amended by SAB No. 104, *Revenue Recognition.* We recognize revenue of products when persuasive evidence of a sales arrangement exists, the price to the buyer is fixed or determinable, delivery has occurred, and collectibility of the sales price is reasonably assured. Sales of some of our products include provisions to provide additional services such as installation and training. We evaluate all sales with multiple deliverables, including our collaboration agreements, to determine if more than one unit of accounting exists, in accordance with Emerging Issues Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables.* When we determine that there is more than one unit of accounting, and there is objective and reliable evidence of fair value for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on their relative fair values. In situations where there is objective and reliable evidence of the fair value(s) of the undelivered item(s) in an arrangement but no such evidence for the delivered item(s), we apply the residual method to allocate fair value. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate fair value of the undelivered item(s). Revenue for each unit of accounting is recorded once all applicable revenue recognition criteria have been met. Service agreements on our equipment are typically sold separately from the sale of the equipment. Revenues on these service agreements are recognized ratably over the life of the agreement, typically one year, in accordance FASB Technical Bulletin (FTB) 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts.*

We account for shipping and handling fees and costs in accordance with EITF Issue No. 00-10, *Accounting for Shipping and Handling Fees and Costs*, which requires all amounts charged to customers for shipping and handling to be classified as revenues. Our costs incurred related to shipping and handling are classified as cost of product revenues. Warranties and product returns are estimated and accrued for at the time sales are recorded. We have no obligations to customers after the date products are shipped or installed, if applicable, other than

Table of Contents

pursuant to warranty obligations and service or maintenance contracts. We provide for the estimated amount of future returns upon shipment of products or installation, if applicable, based on historical experience. Historically, product returns and warranty costs have not been significant, and they have been within our expectations and the provisions established, however, there is no assurance that we will continue to experience the same return rates and warranty repair costs that we have in the past. Any significant increase in product return rates or a significant increase in the cost to repair our products could have a material adverse impact on our operating results for the period or periods in which such returns or increased costs materialize.

We make estimates evaluating our allowance for doubtful accounts. On an ongoing basis, we monitor collections and payments from our customers and maintain a provision for estimated credit losses based upon our historical experience and any specific customer collection issues that we have identified. Historically, such credit losses have not been significant, and they have been within our expectations and the provisions established, however, there is no assurance that we will continue to experience the same credit loss rates that we have in the past. A significant change in the liquidity or financial position of our customers could have a material adverse impact on the collectibility of our accounts receivable and our future operating results.

Accounting for income taxes. We determine our annual income tax provision in each of the jurisdictions in which we operate. This involves determining our current and deferred income tax expense as well as accounting for differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. The future tax consequences attributable to these differences result in deferred tax assets and liabilities, which are included in our consolidated balance sheets. We assess the recoverability of the deferred tax assets by considering whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. To the extent we believe that recovery does not meet this more likely than not standard as required in SFAS No. 109, *Accounting for Income Taxes*, we must establish a valuation allowance. If a valuation allowance is established or increased in a period, generally we allocate the related income tax expense to income from continuing operations in the consolidated statement of operations.

Management s judgment and estimates are required in determining our income tax provision, deferred tax assets and liabilities and any valuation allowance recorded against deferred tax assets. We have established a valuation allowance attributable to certain deferred tax assets as of December 31, 2008 that do not meet the more likely than not standard of realization based on our ability to generate sufficient future taxable income in the carryback and carryforward periods based on the criteria set forth in SFAS No. 109. We review the recoverability of deferred tax assets during each reporting period by reviewing estimates of future taxable income, future reversals of existing taxable temporary differences, and tax planning strategies that would, if necessary, be implemented to realize the benefit of a deferred tax asset before expiration.

We assess tax positions taken on tax returns, including recognition of potential interest and penalties, in accordance with the recognition thresholds and measurement attributes outlined in FASB Interpretation (FIN) No. 48 , *Accounting for Uncertainty in Income Taxes an interpretation of FAS 109*. Interest and penalties recognized, if any, would be classified as a component of income tax expense.

Inventory. We value our inventory at the lower of the actual cost to purchase (first-in, first-out method) and/or manufacture the inventory or the current estimated market value of the inventory. We regularly review inventory quantities on hand and record a provision to write down excess and obsolete inventory to its estimated net realizable value if less than cost, based primarily on its estimated forecast of product demand. Since forecasted product demand quite often is a function of previous and current demand, a significant decrease in demand could result in an increase in the charges for excess inventory quantities on hand. In addition, our industry is subject to technological change and new product development, and technological advances could result in an increase in the amount of obsolete inventory quantities on hand. Therefore, any significant unanticipated changes in demand or technological developments could have a significant adverse impact on the value of our inventory and our reported operating results.

Valuation of identifiable intangible assets acquired in business combinations. Identifiable intangible assets consist primarily of trademarks and acquired technology. Such intangible assets arise from the allocation of the purchase price of businesses acquired to identifiable intangible assets based on their respective fair market

Table of Contents

values. Amounts assigned to such identifiable intangible assets are primarily based on independent appraisals using established valuation techniques and management estimates. The value assigned to trademarks was determined by estimating the royalty income that would be negotiated at an arm s-length transaction if the asset were licensed from a third party. A discount factor, ranging from 20% to 40%, which represents both the business and financial risks of such investments, was used to determine the present value of the future streams of income attributable to trademarks. The specific approach used to value trademarks was the Relief from Royalty (RFR) method. The RFR method assumes that an intangible asset is valuable because the owner of the asset avoids the cost of licensing that asset. The royalty savings are then calculated by multiplying a royalty rate times a determined royalty base, i.e., the applicable level of future revenues. In determining an appropriate royalty rate, a sample of guideline, arm s length royalty and licensing agreements are analyzed. In determining the royalty base, forecasts are used based on management s judgments of expected conditions and expected courses of actions. The value assigned to acquired technology was determined by using a discounted cash flow model, which measures what a buyer would be willing to pay currently for the future cash stream potential of existing technology. The specific method used to value the technologies involved estimating future cash flows to be derived as a direct result of those technologies, and discounting those future streams to their present value. The discount factors used, ranging from 20% to 40%, reflect the business and financial risks of an investment in technologies. Forecasts of future cash flows are based on management s judgment of expected conditions and expected courses of action.

Valuation of in-process research and development acquired in business combinations. Purchase price allocation to in-process research and development represents the estimated fair value of research and development projects that are reasonably believed to have no alternative future use. The value assigned to in-process research and development was determined by independent appraisals by estimating the cost to develop the purchased in-process research and development into commercially feasible products, estimating the percentage of completion at the acquisition date, estimating the resulting net risk-adjusted cash flows from the projects and discounting the net cash flows to their present value. The discount rates used in determining the in-process research and development expenditures reflects a higher risk of investment because of the higher level of uncertainty due in part to the nature of our business and the industry to constantly develop new technology for future product releases and ranged from 25% to 43.5%. The forecasts used by us in valuing in-process research and development were based on assumptions we believed at the time to be reasonable, but which are inherently uncertain and unpredictable. Given the uncertainties of the development process, no assurance can be given that deviations from our estimates will not occur and no assurance can be given that the in-process research and development projects identified will ever reach either technological or commercial success.

Valuation of long-lived and intangible assets and goodwill. In accordance with the provisions of SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets,* we assess the value of identifiable intangibles with finite lives and long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include the following: significant underperformance relative to expected historical or projected future operating results; significant changes in the manner of our use of the acquired assets or the strategy for our overall business; significant negative industry or economic trends; significant changes in who our competitors are and what they do; significant changes in our relationship with GE Healthcare; significant decline in our stock price for a sustained period; and our market capitalization relative to net book value.

If we were to determine that the value of long-lived assets and identifiable intangible assets with finite lives was not recoverable based on the existence of one or more of the aforementioned factors, then the recoverability of those assets to be held and used would be measured by a comparison of the carrying amount of those assets to undiscounted future net cash flows before tax effects expected to be generated by those assets. If such assets are considered to be impaired, the impairment to be recognized would be measured by the amount by which the carrying value of the assets exceeds the fair value of the assets.

A long-lived asset classified as held for sale is initially measured at the lower of carrying amount or fair value less costs to sell. In the period the held for sale criteria are met, we recognize an impairment charge for any initial adjustment of the long-lived assets. During each reporting period after the initial measurement, gains

Table of Contents

or losses resulting from fluctuations in the fair value less costs to sell are recognized. Gains and losses not previously recognized resulting from the sale of a long-lived asset are recognized on the date of sale. Assets to be disposed of are separately presented in the consolidated balance sheet and long-lived assets are no longer depreciated or amortized. The assets and liabilities of a disposal group, which are classified as held for sale, are presented separately in the appropriate asset and liability sections of the balance sheet. Operating results for all periods presented are presented as discontinued operations, net of tax. In accordance with Emerging Issues Task Force Issue No. 87-24, *Allocation of Interest to Discontinued Operations*, we have elected not to allocate interest of our consolidated debt to discontinued operations.

In June 2001, SFAS No. 142, *Goodwill and Other Intangible Assets* was issued. SFAS No. 142 addresses financial accounting and reporting for acquired goodwill and other intangible assets. Among other things, SFAS No. 142 requires that goodwill and intangible assets with indefinite useful lives no longer be amortized, but rather tested annually for impairment or more frequently if events or circumstances indicate that there may be impairment. The goodwill impairment test consists of a comparison of the fair value of our reporting units with their carrying amount. If the carrying amount exceeds its fair value, we are required to perform the second step of the impairment test, as this is an indication that goodwill may be impaired. The impairment loss is measured by comparing the implied fair value of the reporting unit s goodwill with its carrying amount. If the carrying amount exceeds the implied fair value, an impairment loss shall be recognized in an amount equal to the excess. After an impairment loss is recognized, the adjusted carrying amount of the intangible asset shall be its new accounting basis. Subsequent reversal of a previously recognized impairment loss is prohibited. For unamortizable intangible assets if the carrying amount exceeds the fair value of the asset, we would write-down the unamortizable intangible asset to fair value. See Note 7 Discontinued Operations, for a discussion of abandonment and impairment charges taken during 2008 and 2007 within our discontinued operations.

Stock-based compensation We account for share-based payment awards in accordance with the provisions of SFAS No. 123(R), which was adopted as of January 1, 2006 using the modified prospective transition method. In accordance with the modified prospective transition method, our consolidated financial statements for periods prior to January 1, 2006 have not been restated to reflect, and do not include, the impact of SFAS No. 123(R).

SFAS No. 123(R) requires companies to estimate the fair value of stock-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in our consolidated statement of operations. Prior to the adoption of SFAS No. 123(R), we accounted for stock-based awards to employees and directors using the intrinsic value method in accordance with Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, as allowed under SFAS No. 123, *Accounting for Stock-Based Compensation*. Under the intrinsic value method, no stock-based compensation expense was recognized in our consolidated statement of operations when the exercise price of our stock options granted to employees and directors equaled or exceeded the fair market value of the underlying stock at the date of grant.

Stock-based compensation expense recognized under SFAS No. 123(R) for the years ended December 31, 2008, 2007 and 2006 was $2.0 million, $2.3 million and $1.9 million, respectively, which consisted of stock-based compensation expense related to employee stock options and the employee stock purchase plan. Stock-based compensation expense recognized is based on the value of the portion of stock-based payment awards that is ultimately expected to vest. Stock-based compensation expense recognized includes compensation expense for stock-based payment awards granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS No. 123, and compensation expense for the stock-based payment awards granted subsequent to December 31, 2005 based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R). Stock-based compensation expense has been reduced for estimated forfeitures. SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Upon adoption of SFAS No. 123(R), we elected to retain its method of valuation for stock-based payment awards granted beginning in 2006 using the Black-Scholes option-pricing model (Black-Scholes model) which was also previously used for our pro forma information required under SFAS No. 123. Our determination of fair

Table of Contents

value of stock-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to our expected stock price volatility over the term of the awards and actual and projected employee stock option exercise behaviors.

For awards granted prior to January 1, 2006, we use the accelerated expense recognition method in FIN No. 28, *Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans*. We record expense on a straight-line basis over the requisite service period for all awards granted since the adoption of SFAS No. 123(R) on January 1, 2006.

Impact of Foreign Currencies

We sell our products in many countries and a substantial portion of our sales, costs and expenses are denominated in foreign currencies, especially the British pound sterling and the Euro.

During 2008, the U.S. dollar strengthened against these currencies resulting in decreased consolidated revenue and earnings growth. Changes in foreign currency exchange rates resulted in a decrease in revenues of $3.0 million and expenses of $2.6 million (net $0.4 million) during 2008.

