# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

# **FORM 10-Q**

**Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934** 

For the quarterly period ended March 31, 2009

□ 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 (State or Other Jurisdiction of Incorporation or Organization)

84 October Hill Road, Holliston, MA (Address of Principal Executive Offices) 04-3306140 (IRS Employer Identification No.)

> 01746 (Zip Code)

(508) 893-8999

(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  $\Box$  YES  $\Box$  NO

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

Large accelerated filer		Accelerated filer	X
Non-accelerated filer	$\Box$ (Do not check if a smaller reporting company)	Smaller reporting company	
Indicate by check n	nark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).	🗆 YES 🗵 NO	

#### **APPLICABLE ONLY TO CORPORATE ISSUERS:**

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

As of April 28, 2009, there were 29,706,680 shares of Common Stock, par value \$0.01 per share, outstanding.

# HARVARD BIOSCIENCE, INC.

# Form 10-Q For the Quarter Ended March 31, 2009

# INDEX

PART I-FINANCIAL INFORMATION	Page 3
Item 1. Financial Statements	3
<u>Consolidated Balance Sheets as of March 31, 2009 and December 31, 2008 (unaudited)</u>	3
Consolidated Statements of Operations for the Three Months Ended March 31, 2009 and 2008 (unaudited)	4
Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2009 and 2008 (unaudited)	5
Notes to Unaudited Consolidated Financial Statements	6
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	12
Item 3. Quantitative and Qualitative Disclosures About Market Risk	23
Item 4. Controls and Procedures	23
PART II-OTHER INFORMATION	24
Item 1A. Risk Factors.	24
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	24
Item 6. Exhibits	24
<u>SIGNATURES</u>	25
2	

# PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

# HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS (unaudited, in thousands, except share and per share amounts)

	March 31, 2009	December 31, 2008
Assets		
Current assets:		
Cash and cash equivalents	\$ 15,883	\$ 13,698
Accounts receivable, net of allowance for doubtful accounts of \$422 and \$295, respectively	12,096	15,086
Inventories	11,997	11,901
Deferred income tax assets - current	303	306
Other receivables and other assets	2,847	2,473
Total current assets	43,126	43,464
Property, plant and equipment, net	3,208	3,221
Deferred income tax assets - non-current	238	238
Amortizable intangible assets, net	8,388	8,955
Goodwill and other indefinite lived intangible assets	24,466	24,827
Other assets	480	566
Total assets	\$ 79,906	\$ 81,271
Liabilities and Stockholders' Equity		
Current liabilities:		
Notes payable	\$ 963	\$ 1,361
Accounts payable	3,634	4,665
Deferred revenue	584	589
Accrued income taxes payable	713	427
Accrued expenses	4,174	4,006
Other liabilities - current	11	167
Total current liabilities	10,079	11,215
Long-term debt, less current portion		59
Deferred income tax liabilities - non-current	1,176	1,216
Other liabilities - non-current	1,970	2,063
Total liabilities	13,225	14,553
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 shares issued and 29,801,405 and 30,235,479 shares outstanding, respectively	358	358
Additional paid-in-capital	182,385	182,073
Accumulated deficit	(107,851)	(109,690)
Accumulated other comprehensive income	(3,741)	(105,050)
Treasury stock at cost, 5,985,874 and 5,551,800 common shares, respectively	(4,470)	(3,264)
Total stockholders' equity	66,681	66,718
Total liabilities and stockholders' equity	\$ 79,906	\$ 81,271

See accompanying notes to unaudited consolidated financial statements.

# HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS (unaudited, in thousands, except per share amounts)

	Mare	nths Ended ch 31,
D	2009	2008
Revenues	\$19,072 9,662	\$21,959
Cost of product revenues		11,628
Gross profit	9,410	10,331
Sales and marketing expenses	2,372	2,841
General and administrative expenses	3,317	3,756
Research and development expenses	999	1,081
Restructuring charges	27	581
Amortization of intangible assets	344	506
Total operating expenses	7,059	8,765
Operating income	2,351	1,566
Other income (expense):		
Foreign exchange	76	193
Interest expense	(45)	(130)
Interest income	7	78
Other, net	53	54
Other income, net	91	195
Income from continuing operations before income taxes	2,442	1,761
Income taxes	603	544
Income from continuing operations	1,839	1,217
Loss from discontinued operations, net of tax	—	(530)
Net income	\$ 1,839	\$ 687
Income (loss) per share:		
Basic earnings per common share from continuing operations	\$ 0.06	\$ 0.04
Discontinued operations	\$ 0.00 	(0.02)
Basic earnings per common share	\$ 0.06	\$ 0.02
basic earnings per common snare	\$ 0.00	\$ 0.02
Diluted earnings per common share from continuing operations	\$ 0.06	\$ 0.04
Discontinued operations	_	(0.02)
Diluted earnings per common share	\$ 0.06	\$ 0.02
Weighted average common shares:		
Basic	30,012	30,875
Diluted	30,120	31,445

See accompanying notes to unaudited consolidated financial statements.

# HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited, in thousands)

	Three Mor Marc	ch 31,
	2009	2008
Cash flows from operating activities:	¢ 1.020	¢
Net income	\$ 1,839	\$ 687
Adjustments to reconcile net income to net cash provided by operating activities:	312	434
Stock compensation expense Depreciation	282	434
Restructuring charges	202	539
Amortization of catalog costs	20	49
Loss on sale of property, plant and equipment	/1	43
Provision for allowance for doubtful accounts	(14)	14
Amortization of intangible assets	344	506
Amortization of deferred financing costs	6	00
Deferred income taxes	(1)	32
Changes in operating assets and liabilities, net of effects of acquisitions:	(1)	
Decrease in accounts receivable	2,699	2,018
Increase in inventories	(302)	(1,242
Increase in other receivables and other assets	(302)	(493
Decrease in trade accounts payable	(899)	(106
Increase (decrease) in accrued income taxes payable	194	(463
Increase (decrease) in accrued expenses	100	(1,344
Decrease in deferred revenue	(5)	(1,51
Decrease in other liabilities	(59)	(129
Net cash provided by operating activities	4,291	712
Cash flows from investing activities:		
Additions to property, plant and equipment	(299)	(316
Additions to catalog costs	(11)	(372
Net cash used in investing activities	(310)	(688
Cash flows from financing activities:		
Repayments of debt	(376)	(5,615
Purchases of treasury stock	(1,206)	—
Net proceeds from issuance of common stock		224
Net cash used in financing activities	(1,582)	(5,391
Effect of exchange rate changes on cash	(214)	21
ncrease (decrease) in cash and cash equivalents	2,185	(5,15)
Cash and cash equivalents at the beginning of period	13,698	18,204
Cash and cash equivalents at the end of period	\$15,883	\$13,053
Supplemental disclosures of cash flow information:		
Cash paid for interest	\$ 35	\$ 159
Net cash paid for income taxes	\$ 406	\$ 961

Note: The above statement of cash flows for the three months ended March 31, 2008 includes cash and cash equivalents of \$12,459 held by continuing operations and \$594 held by discontinued operations.

See accompanying notes to unaudited consolidated financial statements.

# HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES Notes to Unaudited Consolidated Financial Statements

#### 1. Basis of Presentation and Summary of Significant Accounting Policies

#### Basis of Presentation

The unaudited consolidated financial statements of Harvard Bioscience, Inc. and its wholly owned subsidiaries (collectively "Harvard Bioscience," the "Company" or "we") as of March 31, 2009 and for the three months ended March 31, 2009 and 2008 have been prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. The December 31, 2008 consolidated balance sheet was derived from audited financial statements, but does not include all disclosures required by U.S. generally accepted accounting principles. However, the Company believes that the disclosures are adequate to make the information presented not misleading. These unaudited consolidated financial statements should be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed with the SEC on March 11, 2009.

In the opinion of management, all adjustments, which include normal recurring adjustments necessary to present a fair statement of financial position as of March 31, 2009, results of operations for the three months ended March 31, 2009 and 2008 and cash flows for the three months ended March 31, 2009 and 2008, as applicable, have been made. The results of operations for the three months ended March 31, 2009 are not necessarily indicative of the operating results for the full fiscal year or any future periods.