During 2007 and 2006, the U.S. dollar weakened against these currencies resulting in increased consolidated revenue and earnings growth. Changes in foreign currency exchange rates, resulted in an increase in revenues of $3.0 million and expenses of $2.5 million (net $0.5 million) during 2007.

Our exchange gains and losses were primarily the result of currency fluctuations on net payables and receivables among our subsidiaries. The loss associated with the translation of foreign equity into U.S. dollars was approximately $8.9 million and $0.2 million in 2008 and 2007, respectively. In addition, currency fluctuations resulted in approximately $60,000, $45,000 and $33,000 in foreign currency gains in 2008, 2007 and 2006, respectively.

During the second half of 2008, the U.S. Dollar appreciated approximately 27% against the British pound and 11% against the euro. Approximately 56% of the Company s revenues are derived from business transacted in British pounds or Euros. If the U.S. dollar remains at current rates or continues to strengthen against the British pound and euro, the Company s earnings and cash flows, stated in U.S. dollars, will be affected negatively. Additionally, the stronger U.S. dollar has caused our foreign net assets to translate to a lower value, stated in U.S. dollars, which has a negative effect on the Company s Accumulated Other Comprehensive Income, a component of Stockholders Equity. At December 31, 2008, the Company s Stockholders Equity was lower by $8.9 million as compared to the value at December 31, 2007, due the translation of foreign net assets based on a strengthened dollar.

Under the current terms of our credit facility, we have the ability to borrow in US dollars, Euros or British pounds sterling. As of December 31, 2008, there were no borrowings outstanding under the credit facility. In addition, as of December 31, 2008, our Panlab subsidiary held notes payable of $1.4 million denominated in Euros. These Eurocurrency borrowings are sensitive to changes in currency exchange rates.

Historically, we have not hedged our foreign currency position. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. However, as our sales expand internationally, we will continue to evaluate our currency risks and we may enter into foreign exchange contracts from time to time to mitigate foreign currency exposure.

Recently Issued Accounting Pronouncements

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations*. SFAS No. 141(R) retains the fundamental requirements of the original pronouncement requiring that the purchase method be used for all business combinations. SFAS No. 141(R) defines the acquirer as the entity that obtains control of one or more businesses in the business combination, establishes the acquisition date as the date that the acquirer achieves control and requires the acquirer to recognize the assets acquired, liabilities assumed and any

Table of Contents

noncontrolling interest at their fair values as of the acquisition date. SFAS No. 141(R) also requires that acquisition-related costs be recognized separately from the acquisition. This Statement applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008 and may not be applied before that date. The adoption of this interpretation did not have a material impact on our consolidated results of operations or financial position.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements, An Amendment of ARB No. 51.* SFAS No. 160 amends Accounting Research Bulletin (ARB) 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It also amends certain of ARB 51 s consolidation procedures for consistency with the requirements of FASB Statement No. 141(R). This statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. The statement shall be applied prospectively as of the beginning of the fiscal year in which the statement is initially adopted. The adoption of this interpretation did not have a material impact on our consolidated results of operations or financial position.

In April 2008, the FASB issued FASB Staff Position (FSP) FAS 142-3, *Determination of the Useful Life of Intangible Assets*. FSP FAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets* to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141, *Business Combinations,* other U.S. GAAP. FSP FAS 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early adoption is prohibited. The adoption of this interpretation did not have a material impact on our consolidated results of operations or financial position.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles.* SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements that are presented in conformity with generally accepted accounting principles in the United States. SFAS No. 162 is effective 60 days following the SEC s approval of the Public Company Accounting Oversight Board amendments to AU Section 411, *The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles*. Based on our current operations, the adoption of SFAS No. 162 will not have a material impact on our consolidated results of operations or financial position.

In June 2008, the FASB issued FSP EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities*. FSP EITF 03-6-1 addresses whether instruments granted in share-based payment transactions are participating securities prior to vesting and, therefore, need to be included in computing earnings per share under the two-class method described in SFAS No. 128, *Earnings Per Share*. FSP EITF 03-6-1 is effective for the Company as of January 1, 2009 and in accordance with its requirements it will be applied retrospectively. We do not expect the adoption of FSP EITF 03-6-1 to have a material impact on our consolidated results of operations or financial position.

Impact of Inflation

We believe that our revenues and results of operations have not been significantly impacted by inflation during the past three years.

Item 7A. ***Quantitative and Qualitative Disclosures about Market Risk.***

We manufacture and test the majority of products in research centers in the United States, the United Kingdom, Germany and Spain. We sell our products globally through our direct catalog sales, direct sales force and indirect distributor channels. As a result, our financial results are affected by factors such as changes in foreign currency exchange rates and weak economic conditions in foreign markets.

We collect amounts representing a substantial portion of our revenues and pay amounts representing a substantial portion of our operating expenses in foreign currencies. As a result, changes in currency exchange

Table of Contents

rates from time to time have effected, and may continue to affect our operating results. Historically, we have not hedged our foreign currency position. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. However, as our sales expand internationally, we plan to evaluate currency risks and we may enter into foreign exchange contracts from time to time to mitigate foreign currency exposure.

We are exposed to market risk from changes in interest rates primarily through our financing activities. Under the current terms of our credit facility, we have the ability to borrow in US dollars, Euros or British pounds sterling. As of December 31, 2008, we had no borrowings under our revolving credit facility.

In addition, as of December 31, 2008 and 2007, our Panlab subsidiary held notes payable of $1.4 million compared to $2.3 million, respectively, denominated in Euros. These Eurocurrency borrowings are sensitive to changes in currency exchange rates. A 10% appreciation in the U.S. dollar versus the Euro at year-end 2008 currency exchange rates would have resulted in an increase in the cumulative translation adjustments on our balance sheet of $0.1 million relating to the notes held by our Panlab subsidiary.

Item 8. ***Financial Statements and Supplementary Data.***

The consolidated financial statements filed as part of this Annual Report on Form 10-K are listed under Item 15 below.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.***

None.

Item 9A. ***Controls and Procedures.***

(a) Evaluation of Disclosure Controls and Procedures

As required by Rules 13a-15 and 15d-15 under the Securities Exchange Act of 1934, we have evaluated, with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Our disclosure controls and procedures are designed to provide reasonable assurance 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 SEC s rules and forms, and our management necessarily was required to apply its judgment in evaluating and implementing our disclosure controls and procedures. Based upon the evaluation described above, our Chief Executive Officer and Chief Financial Officer have concluded that they believe that our disclosure controls and procedures were effective, as of the end of the period covered by this report, in providing reasonable assurance 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 SEC s rules and forms.

(b) Management s Annual Report on Internal Control Over Financial Reporting

The Company s management is responsible for establishing and maintaining an adequate system of internal control over financial reporting. 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated 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 (iii) 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 consolidated financial statements.

42

Table of Contents

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.

Management of the Company conducted an evaluation of the effectiveness of the Company s internal control over financial reporting as of December 31, 2008 based on the Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, management of the Company concluded that our internal control over financial reporting was effective as of December 31, 2008.

KPMG LLP, an independent registered public accounting firm, has issued an attestation report on the Company s internal control over financial reporting, which is included below in Item 9A(d).

(c) Changes in Internal Controls Over Financial Reporting

There have been no significant changes in the Company s internal controls over financial reporting during the quarter ended December 31, 2008 that would materially affect, or are reasonably likely to materially affect our internal controls over financial reporting.

(d) Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Harvard Bioscience, Inc. and subsidiaries:

We have audited Harvard Bioscience, Inc. and subsidiaries internal control over financial reporting as of December 31, 2008, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Harvard Bioscience, Inc. and subsidiaries 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 Annual 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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.

Table of Contents

In our opinion, Harvard Bioscience, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Harvard Bioscience, Inc. as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders equity and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2008, and our report dated March 11, 2009 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Boston, Massachusetts

March 11, 2009

Table of Contents

Item 9B. ***Other Information.***
None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance.***
Incorporated by reference to the Company s definitive Proxy Statement filed pursuant to Regulation 14A, in connection with the 2009 Annual Meeting of Stockholders. Information concerning executive officers of the Company is included in Part I of this Annual Report on Form 10-K as Item 4.A. and incorporated herein by reference.

Item 11. ***Executive Compensation.***
Incorporated by reference to the Company s definitive Proxy Statement filed pursuant to Regulation 14A, in connection with the Company s 2009 Annual Meeting of Stockholders.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***
Incorporated by reference to the Company s definitive Proxy Statement filed pursuant to Regulation 14A, in connection with the Company s 2009 Annual Meeting of Stockholders.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence.***
Incorporated by reference to the Company s definitive Proxy Statement filed pursuant to Regulation 14A, in connection with the Company s 2009 Annual Meeting of Stockholders.

Item 14. ***Principal Accountant Fees and Services.***
Incorporated by reference to the Company s definitive Proxy Statement filed pursuant to Regulation 14A, in connection with the Company s 2009 Annual Meeting of Stockholders.

Table of Contents

PART IV

Item 15. ***Exhibits and Financial Statement Schedules.***

(a) Documents Filed. The following documents are filed as part of this Annual Report on Form 10K or incorporated by reference as indicated:

1. Financial Statements. The consolidated financial statements of Harvard Bioscience, Inc. and its subsidiaries filed under Item 8:

	Page
Index to Consolidated Financial Statements	F-1
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2008 and 2007	F-3
Consolidated Statements of Operations for the years ended December 31, 2008, 2007 and 2006	F-4
Consolidated Statements of Stockholders Equity and Comprehensive Income (Loss) for the years ended December 31, 2008, 2007 and 2006	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2008, 2007 and 2006	F-6
Notes to Consolidated Financial Statements	F-7

2. Exhibits and Exhibit Index. See the Exhibit Index included as the last part of this Annual Report on Form 10K, which is incorporated herein by reference.

Table of Contents

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

	Page
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2008 and 2007	F-3
Consolidated Statements of Operations for the years ended December 31, 2008, 2007 and 2006	F-4
Consolidated Statements of Stockholders Equity and Comprehensive Income (Loss) for the years ended December 31, 2008, 2007 and 2006	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2008, 2007 and 2006	F-6
Notes to Consolidated Financial Statements	F-7

Table of Contents

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Harvard Bioscience, Inc. and subsidiaries:

We have audited the accompanying consolidated balance sheets of Harvard Bioscience, Inc. and subsidiaries as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders equity and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2008. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated 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 financial position of Harvard Bioscience, Inc. and subsidiaries as of December 31, 2008 and 2007, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2008, 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 Harvard Bioscience, Inc. and subsidiaries internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 11, 2009 expressed an unqualified opinion on the effectiveness of the Company s internal control over financial reporting.

/s/ KPMG LLP

Boston, Massachusetts

March 11, 2009

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

(In thousands except share and per share data)

	December 31, 2008	December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 13,698	$ 17,889
Accounts receivable, net of allowance for doubtful accounts of $295 and $378, respectively	15,086	14,757
Inventories	11,901	14,983
Deferred income tax assets current	306	
Other receivables and other assets	2,473	2,414
Assets of discontinued operations held for sale		4,268
Total current assets	43,464	54,311
Property, plant and equipment, net	3,221	4,465
Deferred income tax assets non-current	238	346
Amortizable intangible assets, net	8,955	10,640
Goodwill and other indefinite lived intangible assets	24,827	29,028
Other assets	566	63
Total assets	$ 81,271	$ 98,853
Liabilities and Stockholders Equity		
Current liabilities:		
Notes payable	$ 1,361	$ 2,169
Accounts payable	4,665	5,611
Deferred revenue	589	442
Accrued income taxes payable	427	1,091
Accrued expenses	4,006	4,129
Other liabilities current	167	1,128
Liabilities of discontinued operations		1,771
Total current liabilities	11,215	16,341
Long-term debt, less current installments	59	5,578
Deferred income tax liabilities non-current	1,216	1,560
Other liabilities non-current	2,063	1,237
Total liabilities	14,553	24,716
Commitments and contingencies		
Stockholders equity:		
Preferred stock, par value $0.01 per share, 5,000,000 shares authorized		
Common stock, par value $0.01 per share, 80,000,000 shares authorized; 35,787,279 and 35,512,680 shares issued and 30,235,479 and 30,851,896 shares outstanding, respectively	358	355
Additional paid-in-capital	182,073	179,153
Accumulated deficit	(109,690)	(111,363)
Accumulated other comprehensive income	(2,759)	6,660
Treasury stock at cost, 5,551,800 and 4,660,784 common shares, respectively	(3,264)	(668)

Total stockholders equity	66,718	74,137
Total liabilities and stockholders equity	$ 81,271	$ 98,853

See accompanying notes to consolidated financial statements.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Statements of Operations

(In thousands except per share data)

	Years Ended December 31,		
	2008	2007	2006
Revenues	$ 88,049	$ 83,407	$ 76,181
Cost of product revenues	45,893	43,161	38,094
Gross profit	42,156	40,246	38,087
Sales and marketing expenses	10,970	10,352	9,499
General and administrative expenses	15,134	14,829	15,047
Research and development expenses	4,048	3,708	3,154
Restructuring charges	1,559		
Amortization of intangible assets	1,966	1,824	1,697
Total operating expenses	33,677	30,713	29,397
Operating income	8,479	9,533	8,690
Other income (expense):			
Foreign exchange	60	45	33
Interest expense	(389)	(365)	(429)
Interest income	372	317	216
Other, net	(872)	38	(114)
Other income (expense), net	(829)	35	(294)
Income from continuing operations before income taxes	7,650	9,568	8,396
Income taxes	2,240	1,970	1,775
Income from continuing operations	5,410	7,598	6,621
Discontinued operations			
Loss from discontinued operations, net of tax	(457)	(5,864)	(8,962)
Loss on disposition of discontinued operations, net of tax	(3,280)	(3,088)	
Total loss from discontinued operations, net of tax	(3,737)	(8,952)	(8,962)
Net income (loss)	$ 1,673	$ (1,354)	$ (2,341)
Income (loss) per share:			
Basic earnings per common share from continuing operations	$ 0.18	$ 0.25	$ 0.22
Discontinued operations	(0.12)	(0.29)	(0.29)
Basic income (loss) per common share	$ 0.05	$ (0.04)	$ (0.08)
Diluted earnings per common share from continuing operations	$ 0.17	$ 0.24	$ 0.21
Discontinued operations	(0.12)	(0.29)	(0.29)

Diluted income (loss) per common share	$ 0.05	$ (0.04)	$ (0.08)
Weighted average common shares:			
Basic	30,882	30,646	30,519
Diluted	31,354	31,405	31,148

See accompanying notes to consolidated financial statements.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Statements of Stockholders Equity and

Comprehensive Income (Loss)

Years Ended December 31, 2008, 2007 and 2006

(In thousands)

	Number of Shares Issued	Common Stock	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Stockholders Equity
Balance at December 31, 2005	35,142	$ 351	$ 173,694	$ (108,139)	$ 3,178	$ (668)	$ 68,416
Initial application of SAB No. 108				471			471
Stock option exercises	52	1	128				129
Stock purchase plan	29		106				106
Stock compensation expense			2,106				2,106
Impact of adopting SFAS No. 158, net of tax					(1,598)		(1,598)
Comprehensive income:							
Net loss				(2,341)			(2,341)
Translation adjustments					3,973		3,973
Minimum pension liability adjustment, net of tax					621		621
Total comprehensive income							2,253
Balance at December 31, 2006	35,223	$ 352	$ 176,034	$ (110,009)	$ 6,174	$ (668)	$ 71,883
Stock option exercises	263	3	609				612
Stock purchase plan	27		110				110
Stock compensation expense			2,400				2,400
Comprehensive income:							
Net loss				(1,354)			(1,354)
Changes in defined benefit pension plans					707		707
Translation adjustments					(221)		(221)
Total comprehensive loss							(868)
Balance at December 31, 2007	35,513	$ 355	$ 179,153	$ (111,363)	$ 6,660	$ (668)	$ 74,137
Stock option exercises	248	3	835				838
Stock purchase plan	26		73				73
Stock compensation expense			2,012				2,012
Purchases of treasury stock						(2,596)	(2,596)
Comprehensive income:							
Net income				1,673			1,673
Changes in defined benefit pension plans					(568)		(568)
Translation adjustments					(8,851)		(8,851)
Total comprehensive loss							(7,746)
Balance at December 31, 2008	35,787	$ 358	$ 182,073	$ (109,690)	$ (2,759)	$ (3,264)	$ 66,718

See accompanying notes to consolidated financial statements.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

(In thousands)

	Years ended December 31,		
	2008	2007	2006
Cash flows from operating activities:			
Net income (loss)	$ 1,673	$ (1,354)	$ (2,341)
Adjustments to reconcile net income to net cash provided by operating activities:			
Stock compensation expense	2,012	2,400	2,106
Depreciation	1,077	1,468	1,443
Loss on disposal of discontinued operations	3,280	3,088	
Abandonment and impairment of assets		2,878	3,863
Non-cash restructuring charges	552		
Amortization of catalog costs	249	160	95
Loss on disposal of property, plant and equipment	586	32	164
Provision for allowance for doubtful accounts	53	(338)	842
Amortization of intangible assets	2,019	1,824	1,697
Amortization of deferred financing costs	22	22	102
Deferred income taxes	(757)	(474)	682
Changes in operating assets and liabilities, net of effects of acquisitions:			
(Increase) decrease in accounts receivable	(391)	2,238	(2,748)
(Increase) decrease in inventories	511	(950)	1,922
(Increase) decrease in other receivables and other assets	(232)	60	106
Increase (decrease) in trade accounts payable	(478)	(83)	1,229
Increase (decrease) in accrued income taxes payable	(375)	667	354
Increase (decrease) in accrued expenses	(2,078)	313	(694)
Increase (decrease) in deferred revenue	35	252	(366)
Increase (decrease) in other liabilities	1,444	(148)	(100)
Net cash provided by operating activities	9,202	12,055	8,356
Cash flows from investing activities:			
Additions to property, plant and equipment	(1,308)	(1,452)	(2,382)
Additions to catalog costs	(568)	(11)	(281)
Disposition of discontinued operations	(752)	295	
Acquisitions, net of cash acquired		(5,384)	(1,118)
Net cash used in investing activities	(2,628)	(6,552)	(3,781)
Cash flows from financing activities:			
Repayments of short-term debt		(166)	
Net proceeds from issuance of debt	1,650	12,281	
Repayments of debt	(7,920)	(9,807)	(5,521)
Purchases of treasury stock	(2,596)		
Net proceeds from issuance of common stock	911	722	235
Net cash (used in) provided by financing activities	(7,955)	3,030	(5,286)
Effect of exchange rate changes on cash	(3,125)	(80)	691
(Decrease) increase in cash and cash equivalents	(4,506)	8,453	(20)

Cash and cash equivalents at the beginning of period	18,204	9,751	9,771
Cash and cash equivalents at the end of period	$ 13,698	$ 18,204	$ 9,751
Supplemental disclosures of cash flow information:			
Cash paid for interest	$ 374	$ 362	$ 572
Cash paid for income taxes	$ 2,686	$ 2,268	$ 1,894

Note: The above statements of cash flows include both continuing and discontinued operations. Cash and cash equivalents include $13,698 held by continuing operations as of December 31, 2008, $17,889 held by continuing operations and $315 held by discontinued operations as of December 31, 2007 and $9,357 held by continuing operations and $394 held by discontinued operations as of December 31, 2006.

See accompanying notes to consolidated financial statements.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization

Harvard Bioscience, Inc. and subsidiaries (the Company) is a global developer, distributor, manufacturer and marketer of a broad range of specialized products, primarily apparatus and scientific instruments, used to advance life science research at pharmaceutical and biotechnology companies, universities and government laboratories worldwide. We sell our products to thousands of researchers in over 100 countries primarily through our 900 page catalog (and various other specialty catalogs), our website, and through distributors, including GE Healthcare, Thermo Fisher Scientific, Inc. and VWR. We have sales and manufacturing operations in the United States, the United Kingdom, Germany and Spain with sales facilities in France and Canada.

2. Summary of Significant Accounting Policies

(a) Principles of Consolidation

The consolidated financial statements include the accounts of Harvard Bioscience, Inc. and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

(b) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the use of management estimates. Such estimates include the determination and establishment of certain accruals and provisions, including those for inventory obsolescence, catalog cost amortization periods, income tax and reserves for bad debts. In addition, certain estimates are required in order to determine the value of assets and liabilities associated with acquisitions. Estimates are also required to evaluate the value and recoverability of existing long-lived and intangible assets, including goodwill. On an ongoing basis, we review our estimates based upon currently available information. Actual results could differ materially from those estimates.

(c) Reclassifications

Certain other reclassifications to prior year balances have been made to conform to current year presentations.

(d) Cash and Cash Equivalents

For purposes of the consolidated balance sheets and statements of cash flows, we consider all highly liquid instruments with original maturities of three months or less to be cash equivalents.

(e) Allowance for Doubtful Accounts

Allowance for doubtful accounts is based on our assessment of the collectibility of customer accounts. We regularly review the allowance by considering factors such as historical experience, credit quality, age of the accounts receivable balances and other factors that may affect a customer s ability to pay.

(f) Inventories

We value our inventories at the lower of the actual cost to purchase (first-in, first-out method) and/or manufacture the inventories or the current estimated market value of the inventories. We regularly review inventory quantities on hand and record a provision to write down excess and obsolete inventories to its estimated net realizable value if less than cost, based primarily on its estimated forecast of product demand.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(g) Property, Plant and Equipment

Property, plant and equipment are stated at cost. Equipment under capital leases is stated at the present value of the minimum lease payments at the lease agreement date. Property, plant and equipment is depreciated using the straight-line method over the estimated useful lives of the assets as follows:

Buildings	40 years
Machinery and equipment	3-10 years
Computer equipment and software	3-7 years
Furniture and fixtures	5-10 years
Automobiles	3-6 years

Property and equipment held under capital leases and leasehold improvements are amortized using the straight line method over the shorter of the lease term or estimated useful life of the asset. Amortization of assets held under capital leases is included in depreciation expense, when applicable.

(h) Catalog Costs

Significant costs of product catalog design, development and production are capitalized and amortized over the expected useful life of the catalog (usually one to three years).

(i) Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to be applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

(j) Foreign Currency Translation

The functional currency of our foreign subsidiaries is generally their local currency. All assets and liabilities of our foreign subsidiaries are translated at exchange rates in effect at year-end. Income and expenses are translated at rates which approximate those in effect on the transaction dates. The resulting translation adjustment is recorded as a separate component of stockholders equity in accumulated other comprehensive income in the consolidated balance sheets. Gains and losses resulting from foreign currency transactions are included in net income (loss).

Certain debt between the Company and a foreign subsidiary does not require repayment in the foreseeable future and accordingly we treat this intercompany debt as a long-term investment rather than as debt. We record the effects of the exchange rate fluctuations on this intercompany debt as a currency translation adjustment in accumulated other comprehensive income in stockholders equity.

(k) Earnings per Share

Basic earnings per share is computed by dividing the net income by the weighted average number of shares of common stock outstanding during the periods presented. The computation of diluted earnings per share is similar to the computation of basic earnings per share, except that the denominator is increased for the assumed exercise of dilutive options and other potentially dilutive securities using the treasury stock method unless the effect is antidilutive. Since we are reporting discontinued operations, we used income from continuing operations as the control number in determining whether those potential dilutive securities are dilutive or antidilutive.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(l) Comprehensive Income (Loss)

We follow Statement of Financial Accounting Standards (SFAS) No. 130, *Reporting Comprehensive Income*. SFAS No. 130 requires companies to report all changes in equity during a period, resulting from net income (loss) and transactions from non-owner sources, in a financial statement in the period in which they are recognized. We have chosen to disclose comprehensive income (loss), which encompasses net income (loss), foreign currency translation adjustments, the underfunded status of our pension plans, net of tax, and pension minimum additional liability adjustments, net of tax, in the consolidated statements of stockholders equity and comprehensive income (loss).

As of December 31, 2008, accumulated other comprehensive income consisted of cumulative foreign currency translation adjustments of $(1.3) million and the underfunded status of our pension plans of $(1.5) million, net of tax. As of December 31, 2007, accumulated other comprehensive income consisted of cumulative foreign currency translation adjustments of $7.6 million and the underfunded status of our pension plans of $(0.9) million, net of tax.