As discussed in Note 3, the Company decided to divest and has divested its Capital Equipment Business segment. Accordingly, the results of operations of this business segment have been reported as discontinued operations.

#### Reclassifications

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

#### Summary of Significant Accounting Policies

The accounting policies underlying the accompanying unaudited consolidated financial statements are those set forth in Note 2 to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2008, filed with the SEC on March 11, 2009, with the exception of foreign currency translation as noted below.

#### 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 period-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. The effects of the exchange rate fluctuations on certain short-term classified debt between the Company and a foreign subsidiary and between subsidiaries are also included in net income.

In order to mitigate the impact of changes in foreign currency exchange rates, during the first quarter of 2009 we used derivative financial instruments (or "foreign currency contracts") to hedge the foreign currency effects on the value of certain loans between subsidiaries and do not designate these derivative instruments as accounting hedges.

#### 2. Recently Issued Accounting Pronouncements

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. The adoption of FSP EITF 03-6-1 did not have a material impact on the Company's consolidated results of operations or financial position.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133* ("SFAS 161"). SFAS 161 amends FASB Statement No. 133 to require enhanced disclosures about an entity's derivative and hedging activities thereby improving the transparency of financial reporting. Entities are required to provide enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under Statement 133 and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. This Statement is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. Since SFAS No. 161 requires only additional disclosures concerning derivatives and hedging activities, the adoption of SFAS 161 did not affect our consolidated results of operations or financial position.

#### 3. 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 our 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.

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 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.

In September 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, for the Company's former Union Biometrica US and German subsidiaries was \$0.5 million for the three months ended March 31, 2008.

Operating results from the Capital Equipment Business segment for the three months ended March 31, 2008 were as follows:

	Three Months Ended <u>March 31, 2008</u> (in thousands)
Total revenues	\$ 495
Pretax loss	(530)
Income tax (benefit) expense	—
Loss from discontinued operations, net of tax	\$ (530)

As a result of the divestiture of the Capital Equipment Business segment, which was completed in September 2008, there were no operating results to report for that segment during the three months ended March 31, 2009.

#### 4. Goodwill and Other Intangible Assets

Intangible assets consist of the following:

	Marcl	h 31, 2009		per 31, 2008	Weighted Average Life (a)
	Gross	Accumulated Amortization	(in thousands) <u>Gross</u>	Accumulated Amortization	
Amortizable intangible assets:					
Existing technology	\$10,556	\$ (6,354)	\$10,780	\$ (6,224)	5.7 years
Tradename	920	(572)	920	(557)	5.9 years
Distribution agreement/customer relationships	7,149	(3,315)	7,272	(3,240)	10.3 years
Patents	9	(5)	9	(5)	7.1 years
Total amortizable intangible assets	\$18,634	\$ (10,246)	\$18,981	\$ (10,026)	
Unamortizable intangible assets:					
Goodwill	\$23,191		\$23,536		
Other indefinite lived intangible assets	1,275		1,291		
Total goodwill and other indefinite lived intangible assets	\$24,466		\$24,827		
Total intangible assets	\$43,100		\$43,808		

# (a) Weighted average life is as of March 31, 2009.

The change in the carrying amount of goodwill for the three months ended March 31, 2009 is as follows:

	(in	thousands)
Balance at December 31, 2008	\$	23,536
Effect of change in foreign currencies		(345)
Balance at March 31, 2009	\$	23,191

Intangible asset amortization expense from continuing operations was \$0.3 million and \$0.5 million for the three months ended March 31, 2009 and 2008, respectively. Amortization expense of existing amortizable intangible assets is estimated to be \$1.5 million for the year ending December 31, 2009, \$1.3 million for the years ending December 31, 2010 and 2011, \$1.1 million for the year ending December 31, 2012 and \$0.9 million for the year ending December 31, 2013.

#### 5. Inventories

Inventories consist of the following:

	March 31, 2009	December 31, 2008
	(in thou	isands)
Finished goods	\$ 4,166	\$ 3,971
Work in process	712	772
Raw materials	7,119	7,158
Total	\$ 11,997	\$ 11,901

#### 6. Restructuring and Other Exit Costs

#### 2008 Restructuring Plan

During the quarter ended March 31, 2008, the management of Harvard Bioscience committed to an ongoing initiative to consolidate business functions to improve operating results. Our actions in 2008 were related to the separation of our electrophoresis product lines from our spectrophotometer and plate reader product lines. As part of these initiatives, we 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 the Company's Biochrom subsidiary's facility located in Cambridge UK. The combined costs of these activities recorded in the year ended December 31, 2008 were \$1.8 million.