(m) Revenue Recognition

We follow the provisions of SEC Staff Accounting Bulletin (SAB) No. 101, *Revenue Recognition in the Financial Statements,* as amended by SAB No. 104, *Revenue Recognition.* We recognize revenue of products when persuasive evidence of a sales arrangement exists, the price to the buyer is fixed or determinable, delivery has occurred, and collectibility of the sales price is reasonably assured. Sales of some of our products include provisions to provide additional services such as installation and training. We evaluate all sales with multiple deliverables, including our collaboration agreements, to determine if more than one unit of accounting exists, in accordance with Emerging Issues Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables.* When we determine that there is more than one unit of accounting, and there is objective and reliable evidence of fair value for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on their relative fair values. In situations where there is objective and reliable evidence of the fair value(s) of the undelivered item(s) in an arrangement but no such evidence for the delivered item(s) we apply the residual method to allocate fair value. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate fair value of the undelivered item(s). Revenue for each unit of accounting is recorded once all applicable revenue recognition criteria have been met. Service agreements on our equipment are typically sold separately from the sale of the equipment. Revenues on these service agreements are recognized ratably over the life of the agreement, typically one year, in accordance with FASB Technical Bulletin 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts.*

We account for shipping and handling fees and costs in accordance with EITF Issue No. 00-10, *Accounting for Shipping and Handling Fees and Costs*, which requires all amounts charged to customers for shipping and handling to be classified as revenues. Our costs incurred related to shipping and handling are classified as cost of product revenues. Warranties and product returns are estimated and accrued for at the time sales are recorded. We have no obligations to customers after the date products are shipped or installed, if applicable, other than pursuant to warranty obligations or service and maintenance contracts. We provide for the estimated amount of future returns upon shipment of products or installation, if applicable, based on historical experience.

(n) Goodwill and Other Intangible Assets

Goodwill and other intangible assets includes goodwill, unamortizable intangible assets and amortizable intangible assets. Amortizable intangible assets (those intangible assets with definite estimated useful lives) are initially recorded at fair value and amortized, using the straight-line method, over their estimated useful lives. At December 31, 2008, amortizable intangible assets include existing technology, trade names, distribution

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

agreements, customer relationships and patents. These amortizable intangible assets are amortized on a straight-line basis over 1 to 15 years, 15 years, 5 to 15 years, 11 years and 15 years, respectively.

Goodwill and unamortizable intangible assets acquired in a business combination and determined to have an indefinite useful life are not amortized, but instead tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired, in accordance with the provisions of SFAS No. 142, *Goodwill and Other Intangible Assets*.

The goodwill impairment test is a two-step process. The first step of the impairment analysis compares the Company s fair value to its carrying value to determine if there is any indication of impairment. Step two of the analysis compares the implied fair value of goodwill to its carrying amount in a manner similar to a purchase price allocation for business combination. If the carrying amount of goodwill exceeds its implied fair value, an impairment loss is recognized equal to that excess. For unamortizable intangible assets if the carrying amount exceeds the fair value of the asset, we would write-down the unamortizable intangible asset to fair value.

Management performed a goodwill impairment test at December 31, 2008 in accordance with SFAS No. 142. We calculated the estimated fair value of each of the Company s reporting units as at December 31, 2008. Management arrived at the estimated fair values by preparing discounted cash flow analyses using updated financial projections of the reporting units estimated future operating results and discounted to present value using appropriate discount rates. At December 31, 2008, the market capitalization of the Company s common shares was $80.1 million and the carrying value of net assets was $66.7 million. We reconciled our fair value calculations to our overall market capitalization to help determine the reasonableness of our assumptions. We concluded that none of the Company s goodwill was impaired.

(o) Impairment or Disposal of Long-Lived Assets

We assess the recoverability of our long-lived assets that are held for use, such as property, plant and equipment and amortizable intangible assets in accordance with SFAS No. 144, *Accounting for Impairment or Disposal of Long-Lived Assets* when events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. Recoverability of assets or an asset group to be held and used is measured by a comparison of the carrying amount of an asset or asset group to estimated undiscounted future cash flows expected to be generated by the asset or the asset group. Cash flow projections are based on trends of historical performance and management s estimate of future performance. If the carrying amount of the asset or asset group exceeds the estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset or asset group exceeds its estimated fair value.

A long-lived asset classified as held for sale is initially measured at the lower of carrying amount or fair value less costs to sell. In the period the held for sale criteria are met, we would recognize an impairment charge for any initial adjustment of the long-lived assets. During each reporting period after the initial measurement, gains or losses resulting from fluctuations in the fair value less costs to sell are recognized. Gains and losses not previously recognized resulting from the sale of a long-lived asset are recognized on the date of sale. Assets to be disposed of are separately presented in the consolidated balance sheets and long-lived assets are no longer depreciated or amortized. The assets and liabilities of a disposal group, which are classified as held for sale, are presented separately in the appropriate asset and liability sections of the consolidated balance sheets. Operating results for all periods are presented as discontinued operations, net of tax. In accordance with EITF Issue No. 87-24, *Allocation of Interest to Discontinued Operations*, we have elected not to allocate interest of our consolidated debt to discontinued operations.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(p) Fair Value of Financial Instruments

The carrying value of our cash and cash equivalents, trade accounts receivable and trade accounts payable and short-term debt approximate their fair values because of the short maturities of those instruments. The fair value of our long-term debt approximates its carrying amount and is based on the amount of future cash flows associated with the debt discounted using our current borrowing rate for similar debt instruments of comparable maturity.

(q) Stock-based Compensation

We follow the provisions of SFAS No. 123 (revised 2004), *Share-Based Payment*, which requires us to recognize compensation expense for all share-based payment awards made to employees and directors including employee stock options and employee stock purchases related to the Employee Stock Purchase Plan (employee stock purchases). We adopted SFAS No. 123(R) using the modified prospective transition method, which requires the application of the accounting standard as of January 1, 2006, the first day of fiscal year 2006. Prior to the adoption of SFAS No. 123(R), we accounted for stock options to employees in accordance with Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* and related interpretations. We also provided the disclosures required under SFAS No. 123, *Accounting for Stock-Based Compensation*, as amended by SFAS No. 148*, Accounting for Stock-Based Compensation Transition and Disclosures*. In accordance with the modified prospective transition method, our consolidated financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS No. 123(R).

Stock-based compensation expense recognized under SFAS No. 123(R) for the years ended December 31, 2008, 2007 and 2006 was $2.0 million, $2.4 million and $2.1 million, respectively, and consisted of stock-based compensation expense related to employee stock options and the employee stock purchase plan, as applicable, and was recorded as a component of cost of product revenues, sales and marketing expenses, general and administrative expenses, research and development expenses and discontinued operations, net of tax.

(r) Recently Issued Accounting Pronouncements

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations*. SFAS No. 141(R) retains the fundamental requirements of the original pronouncement requiring that the purchase method be used for all business combinations. SFAS 141(R) defines the acquirer as the entity that obtains control of one or more businesses in the business combination, establishes the acquisition date as the date that the acquirer achieves control and requires the acquirer to recognize the assets acquired, liabilities assumed and any noncontrolling interest at their fair values as of the acquisition date. SFAS No. 141(R) also requires that acquisition-related costs be recognized separately from the acquisition. This Statement applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008 and may not be applied before that date. The adoption of this interpretation did not have a material impact on our consolidated results of operations or financial position.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements, An Amendment of ARB No. 51.* SFAS No. 160 amends Accounting Research Bulletin (ARB) 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It also amends certain of ARB 51 s consolidation procedures for consistency with the requirements of FASB Statement No. 141(R). This statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. The statement shall be applied prospectively as of the beginning of the fiscal year in which the statement is initially adopted. The adoption of this interpretation did not have a material impact on our consolidated results of operations or financial position.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In April 2008, the FASB issued FASB Staff Position (FSP) FAS 142-3, *Determination of the Useful Life of Intangible Assets*. FSP FAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets* to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141, *Business Combinations,* other U.S. GAAP. FSP FAS 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early adoption is prohibited. The adoption of this interpretation did not have a material impact on our consolidated results of operations or financial position.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles.* SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements that are presented in conformity with generally accepted accounting principles in the United States. SFAS No. 162 is effective 60 days following the SEC s approval of the Public Company Accounting Oversight Board amendments to AU Section 411, *The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles*. Based on our current operations, the adoption of SFAS No. 162 will not have a material impact on our consolidated results of operations or financial position.

In June 2008, the FASB issued FASB Staff Position (FSP) EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities*. FSP EITF 03-6-1 addresses whether instruments granted in share-based payment transactions are participating securities prior to vesting and, therefore, need to be included in computing earnings per share under the two-class method described in SFAS No. 128, *Earnings Per Share*. FSP EITF 03-6-1 is effective as of January 1, 2009 and in accordance with its requirements it will be applied retrospectively. We do not expect the adoption of FSP EITF 03-6-1 to have a material impact on our consolidated results of operations or financial position.

3. Concentrations

One commercial customer accounted for 15%, 17% and 19% of revenues for the years ended December 31, 2008, 2007 and 2006, respectively. We have two agreements with this commercial customer. At December 31, 2008, one customer accounted for 14% of net accounts receivable and at December 31, 2007, one customer accounted for 16% of net accounts receivable. Except as noted above, no other individual customer accounted for more than 10% of revenues for the years ended December 31, 2008, 2007 and 2006.

4. Inventories

Inventories consist of the following:

	December 31,	
	2008	2007
	(in thousands)	
Finished goods	$ 3,971	$ 4,772
Work in process	772	1,665
Raw materials	7,158	8,546
	$ 11,901	$ 14,983

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Property, Plant and Equipment

Property, plant and equipment consists of the following:

	December 31, 2008	2007
	(in thousands)	
Land, buildings and leasehold improvements	$ 2,521	$ 2,581
Machinery and equipment	4,353	5,851
Computer equipment and software	3,380	3,475
Furniture and fixtures	792	854
Automobiles	324	301
	11,370	$ 13,062
Less: accumulated depreciation	(8,149)	(8,597)
Property, plant and equipment, net	$ 3,221	$ 4,465

6. Acquisitions

Our continuing operations have completed two acquisitions since January 1, 2006.

Panlab s.l.

On October 11, 2007, we acquired all issued and outstanding shares of Panlab s.l. (Panlab), of Barcelona, Spain, a distributor, manufacturer and developer of products and software for life science researchers primarily in the neuroscience research market, for a purchase price of approximately $5.4 million (including acquisition costs of $0.5 million). The acquisition was funded by proceeds from our $20.0 million credit facility with Brown Brothers Harriman. The results of operations of Panlab since the date of acquisition have been included in our consolidated financial statements.

During 2008, we completed the valuation of Panlab s assets and liabilities acquired and a final purchase price allocation was prepared and is included as part of these consolidated financial statements. The purchase price, which has been allocated on the basis of fair market value of assets acquired and liabilities assumed at the date of acquisition, resulted in the following allocation:

	(in thousands)
Tangible assets	$ 3,705
Liabilities assumed	(1,892)
Notes payable and other debt assumed	(2,348)
Net liabilities assumed	(535)
Goodwill and intangible assets:	
Goodwill	3,815
Other indefinite lived intangibles (trade name)	239

Distribution agreements / customer relationships		2,525
Existing technology		233
Non-compete agreements		9
Deferred tax liabilities		(902)
Total goodwill and intangible assets		5,919
Cash paid for acquisition, net of cash acquired	$	5,384

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Anthos

On June 12, 2006, we acquired, through Asys Hitech GmbH (Asys), certain assets of the microplate reader and washer product lines of Anthos Labtec Instruments GmbH (Anthos), a subsidiary of Beckman Coulter, Inc., for approximately $1.1 million (including acquisition costs of approximately $95,000). This acquisition of certain assets provides us with a new design platform, software and a luminescence capability, which complements our current Asys product line. In accordance with Emerging Task Force 98-3, *Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets of a Business,* we determined that the transaction involves the receipt of productive assets and does not constitute the acquisition of a business. The aggregate purchase price allocation for certain assets of Anthos was allocated to tangible and intangible assets acquired based on their fair market values as follows:

		(in thousands)
Tangible assets	$	690
Intangible assets:		
Existing technology		404
Other indefinite lived intangibles (trade name)		24
Total intangible assets		428
Cash paid for acquisition	$	1,118

7. Discontinued Operations

In July 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business was based on the fact that market conditions for the Capital Equipment Business segment were such that this business had not met expectations and the decision to focus resources on the Apparatus and Instrumentation Business segment. As a result, we began reporting our Capital Equipment Business segment as a discontinued operation in the third quarter of 2005.

During the year ended December 31, 2006, we utilized a market approach and re-evaluated the fair value less costs to sell of the assets that comprise the Capital Equipment Business segment. Based on this evaluation, we recorded asset impairment charges of approximately $3.9 million. The loss from discontinued operations, net of tax, excluding the impairment charge was approximately $5.1 million for the year ended December 31, 2006.

During the year ended December 31, 2007, we utilized a market approach and re-evaluated the fair value less costs to sell of the assets that comprise the Capital Equipment Business segment. Based on management s evaluation, additional asset impairment charges of approximately $2.9 million were recorded during 2007. The loss from discontinued operations, net of tax, excluding the impairment charge was approximately $3.0 million. The loss from discontinued operations, net of tax for the years ended December 31, 2007 and 2006 includes the operating results of our former Genomic Solutions Division, MAIA Scientific subsidiary, and Union Biometrica US and German subsidiaries.

In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of our Belgian subsidiary, MAIA Scientific, both of which were part of our Capital Equipment Business Segment, to Digilab, Inc. The purchase price paid by Digilab under the terms of the Asset Purchase Agreement consisted of $1,000,000 in cash plus additional consideration in the form of an earn-out based on 20% of the revenue generated by the acquired business as it is conducted by Digilab over a three-year period post-transaction. Any earn-out amounts will be evidenced by interest bearing promissory notes due on November 30, 2012. During the fourth quarter of 2007, we recorded a loss on this sale of $3.1 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain. The COPAS flow cytometry product line held by our Union Biometrica US and German subsidiaries was not included in this sale.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

On September 30, 2008, we completed the sale of assets of our Union Biometrica Division including its German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment, to UBIO Acquisition Company. The purchase price paid by UBIO Acquisition Company under the terms of the Asset Purchase Agreement consisted of $1 in cash, the assumption of certain liabilities, plus additional consideration in the form of an earn-out based on the revenue generated by the acquired business as it is conducted by UBIO Acquisition Company over a five-year post-transaction period in an amount equal to (i) 5% of the revenue generated up to and including $6,000,000 and (ii) 8% of the revenue generated above $6,000,000 each year. Any earn-out amounts will be evidenced by interest-bearing promissory notes due on September 30, 2013 or at an earlier date based on certain triggering events. During 2008, we recorded a loss on sale of the Union Biometrica business of $3.3 million. There was no value ascribed to the contingent consideration from the earn-out agreement, as realization is uncertain.

The loss from discontinued operations, net of tax, excluding the loss on sale was $0.5 million for the year ended December 31, 2008. The loss from discontinued operations, net of tax for the year ended December 31, 2008 includes the operating results of our former Union Biometrica US and German subsidiaries.

Operating results from our Capital Equipment Business segment were as follows:

	Years Ended December 31,		
	2008	2007	2006
		(in thousands)	
Total revenues	$ 1,536	$ 15,253	$ 17,781
Pretax loss	(457)	(6,127)	(8,672)
Income tax (benefit) expense		(263)	290
Loss from discontinued operations, net of tax	(457)	(5,864)	(8,962)
Loss on disposition of discontinued operations, net of tax	(3,280)	(3,088)	
Total loss from discontinued operations, net of tax	$ (3,737)	$ (8,952)	$ (8,962)

Assets and liabilities of our Capital Equipment Business segment were as follows:

	December 31, 2007 (in thousands)
Assets	
Cash and cash equivalents	$ 315
Accounts receivable, net	1,863
Inventories	405
Other assets	555
Long-lived assets	1,130
Total assets	$ 4,268
Liabilities	
Total liabilities	$ 1,771

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Goodwill and Other Intangible Assets

On January 1, 2002, we adopted SFAS No. 142. As a result of the adoption, goodwill and other indefinite-lived intangible assets are no longer being amortized, but are subject to impairment reviews annually, or more frequently, if events or circumstances indicate there may be an impairment.

As of December 31, 2008, we completed our annual goodwill impairment tests and concluded there was no impairment to goodwill included in its continuing operations. See Note 7 Discontinued Operations, for a discussion of abandonment and impairment charges taken during 2008 and 2007 within our discontinued operations.

Intangible assets consist of the following:

	December 31,				
	2008		2007		Weighted Average Life(a)
	Gross	Accumulated Amortization	Gross	Accumulated Amortization	
	(in thousands)				
Amortizable intangible assets:					
Existing technology	$ 10,780	$ (6,224)	$ 12,389	$ (6,009)	5.9 years
Tradename	920	(557)	920	(496)	6.1 years
Distribution agreement/customer relationships	7,272	(3,240)	6,291	(2,460)	10.5 years
Patents	9	(5)	9	(4)	7.3 years
Total amortizable intangible assets	$ 18,981	$ (10,026)	$ 19,609	$ (8,969)	
Unamortizable intangible assets:					
Goodwill	$ 23,536		$ 27,646		
Other indefinite lived intangible assets	1,291		1,382		
Total goodwill and other indefinite lived intangible assets	$ 24,827		$ 29,028		
Total intangible assets	$ 43,808		$ 48,637		

(a) Weighted average life is as of December 31, 2008.

The changes in the carrying amount of goodwill for the years ended December 31, 2008 and 2007 are as follows:

	(in thousands)
Balance at December 31, 2006	$ 22,906
Goodwill acquired during the year	4,382
Effect of change in foreign currencies	358
Balance at December 31, 2007	$ 27,646
Adjustment to purchase price allocations of prior year acquisition	(567)
Effect of change in foreign currencies	(3,543)

Balance at December 31, 2008	$ 23,536

Intangible asset amortization expense was $2.0 million, $1.8 million and $1.7 million for the years ended December 31, 2008, 2007 and 2006, respectively. Amortization expense of existing amortizable intangible assets is estimated to be $1.5 million for the year ended December 31, 2009, $1.4 million for the years ended December 31, 2010 and 2011, $1.1 million for the year ended December 31, 2012 and $0.9 million for the year ended December 31, 2013.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Restructuring and Other Exit Costs

During the quarter ended March 31, 2008, the management of Harvard Bioscience committed to an ongoing initiative to consolidate business functions to reduce operating expenses. Our recent actions have been related to the separation of our electrophoresis product lines from our spectrophotometer and plate reader product lines. As part of these initiatives, we have made changes in management, completed the consolidation of the Hoefer electrophoresis administrative and marketing operations from San Francisco, California to the headquarters of the Harvard Apparatus business in Holliston, Massachusetts and consolidated the activities of our Asys Hitech subsidiary in Austria to our Biochrom subsidiary s facility located in Cambridge, UK.

During the year ended December 31, 2008, we recorded restructuring charges of approximately $1.8 million. These charges were comprised of $1.0 million in severance payments, $0.3 million in inventory impairment charges related to the discontinuance of certain product lines (included in cost of product revenues), $0.2 million in facility closure costs and $0.4 million in various other costs.

Restructuring charges are as follows:

	Severance and Related	Inventory	Facility Closure Costs	Other	Total
			(in thousands)		
Restructuring charges	$ 971	$ 250	$ 150	$ 441	$ 1,812
Cash payments	(947)		(141)	(285)	(1,373)
Non-cash charges		(250)		(124)	(374)
Currency translation	(12)		(9)	(13)	(34)
Restructuring balance at December 31, 2008	$ 12	$	$	$ 19	$ 31

We anticipate the remaining payments related to the restructuring will occur during the first quarter of 2009.

10. Long-Term Debt

Long-term debt consists of the following:

	December 31, 2008	2007
	(in thousands)	
Long-term debt	$	$ 5,474
Notes payable (Panlab s.l.)	1,420	2,273
	$ 1,420	$ 7,747
Less: current installments	(1,361)	(2,169)
Long-term debt	$ 59	$ 5,578

During 2003, we entered into a $20.0 million credit facility with Brown Brothers Harriman & Co. On December 1, 2006, we amended the terms of the credit facility. This amendment changed the terms of our current $20.0 million credit facility, by allowing borrowing of up to $10.0 million in British Pound Sterling or Eurocurrency and extending the maturity date from January 1, 2007 to December 1, 2009. The amended

credit facility bears interest at either (1) the base rate announced by BBH from time to time, (2) the London Interbank Offered Rate (LIBOR) or (3) the Eurocurrency base rate, plus, in the case of LIBOR or the Eurocurrency base rate, a margin of 2.5% or 2.75% depending on our debt service leverage ratio. As of December 31, 2008, we had no borrowings outstanding under our revolving credit facility compared to $5.5 million as of December 31, 2007.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

As of December 31, 2008, we are in compliance with financial covenants contained in the credit facility involving income, debt coverage and cash flow, as well as minimum working capital requirements. Additionally, the credit facility also contains limitations on our ability to incur additional indebtedness and requires creditor approval for acquisitions funded with cash, promissory notes and/or other consideration in excess of $6.0 million and for acquisitions funded solely with equity in excess of $10.0 million. We do not believe that these requirements will be a significant constraint on our operations. As of December 31, 2008, we were not subject to any borrowing restrictions under the covenants and had available borrowing capacity under our revolving credit facility of $20.0 million.

In connection with our acquisition of Panlab, we assumed several working capital lines of credit totaling $2.3 million. As of December 31, 2008, Panlab s borrowings under these lines of credit were $1.4 million denominated in Euros. The payment terms of the lines of credit are generally one year; however, the lines have historically renewed annually. The interest rates, which include bank commissions and other fees, range between 5.8% and 9.0%. There are no material financial covenants associated with these lines of credit.

The debt repayment schedule is as follows:

	(in thousands)
2009	$ 1,361
2010	59
2011	
Total	$ 1,420

11. Leases

Historically, we have leased automobiles and equipment under various leases, which were classified as capital leases. As of December 31, 2008 and 2007, we did not have any capital leases.

We have noncancelable operating leases for office and warehouse space expiring at various dates through 2015. Rent expense, which is recorded on a straight-line basis, was approximately $1.6 million for the year ended December 31, 2008, $1.7 million for the year ended December 31, 2007 and $1.6 million for the year ended December 31, 2006.

Future minimum lease payments for operating leases, with initial or remaining terms in excess of one year at December 31, 2008, for our continuing and discontinued operations are as follows:

	Operating Leases (in thousands)
2009	$ 1,190
2010	824
2011	735
2012	592
2013	241
Thereafter	40
Net minimum lease payments	$ 3,622

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. Accrued Expenses

Accrued expenses consist of:

	December 31, 2008	2007
	(in thousands)	
Accrued compensation and payroll	$ 1,432	$ 1,631
Accrued legal and professional fees	695	976
Warranty costs	186	239
Other	1,693	1,283
Total	$ 4,006	$ 4,129

13. Income Taxes

Income tax expense (benefit) attributable to income from continuing operations for the years ended December 31, 2008, 2007 and 2006 consisted of:

	Years ended December 31, 2008	2007	2006
		(in thousands)	
Current income tax expense (benefit):			
Federal and state	$ (29)	$ (19)	$ 7
Foreign	2,362	2,337	1,591
	$ 2,333	$ 2,318	$ 1,598
Deferred income tax (benefit) expense:			
Federal and state	$ (76)	$ (22)	$ (16)
Foreign	(17)	(326)	193
	$ (93)	$ (348)	$ 177
Total income tax expense	$ 2,240	$ 1,970	$ 1,775

Income tax expense for the periods ended December 31, 2008, 2007 and 2006 differed from the amount computed by applying the U.S. federal income tax rate of 34% to pre-tax continuing operations income as a result of the following:

	Years ended December 31, 2008	2007	2006
		(in thousands)	
Computed expected income tax expense	$ 2,601	$ 3,253	$ 2,855

Increase (decrease) in income taxes resulting from:			
Permanent differences, net	67	193	(174)
Foreign tax rate and regulation differential	(308)	(167)	(143)
State income taxes, net of federal income tax benefit	10	(13)	6
Foreign withholding taxes		61	74
Impact of discontinued operations	(1,200)	(5,464)	(1,544)
Utilization of net operating loss			(1,152)
Non-deductible stock compensation expense	11	35	352
Federal tax expense differential from prior year tax	9	(182)	(805)
Tax credits	(145)	(433)	(289)
Change in valuation allowance allocated to income tax expense	1,222	4,976	2,700
Other	(27)	(289)	(105)
Total income tax expense	$ 2,240	$ 1,970	$ 1,775

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Income tax expense is based on the following pre-tax continuing operations income for the years ended December 31, 2008, 2007 and 2006:

	Years ended December 31,		
	2008	2007	2006
	(in thousands)		
Domestic	$ 760	$ 1,536	$ 1,502
Foreign	6,890	8,032	6,894
	$ 7,650	$ 9,568	$ 8,396

The tax effects of temporary differences that give rise to significant components of the deferred tax assets and deferred tax liabilities from continuing operations at December 31, 2008 and 2007 are as follows:

	Years ended December 31,	
	2008	2007
	(in thousands)	
Deferred tax assets:		
Accounts receivable	$ 13	$ 13
Inventory	562	510
Operating loss and credit carryforwards	16,144	14,146
Property, plant and equipment	86	63
Accrued expenses	132	384
Pension liabilities	567	346
Other accrued liabilities	3,230	1,024
Total gross deferred assets	20,734	16,486
Less: valuation allowance	(17,987)	(14,315)
Deferred tax assets	$ 2,747	$ 2,171
Deferred tax liabilities:		
Property, plant and equipment	$	$
Intangible assets	3,153	3,114
Other accrued liabilities	266	412
Total deferred tax liabilities	3,419	3,526
Net deferred tax liability	$ (672)	$ (1,355)

As of December 31 2007, gross deferred tax assets held by our discontinued operations were approximately $3.2 million and primarily consisted of operating loss and credit carryforwards, offset by valuation allowances of approximately $3.0 million. These deferred tax assets and offsetting valuation allowances are included in assets of discontinued operations held for sale for the year ended December 31, 2007. See Note 7 Discontinued Operations. During the year ending December 31, 2008 and 2007, the assets that comprised our discontinued operations were sold in the form of an asset sale. As a result, the Capital Equipment Business segment retained certain tax attributes. The remaining attributes and related valuation allowance on the portion of our discontinued operations that were sold, were moved to continuing operations at

December 31, 2008 and 2007.

The amounts recorded as gross deferred tax assets as of December 31, 2008 and 2007 represent the amount of tax benefits of existing deductible temporary differences or carryforwards that are more likely than not to be realized through the generation of sufficient future taxable income within the carryforward period. Due to the operating results of our discontinued operations, we concluded that a full valuation allowance was needed to

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

offset most United States deferred tax assets, net of deferred tax liabilities except deferred tax liabilities related to indefinite lived intangible assets.

At December 31, 2008, including our discontinued operations, we had federal and state net operating loss carryforwards available to offset future taxable income of approximately $45.4 million. The operating loss carryforwards will begin to expire in 2009. Furthermore, we had foreign operating loss carryforwards to offset future taxable income of approximately $6.1 million, which begin to expire in 2012. The Company, including our discontinued operations, also had federal and state general business and minimum tax credit carryforwards available to reduce future federal and state regular income taxes of approximately $5.2 million, which begin to expire in 2009. Utilization of the net operating losses and tax credits may be subject to an annual limitation imposed by change in ownership provisions of Section 382 of the Internal Revenue Code and similar state provisions. As mentioned above most net operating loss and credit carryforwards have full valuation allowances set up against them.

Total valuation allowances for deferred tax assets as of December 31, 2008 was $18.0 million. Undistributed earnings of our foreign subsidiaries, including discontinued operations, amounted to approximately $25.4 million, $16.0 million, and $11.6 million at December 31, 2008, 2007 and 2006, respectively. Our policy is that our undistributed foreign earnings are indefinitely reinvested and, accordingly, no related provision for U.S federal and state income taxes has been provided. Effective January 1, 2007, the Company adopted FASB Interpretation (FIN) No. 48, an interpretation that clarified the accounting for uncertainties in income taxes recognized in a company s financial statements in accordance with SFAS No. 109. At that time, we did not record any liabilities for uncertainties related to our tax positions. At December 31, 2008, the Company had recorded no liabilities related to FIN No. 48.

The Company or one of its subsidiaries files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to income tax examinations by tax authorities for years before 2004. We are not currently under audit by any major tax jurisdiction nor have we been in the past.

14. Employee Benefit Plans

The Company sponsors profit sharing retirement plans for its U.S. employees, which includes employee savings plans established under Section 401(k) of the U.S. Internal Revenue Code (the 401(k) Plan). The 401(k) Plans cover substantially all full-time employees who meet certain eligibility requirements. Contributions to the profit sharing retirement plans are at the discretion of management. For each of the years ended December 31, 2008, 2007 and 2006, we contributed approximately $0.3 million to the plans.

Certain of our subsidiaries in the United Kingdom (UK), Harvard Apparatus Limited and Biochrom Limited maintain contributory, defined benefit pension plans for their employees. Effective December 31, 2006, we adopted SFAS No. 158. The provisions of SFAS No. 158 require that the funded status of our pension plans be recognized in its balance sheet. The provisions of SFAS No. 158 also revise employers disclosures about our pension plans. SFAS No. 158 does not change the measurement or income statement recognition of these plans, although it does require that plan assets and benefit obligations be measured as of the balance sheet date. We have historically measured the plan assets and benefit obligations as of the balance sheet date.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The components of our pension expense follows:

	Years ended December 31,		
	2008	2007	2006
		(in thousands)	
Components of net periodic benefit cost:			
Service cost	$ 225	$ 394	$ 509
Interest cost	802	906	762
Expected return on plan assets	(800)	(970)	(801)
Net amortization loss	27	60	124
Net periodic benefit cost	$ 254	$ 390	$ 594

The measurement date is December 31 for these plans. The funded status of our defined benefit pension plans and the amount recognized in the consolidated balance sheets at December 31, 2008 and 2007 is as follows:

	December 31,	
	2008	2007
	(in thousands)	
Change in benefit obligation:		
Balance at beginning of year	$ 15,139	$ 17,279
Service cost	225	394
Interest cost	802	906
Participants contributions	92	147
Actuarial gain	(1,364)	(928)
Benefits paid	(452)	(2,941)
Currency translation adjustment	(3,888)	282
Balance at end of year	$ 10,554	$ 15,139
Change in fair value of plan assets:		
Balance at beginning of year	$ 13,902	$ 14,996
Actual (loss) return on plan assets	(2,082)	1,020
Participants contributions	92	147
Employer contributions	366	461
Benefits paid	(452)	(2,941)
Expenses paid		(20)
Currency translation adjustment	(3,298)	239
Balance at end of year	$ 8,528	$ 13,902

	December 31,	
	2008	2007
	(in thousands)	
Funded status	$ (2,026)	$ (1,237)

Unrecognized net loss	N/A	N/A
Net amount recognized	$ (2,026)	$ (1,237)

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The accumulated benefit obligation for all defined benefit pension plans was $10.2 million and $13.4 million at December 31, 2008 and 2007, respectively.

The amounts recognized in the consolidated balance sheets consist of:

	December 31,	
	2008	2007
	(in thousands)	
Deferred income tax assets	$ 567	$ 346
Other liabilities	(2,026)	(1,237)
Net amount recognized	$ (1,459)	$ (891)

The amounts recognized in accumulated other comprehensive income, net of tax consist of:

	December 31,	
	2008	2007
	(in thousands)	
Underfunded status of pension plans	$ (1,459)	$ (891)
Net amount recognized	$ (1,459)	$ (891)

The weighted average assumptions used in determining the net pension cost for these plans follows:

	Years ended December 31,		
	2008	2007	2006
Discount rate	6.87%	5.81%	5.13%
Expected return on assets	6.26%	6.75%	6.38%
Rate of compensation increase	4.02%	4.31%	3.96%

The discount rate assumptions used for pension accounting reflect the prevailing rates available on high-quality, fixed-income debt instruments with terms that match the average expected duration of our defined benefit pension plan obligations. We use the iBoxx AA 15yr+ index, which match the average duration of our pension plan liability of approximately 15 years. With the current base of assets in our pension plans, a 0.1% increase/decrease in the discount rate assumption would decrease/increase our annual pension expense by approximately $30,000.

The Company s mix of pension plan investments among asset classes also affects the long-term expected rate of return on plan assets. The Company s current target asset mix used in determining the expected return is 60% equities and 40% fixed income securities, including an insurance contract. As of December 31, 2008, the Company s actual asset mix approximated its target mix. Differences between actual and expected returns are recognized in the calculation of net periodic pension (income)/cost over the average remaining expected future working lifetime, which is approximately 16 years, of active plan participants. With the current base of assets, a 0.5% increase/decrease in the asset return assumption would decrease/increase the annual pension expense by approximately $42,000.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The asset allocations of the Company s pension benefits as of December 31, 2008 and 2007 measurement dates were as follows:

	December 31,	
	2008	2007
Asset category:		
Equity securities	62%	76%
Debt securities	17%	8%
Insurance contract	14%	11%
Other	7%	5%
Total	100%	100%

We expect to contribute approximately $0.5 million to our pension plans during 2009.

The benefits expected to be paid from the pension plans are $0.3 million in each of the years of 2009, 2010, 2011, 2012 and 2013. The expected benefits to be paid in the five years from 2014 2018 are $2.4 million. The expected benefits are based on the same assumptions used to measure the Company s benefit obligation at December 31, 2008 and include estimated future employee service. During the second half of 2008 and continuing for the first 70 days of 2009, the world s capital markets have weakened considerably. Should this trend continue or worsen, it could have a negative effect on the value of our pension assets and the Company s future pension contributions could increase from current estimates.

15. Commitments and Contingent Liabilities

From time to time, we may be involved in various claims and legal proceedings arising in the ordinary course of business. We are not currently a party to any such claims or proceedings.

16. Capital Stock

Common Stock

On February 5, 2008, our Board of Directors adopted a Shareholder Rights Plan and declared a dividend distribution of one preferred stock purchase right for each outstanding share of the Company s common stock to shareholders of record as of the close of business on February 6, 2008. Initially, these rights will not be exercisable and will trade with the shares of the Company s common stock. Under the Shareholder Rights Plan, the rights generally will become exercisable if a person becomes an acquiring person by acquiring 20% or more of the common stock of the Company or if a person commences a tender offer that could result in that person owning 20% or more of the common stock of the Company. If a person becomes an acquiring person, each holder of a right (other than the acquiring person) would be entitled to purchase, at the then-current exercise price, such number of shares of preferred stock which are equivalent to shares of the Company s common stock having a value of twice the exercise price of the right. If the Company is acquired in a merger or other business combination transaction after any such event, each holder of a right would then be entitled to purchase, at the then-current exercise price, shares of the acquiring company s common stock having a value of twice the exercise price of the right.

Stock Repurchase Program

On December 6, 2007, the Board of Directors authorized the repurchase by the Company of up to $10 million of its common stock in the open market or through privately negotiated transactions over the next 24

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

months. Under the program, shares may be repurchased from time to time and in such amounts as market conditions warrant, subject to regulatory considerations and any applicable contractual restrictions. During the year ended December 31, 2008, we repurchased in the open market 891,016 shares of common stock at an aggregate cost of $2.6 million, including commissions under the stock repurchase program. During the year ended December 31, 2007, no shares were purchased by the Company pursuant to this program. At December 31, 2008, we had $7.4 million remaining under the stock repurchase program.

Repurchased shares have been recorded as treasury stock and will be held until the Company s Board of Directors designates that these shares be retired or used for other purposes.

Employee Stock Purchase Plan

In 2000, we approved a stock purchase plan. Under this plan, participating employees can authorize the Company to withhold a portion of their base pay during consecutive six-month payment periods for the purchase of shares of the Company s common stock. At the conclusion of the period, participating employees can purchase shares of the Company s common stock at 85% of the lower of the fair market value of the Company s common stock at the beginning or end of the period. Shares are issued under the plan for the six-month periods ending June 30 and December 31. Under this plan, 500,000 shares of common stock are authorized for issuance of which 271,686 shares were issued as of December 31, 2008. During the years ended December 31, 2008 and 2007, we issued 25,824 and 27,020 shares, respectively, under the Employee Stock Purchase Plan.

We account for share-based payment awards in accordance with the provisions of SFAS No. 123(R), which was adopted as of January 1, 2006 using the modified prospective transition method. Stock-based compensation expense recognized under SFAS No. 123(R) for the years ended December 31, 2008, 2007 and 2006 was $2.0 million, $2.4 million and $2.1 million, respectively, which consisted of stock-based compensation expense related to employee stock options and the employee stock purchase plan. SFAS No. 123(R) requires companies to estimate the fair value of stock-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in our consolidated statement of operations. Prior to the adoption of SFAS No. 123(R), we accounted for stock-based awards to employees and directors using the intrinsic value method in accordance with APB Opinion No. 25 as allowed under SFAS No. 123. Under the intrinsic value method, no stock-based compensation expense was recognized in our consolidated statement of operations when the exercise price of the Company s stock options granted to employees and directors equaled or exceeded the fair market value of the underlying stock at the date of grant.

Stock-based compensation expense recognized during the period is based on the value of the portion of stock-based payment awards that is ultimately expected to vest. Stock-based compensation expense recognized in our consolidated statement of operations for years ended December 31, 2008, 2007 and 2006 included compensation expense for stock-based payment awards granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS No. 123, and compensation expense for the stock-based payment awards granted subsequent to December 31, 2005 based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R). As stock-based compensation expense recognized in the consolidated statement of operations for the year ended December 31, 2008 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Upon adoption of SFAS No. 123(R), we elected to retain our method of valuation for stock-based payment awards granted beginning in 2006 using the Black-Scholes option-pricing model (Black-Scholes model) which was also previously used for our pro forma information required under SFAS No. 123. Our determination of fair

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

value of stock-based payment awards on the date of grant using an option-pricing model is affected by the Company s stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to the Company s expected stock price volatility over the term of the awards and actual and projected employee stock option exercise behaviors. For awards granted prior to January 1, 2006, we use the accelerated expense recognition method in FIN No. 28, Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans. We record expense on a straight-line basis over the requisite service period for all awards granted since the adoption of SFAS No. 123(R) on January 1, 2006.

Stock Option Plans

1996 Stock Option and Grant Plan

In 1996, we adopted the 1996 Stock Option and Grant Plan (the 1996 Stock Plan) pursuant to which the Company s Board of Directors could grant stock options to employees, directors and consultants. The 1996 Stock Plan authorized grants of options to purchase 4,072,480 shares of authorized but unissued common stock. In 2000, the 1996 Stock Plan was replaced by the 2000 Stock Option and Incentive Plan. As of December 31, 2008, there were options to purchase 125,658 shares outstanding under the 1996 Stock Plan. During the years ended December 31, 2008 and 2007, no shares were issued under the 1996 Stock Plan.

2000 Stock Option and Incentive Plan

The Second Amended and Restated 2000 Stock Option and Incentive Plan (the 2000 Plan and, together with the 1996 Stock Plan, the Stock Plans) was amended by the Board of Directors on April 10, 2008. Such amendment to the 2000 Plan, which included an increase in the number of shares available thereunder by 2,500,000, was approved by the stockholders at the Company s 2008 Annual Meeting. The 2000 Plan permits the Company to make grants of incentive stock options, non-qualified stock options, stock appreciation rights, deferred stock awards, restricted stock awards, unrestricted stock awards, performance shares and dividend equivalent rights. We currently have reserved 9,367,675 shares of common stock for the issuance of awards under the 2000 Plan. As of December 31, 2008, there were options to purchase 5,600,100 shares outstanding and 2,846,227 shares available for grant under the 2000 Plan.

Through December 31, 2008 and 2007, incentive stock options to purchase 6,775,484 and 6,335,484 shares and non-qualified stock options to purchase 6,254,061 and 5,536,061 shares, respectively, had been granted to employees and directors under the Stock Plans. Generally, both the incentive stock options and non-qualified stock options become fully vested over a four-year period, with one-quarter of the options vesting on each of the first four anniversaries of the grant date.

During the years ended December 31, 2008, 2007 and 2006, 1,158,000, 1,137,000 and 1,185,000 stock options, respectively, were granted to employees and directors at exercise prices equal to or greater than fair market value of the Company s common stock on the date of grant.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Distribution and Dilutive Effect of Options

The following table illustrates the dilution (accretion) resulting from the grant of options and exercise of options, which is referred to as the grant dilution and exercise dilution, respectively, during the periods described below.

	Years Ended December 31,		
	2008	2007	2006
Shares of common stock outstanding	30,235,479	30,851,896	30,562,408
Granted	1,158,000	1,137,000	1,185,000
Canceled / forfeited	(970,836)	(333,562)	(167,691)
Net options granted	187,164	803,438	1,017,309
Grant dilution(1)	0.62%	2.60%	3.33%
Exercised	248,775	262,468	52,192
Exercise dilution(2)	0.82%	0.85%	0.17%

(1) The percentage for grant dilution is computed based on net options granted as a percentage of shares of common stock outstanding.

(2) The percentage for exercise dilution is computed based on net options exercised as a percentage of shares of common stock outstanding. Basic earnings per share is based upon net income (loss) divided by the number of weighted average common shares outstanding during the period. The calculation of diluted earnings per share assumes conversion of stock options into common stock using the treasury method. The weighted average number of shares used to compute basic and diluted earnings per share consists of the following:

	Years Ended December 31,		
	2008	2007	2006
Basic	30,881,611	30,645,696	30,518,835
Effect of assumed conversion of employee and director stock options	472,781	759,235	629,563
Diluted	31,354,392	31,404,931	31,148,398

Excluded from the calculation of the diluted earnings per common share in the above table are options to purchase approximately 3,870,546, 3,739,455 and 2,523,489 shares of common stock for years ended December 31, 2008, 2007 and 2006, respectively, as the impact of these shares would be anti-dilutive.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

General Option Information

The following is a summary of stock option activity:

	Options Available for Grant	Options Outstanding	Weighted Average Exercise Price
Balance at December 31, 2005	354,138	4,281,282	$ 5.29
Approved by shareholders	2,000,000		
Options granted	(1,185,000)	1,185,000	4.36
Options exercised		(52,192)	2.47
Options cancelled / forfeited	167,691	(167,691)	5.81
Balance at December 31, 2006	1,336,829	5,246,399	$ 5.09
Options granted	(1,137,000)	1,137,000	5.41
Options exercised		(262,468)	2.33
Options cancelled / forfeited	333,562	(333,562)	5.71
Balance at December 31, 2007	533,391	5,787,369	$ 5.24
Approved by shareholders	2,500,000		
Options granted	(1,158,000)	1,158,000	3.19
Options exercised		(248,775)	3.38
Options cancelled / forfeited	970,836	(970,836)	5.83
Balance at December 31, 2008	2,846,227	5,725,758	$ 4.81

We have a policy of issuing stock out of our registered but unissued stock pool through our transfer agent to satisfy stock option exercises.

The following table summarizes information concerning currently outstanding and exercisable options as of December 31, 2008 (Aggregate Intrinsic Value, in thousands):

	Options Outstanding				Options Exercisable		
Range of Exercise Price	Number Outstanding at December 31, 2008	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Aggregate Intrinsic Value	Shares Exercisable at December 31, 2008	Weighted Average Exercise Price	Aggregate Intrinsic Value
$0.01-1.99	725,658	8.41	$ 1.83	$ 598	125,658	$ 1.05	$ 202
$1.99-3.48	1,223,100	5.53	$ 3.12		1,023,100	$ 3.16	
$3.48-4.58	1,196,500	7.34	$ 4.29		647,003	$ 4.20	
$4.58-6.47	1,189,500	8.59	$ 5.31		235,169	$ 5.45	
$6.47-10.00	1,391,000	4.10	$ 7.86		1,391,000	$ 7.86	
$0.01-10.00	5,725,758	6.56	$ 4.81	$ 598	3,421,930	$ 5.35	$ 202

The aggregate intrinsic value in the preceding table represents the total pre-tax intrinsic value, based on the Company s closing stock price of $2.65 as of December 31, 2008, which would have been received by the option holders had all option holders exercised their options as of that date. The aggregate intrinsic value of options exercised for the year ended December 31, 2008 was approximately $0.2 million. The total number of in-the-money options that were exercisable as of December 31, 2008 was 125,658.

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Valuation and Expense Information under SFAS No. 123(R)

Stock-based compensation expense related to employee stock options and the employee stock purchase plan under SFAS No. 123(R) for the years ended December 31, 2008, 2007 and 2006 was allocated as follows:

	Years Ended December 31,		
	2008	2007	2006
	(in thousands)		
Cost of sales	$ 45	$ 47	$ 51
Sales and marketing	78	112	114
General and administrative	1,878	2,171	1,757
Research and development	2	5	12
Discontinued operations	9	65	172
Total stock-based compensation	$ 2,012	$ 2,400	$ 2,106

We did not capitalize any stock-based compensation. No significant tax benefit on the stock-based compensation was recorded in the years ended December 31, 2008, 2007 and 2006 since we have established a valuation allowance against net deferred tax assets.

The weighted-average estimated value of employee stock options granted during 2008, 2007 and 2006 was $1.64, $3.65 and $3.08 per share, respectively, using the Black Scholes option-pricing model with the following weighted-average assumptions:

	Years Ended December 31,		
	2008	2007	2006
Volatility	59.20%	70.46%	75.99%
Risk-free interest rate	2.40%	4.60%	4.82%
Expected holding period	5.83 years	6.25 years	6.25 years
Dividend yield	0.00%	0.00%	0.00%

We used historical volatility to calculate our expected volatility as of December 31, 2008. Historical volatility was determined by calculating the mean reversion of the daily adjusted closing stock price. The risk-free interest rate assumption is based upon observed Treasury bill interest rates (risk free) appropriate for the term of the Company s employee stock options. The expected life of employee stock options represents the period of time options are expected to be outstanding and were based on historical experience. The vesting period is generally 4 years and the contractual life is 10 years.

Stock-based compensation expense recognized in the consolidated statement of operations for the years ended December 31, 2008, 2007 and 2006 is based on awards ultimately expected to vest and has been reduced for annualized estimated forfeitures of 5.84%, 4.02% and 3.03%, respectively. SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based on historical experience.

17. Segment and Related Information

During the quarter ended June 30, 2005, we realigned our lines of business into two business segments, the Apparatus and Instrumentation Business segment and the Capital Equipment Business segment. Corporate costs of $6.2 million for the years ended December 31, 2008 and 2007 and $6.4 million for the year ended December 31, 2006, are all included in general and administrative expenses from continuing operations

and are not allocated for purposes of segment reporting. Included in corporate costs in 2008, 2007 and 2006 are $1.5 million, $1.6 million and $1.2 million, respectively, of stock compensation expense related to the adoption of SFAS No. 123(R). See Note 2(q).

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

During the quarter ended September 30, 2005, we announced plans to divest our Capital Equipment Business segment. The decision to divest this business segment was based on the fact that market conditions for the Capital Equipment Business were such that this business had not met our expectations and the decision to focus Company resources on the Apparatus and Instrumentation Business segment. As a result, we began reporting the Capital Equipment Business segment as a discontinued operation in the third quarter of 2005. In November 2007, we completed the sale of the assets of our Genomic Solutions Division and the stock of its Belgian subsidiary, Maia Scientific, both of which were part of our Capital Equipment Business Segment, to Digilab, Inc. On September 30, 2008, we completed the sale of assets of our Union Biometrica Division including its German subsidiary, Union Biometrica GmbH, representing at that time the remaining portion of our Capital Equipment Business Segment, to UBIO Acquisition Company. See Note 7 Discontinued Operations.

The following tables summarize selected financial information of the Company s continuing operations by geographic location:

Revenues by geographic area consist of the following:

	Years ended December 31,		
	2008	2007	2006
		(in thousands)	
United States	$ 34,807	$ 35,308	$ 35,713
United Kingdom	30,972	29,617	27,079
Rest of the world	22,270	18,482	13,389
	$ 88,049	$ 83,407	$ 76,181

Tangible long-lived assets by geographic area consist of the following:

	December 31,	
	2008	2007
	(in thousands)	
United States	$ 1,566	$ 2,164
United Kingdom	1,481	1,856
Rest of the world	174	445
	$ 3,221	$ 4,465

Net assets by geographic area consist of the following:

	December 31,	
	2008	2007
	(in thousands)	
United States	$ 31,589	$ 25,774
United Kingdom	23,451	29,788
Rest of the world	11,678	16,078
	$ 66,718	$ 71,640

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

18. Allowance for Doubtful Accounts

Allowance for doubtful accounts is based on our assessment of the collectibility of customer accounts. A rollforward of allowance for doubtful accounts is as follows:

	Beginning Balance	Charged to Bad Debt Expense	Write-offs Charged to Allowance	Ending Balance
		(in thousands)		
Year ended December 31, 2006	$ 347	27	(10)	$ 364
Year ended December 31, 2007	$ 364	24	(10)	$ 378
Year ended December 31, 2008	$ 378	16	(99)	$ 295

19. Warranties

A rollforward of product warranties is as follows:

	Beginning Balance	Payments	Additions(a)	Ending Balance
		(in thousands)		
Year ended December 31, 2006	$ 237	(151)	93	$ 179
Year ended December 31, 2007	$ 179	(226)	286	$ 239
Year ended December 31, 2008	$ 239	(93)	40	$ 186

(a) Includes additions of acquired companies.

20. Supplemental Cash Flow Information

	Years ended December 31,		
	2008	2007	2006
		(in thousands)	
Cash paid for acquisitions, net of cash acquired:			
Net assets acquired or liabilities assumed	$	$ (510)	$ 690
Goodwill and intangible assets		5,919	428
Less cash acquired, if any		(25)	
Cash paid for acquisitions, net of cash acquired	$	$ 5,384	$ 1,118

21. Supplemental Statement of Stockholders Equity Information

	As of December 31, 2008	2007
	(in thousands)	
Balances Included in Accumulated Other Comprehensive Income:		
Cumulative translation adjustment	$ (1,946)	$ 5,896
Cumulative translation adjustment on investment type loans, net of tax of $271 and $710, respectively	646	1,655
Changes in defined benefit pension plans, net of tax benefit of $567 and $346, respectively	(1,459)	(891)
Balance	$ (2,759)	$ 6,660

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. Quarterly Financial Information (Unaudited)
Statement of Operations Data:

2008	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
			(in thousands, except per share data)		
Revenues	$ 21,959	$ 23,049	$ 19,989	$ 23,052	$ 88,049
Cost of product revenues	11,628	12,286	10,555	11,424	45,893
Gross profit	10,331	10,763	9,434	11,628	42,156
Sales and marketing expenses	2,841	2,969	2,568	2,592	10,970
General and administrative expenses	3,756	3,795	3,451	4,132	15,134
Research and development expenses	1,081	1,077	1,009	881	4,048
Restructuing	581	943	60	(25)	1,559
Amortization of goodwill and other intangibles	506	505	489	466	1,966
Total operating expenses	8,765	9,289	7,577	8,046	33,677
Operating income	1,566	1,474	1,857	3,582	8,479
Other income (expense), net	195	24	(39)	(1,009)	(829)
Income from continuing operations before income taxes	1,761	1,498	1,818	2,573	7,650
Income taxes	544	445	385	866	2,240
Income from continuing operations	1,217	1,053	1,433	1,707	5,410
Discontinued operations					
Income (loss) from discontinued operations, net of tax	(530)	(373)	77	369	(457)
Loss on disposition of discontinued operations, net of tax		(2,886)	(394)		(3,280)
Total income (loss) from discontinued operations, net of tax	(530)	(3,259)	(317)	369	(3,737)
Net income (loss)	$ 687	$ (2,206)	$ 1,116	$ 2,076	$ 1,673
Income (loss) per share:					
Basic earnings per common share from continuing operations	$ 0.04	$ 0.03	$ 0.05	$ 0.06	$ 0.18
Discontinued operations	(0.02)	(0.11)	(0.01)	0.01	(0.12)
Basic earnings per common share	$ 0.02	$ (0.07)	$ 0.04	$ 0.07	$ 0.05
Diluted earnings per common share from continuing operations	$ 0.04	$ 0.03	$ 0.05	$ 0.06	$ 0.17
Discontinued operations	(0.02)	(0.10)	(0.01)	0.01	(0.12)
Diluted earnings per common share	$ 0.02	$ (0.07)	$ 0.04	$ 0.07	$ 0.05
Weighted average common shares:					

Basic	30,875	30,971	31,046	30,636	30,882
Diluted	31,445	31,608	31,624	30,745	31,354

Table of Contents

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Statement of Operations Data:

2007	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
		(in thousands, except per share data)			
Revenues	$ 19,115	$ 20,410	$ 19,353	$ 24,529	$ 83,407
Cost of product revenues	9,694	10,426	10,077	12,964	43,161
Gross profit	9,421	9,984	9,276	11,565	40,246
Sales and marketing expenses	2,470	2,553	2,458	2,871	10,352
General and administrative expenses	3,403	3,544	3,501	4,381	14,829
Research and development expenses	844	888	873	1,103	3,708
Restructuring					
Amortization of goodwill and other intangibles	442	444	444	494	1,824
Total operating expenses	7,159	7,429	7,276	8,849	30,713
Operating income	2,262	2,555	2,000	2,716	9,533
Other income (expense), net	13	(7)	84	(55)	35
Income from continuing operations before income taxes	2,275	2,548	2,084	2,661	9,568
Income taxes	533	533	566	338	1,970
Income from continuing operations	1,742	2,015	1,518	2,323	7,598
Discontinued operations					
Loss from discontinued operations, net of tax	(1,246)	(3,781)	(299)	(538)	(5,864)
Loss on disposition of discontinued operations, net of tax				(3,088)	(3,088)
Total loss from discontinued operations, net of tax	(1,246)	(3,781)	(299)	(3,626)	(8,952)
Net income (loss)	$ 496	$ (1,766)	$ 1,219	$ (1,303)	$ (1,354)
Income (loss) per share:					
Basic earnings per common share from continuing operations	$ 0.06	$ 0.07	$ 0.05	$ 0.08	$ 0.25
Discontinued operations	(0.04)	(0.12)	(0.01)	(0.12)	(0.29)
Basic earnings per common share	$ 0.02	$ (0.06)	$ 0.04	$ (0.04)	$ (0.04)
Diluted earnings per common share from continuing operations	$ 0.06	$ 0.06	$ 0.05	$ 0.07	$ 0.24
Discontinued operations	(0.04)	(0.12)	(0.01)	(0.12)	(0.29)
Diluted earnings per common share	$ 0.02	$ (0.06)	$ 0.04	$ (0.04)	$ (0.04)
Weighted average common shares:					
Basic	30,567	30,588	30,625	30,801	30,646

Diluted	31,394	31,437	31,407	31,382	31,405

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 and 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.

HARVARD BIOSCIENCE, INC.

Date: March 11, 2009

By: /s/ CHANE GRAZIANO
Chane Graziano
Chief Executive Officer

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:

Signature	Title	Date
/s/ CHANE GRAZIANO **Chane Graziano**	Chief Executive Officer and Director (Principal Executive Officer)	March 11, 2009
/s/ THOMAS MCNAUGHTON **Thomas McNaughton**	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 11, 2009
/s/ DAVID GREEN **David Green**	President and Director	March 11, 2009
/s/ ROBERT DISHMAN **Robert Dishman**	Director	March 11, 2009
/s/ NEAL J. HARTE **Neal J. Harte**	Director	March 11, 2009
/s/ JOHN F. KENNEDY **John F. Kennedy**	Director	March 11, 2009
/s/ EARL R. LEWIS **Earl R. Lewis**	Director	March 11, 2009
/s/ GEORGE UVEGES **George Uveges**	Director	March 11, 2009

Table of Contents

EXHIBIT INDEX

The following exhibits are filed as part of this Annual Report on Form 10-K. Where such filing is made by incorporation by reference to a previously filed document, such document is identified.

(5)	2.1	Asset Purchase Agreement, dated November 30, 2007, by and among Harvard Bioscience, Inc., as Parent, Genomic Solutions Inc., Genomic Solutions, Ltd., Genomic Solutions Acquisitions Limited, Union Biometrica, Inc., and Cartesian Technologies, Inc., collectively, as Sellers, and Digilab, Inc., as Buyer
(6)	2.2	Asset Purchase Agreement, dated September 30, 2008, by and among Harvard Bioscience, Inc., as Parent, Union Biometrica, Inc., as Seller, and UBIO Acquisition Company, as Buyer
(1)	3.1	Second Amended and Restated Certificate of Incorporation of Harvard Bioscience, Inc
(1)	3.2	Amended and Restated By-laws of Harvard Bioscience, Inc
(2)	3.3	Amendment No. 1 to Amended and Restated Bylaws of Harvard Bioscience, Inc. (as adopted October 30, 2007)
(7)	3.4	Certificate of Designations, Preferences and Rights of a Series of Preferred Stock of Harvard Bioscience, Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock
(1)	4.1	Specimen certificate for shares of Common Stock, $0.01 par value, of Harvard Bioscience, Inc.
(1)	4.2	Amended and Restated Securityholders Agreement dated as of March 2, 1999 by and among Harvard Apparatus, Inc., Pioneer Partnership II, Pioneer Capital Corp., First New England Capital, L.P. and Citizens Capital, Inc. and Chane Graziano and David Green.
(8)	4.3	Shareholders Rights Agreement, dated as of February 5, 2008 between Harvard Bioscience, Inc., and Registrar and Transfer Company, as Rights Agent.
(1)	10.1	Harvard Apparatus, Inc. 1996 Stock Option and Grant Plan.
(11)	10.2	Harvard Bioscience, Inc. Second Amended and Restated 2000 Stock Option and Incentive Plan.
(1)	10.3	Harvard Bioscience, Inc. Employee Stock Purchase Plan.
	10.4*	Amended and Restated Employment Agreement between Harvard Bioscience, Inc. and Chane Graziano, dated December 18, 2008.
	10.5*	Amended and Restated Employment Agreement between Harvard Bioscience, Inc. and David Green, dated December 18, 2008.
(1)	10.6	Form of Director Indemnification Agreement.
	10.7*	Lease of Unit 22 Phase I Cambridge Science Park, Milton Road, Cambridge dated May 8, 2008 between The Master Fellows and Scholars of Trinity College Cambridge and Biochrom Limited
	10.8*	Amended and Restated Employment Agreement between Harvard Bioscience, Inc. and Susan Luscinski, dated December 18, 2008.
(10)	10.9	Revolving Credit Loan Agreement, dated as of November 21, 2003, by and among Harvard Bioscience, Inc., the Lenders that are signatories thereto and Brown Brothers Harriman & Co.
(12)	10.10	Letter Agreement among Harvard Bioscience, Inc., Brown Brother Harriman & Co. and Bank of America, N.A. dated as of March 14, 2006 amending that certain Revolving Credit Loan Agreement dated as of November 21, 2003 among the parties
(16)	10.11	Second Amendment to the Revolving Credit Loan Agreement dated as of December 1, 2006, by and among Harvard Bioscience, Inc., the Lenders that are signatories thereto and Brown Brothers Harriman & Co.

Table of Contents

+(4)10.12	Distribution Agreement, dated April 10, 2008, by and between Biochrom Limited and GE Healthcare Biosciences, Corp.
(10)10.13	Lease, dated February 23, 2004, by and between William Cash Forman and Hoefer, Inc.
+(9)10.14	Trademark License Agreement, dated December 9, 2002, by and between Harvard Bioscience, Inc. and President and Fellows of Harvard College.
(13)10.16	Lease Agreement Between Seven October Hill, LLC and Harvard Bioscience, Inc. dated December 30, 2005
(14)10.18	Form of Incentive Stock Option Agreement (Executive Officers)
(14)10.19	Form of Non-Qualified Stock Option Agreement (Executive Officers)
(14)10.20	Form of Non-Qualified Stock Option Agreement (Non-Employee Directors)
(3)10.21	Employment Agreement Between Harvard Bioscience, Inc. and Thomas McNaughton, dated November 14, 2008
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of KPMG LLP.
31.1*	Certification of Chief Financial Officer of Harvard Bioscience, Inc., pursuant to Rules 13a-15(e) and 15d-15(e), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Executive Officer of Harvard Bioscience, Inc., pursuant to Rules 13a-15(e) and 15d-15(e), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Financial Officer of Harvard Bioscience, Inc., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Executive Officer of Harvard Bioscience, Inc., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

(1) Previously filed as an exhibit to the Company s Registration Statement on Form S-1 (File No. 333-45996) and incorporated by reference thereto.

(2) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed on November 1, 2007) and incorporated by reference thereto.

(3) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed November 18, 2008) and incorporated by reference thereto.

(4) Previously filed as an exhibit to the Company s Quarterly Report on Form 10-Q/A, as amended (filed February 2009) and incorporated by reference thereto.

(5) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed on December 6, 2007) and incorporated by reference thereto.

(6) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed on October 6, 2008) and incorporated by reference thereto.

(7) Previously filed as an exhibit to the Company s Registration Statement on Form 8-A (filed February 8, 2008) and incorporated by reference thereto.

(8) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed on February 8, 2008) and incorporated by reference thereto.

(9) Previously filed as an exhibit to the Company s Quarterly Report on Form 10-Q (filed May 15, 2003) and incorporated by reference thereto.

(10) Previously filed as an exhibit to the Company s Annual Report on Form 10-K (filed March 15, 2004) and incorporated by reference thereto.

Table of Contents

(11) Previously filed as Appendix A to the Company s Proxy Statement on Schedule 14A (filed April 16, 2008) and incorporated by reference thereto.

(12) Previously filed as an exhibit to the Company s Quarterly Report on Form 10-Q (filed May 9, 2006) and incorporated by reference thereto.

(13) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed January 4, 2006) and incorporated by reference thereto.

(14) Previously filed as an exhibit to the Company s Annual Report on Form 10-K (filed March 16, 2006) and incorporated by reference thereto.

(15) Intentionally left blank.

(16) Previously filed as an exhibit to the Company s Current Report on Form 8-K (filed December 6, 2006) and incorporated by reference thereto.

(17) Previously filed as an exhibit to the Company s Quarterly Report on Form 10-Q (filed August 6, 2007) and incorporated by reference thereto.

+ Certain portions of this document have been granted confidential treatment by the Securities and Exchange Commission (the Commission).

* Filed herewith.

** This certification shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

The Company will furnish to stockholders a copy of any exhibit without charge upon written request.