During the quarter ended March 31, 2009, no charges were recorded relating to the 2008 restructuring. During the quarter ended March 31, 2008, we recorded charges relating to the 2008 restructuring of approximately \$0.8 million. These charges were comprised of \$0.4 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) and \$0.2 million in various other costs.

Activity and liability balances related to these restructuring charges in connection with the 2008 Restructuring Plan were as follows:

	/erance Related	Inv	<u>entory</u>	acility ure Costs sands)	Other		Total
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
Cash payments			_	_			_
Non-cash charges							—
Currency translation			—	—	(1)		(1)
Restructuring balance at March 31, 2009	\$ 12	\$		\$ 	\$ 18	\$	30

We anticipate the remaining payments related to the 2008 Restructuring Plan will occur during the second quarter of 2009.

#### 2009 Restructuring Plan

During the quarter ended March 31, 2009, the management of Harvard Bioscience initiated a plan to relocate the Scie-Plas operation and exit its general fabrication business as part of the Company's ongoing initiative to improve operating results. During the quarter ended March 31, 2009, we recorded charges relating to this plan of approximately \$55,000. These charges were comprised of \$9,000 in severance payments, \$28,000 in inventory impairment charges related to the discontinuance of certain product lines (included in cost of product revenues) and \$18,000 in various other costs.

Restructuring charges related to the 2009 Restructuring Plan were as follows:

	Severanc and Relate	ed Inven	tory Other thousands)	Total
Restructuring charges	\$	9 \$	28 \$ 18	\$ 55
Cash payments	(	(9) -	— (18)	(27)
Non-cash charges	—	-	(28)	(28)
Restructuring balance at March 31, 2009	\$	- <b>\$</b> -	\$	\$—

Aggregate restructuring charges relating to the 2009 Restructuring Plan and the 2008 Restructuring Plan were as follows:

	T	rree Months Ended March 31,
	2009	
		(in thousands)
Restructuring charges	\$ 5	

#### 7. Warranties

Warranties are estimated and accrued for at the time sales are recorded. A rollforward of product warranties is as follows:

	Beginning Balance	<u>Payments</u> (in thousa	<u>Additions</u> nds)	Ending Balance
Year ended December 31, 2008	\$ 239	(93)	40	\$ 186
Three months ended March 31, 2009	\$ 186	(11)	6	\$ 181

#### 8. Comprehensive Income

As of March 31, 2009, accumulated other comprehensive income consisted of cumulative foreign currency translation adjustments of \$(2.3) million and, in accordance with 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),* \$(1.5) million to reflect the under-funded status of the Company's pension plans net of tax. As of March 31, 2008, accumulated other comprehensive income consisted of cumulative foreign currency translation adjustments of \$8.7 million and, in accordance with 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),* \$(0.9) million to reflect the under-funded status of the Company's pension plans net of tax.

The components of total comprehensive income were as follows:

		Three Months Ended March 31,	
	2009	2008 ousands)	
Net income	\$ 1,839	\$ 687	
Other comprehensive income (loss)	(982)	1,141	
Comprehensive income	<u>\$ 857</u>	\$ 1,828	

Other comprehensive income for the three months ended March 31, 2009 and 2008 consisted of foreign currency translation adjustments.

## 9. Employee Benefit Plans

Certain of the Company's United Kingdom subsidiaries, Harvard Apparatus Limited and Biochrom Limited, maintain contributory, defined benefit or defined contribution pension plans for substantially all of their employees. The components of the Company's defined benefit pension expense were as follows:

	Three Montl March	
	2009	2008
Components of net periodic benefit cost:	(in thous	andsj
Service cost	\$ 33	\$ 99
Interest cost	181	228
Expected return on plan assets	(132)	(242)
Net amortization loss	23	16
Net periodic benefit cost	<u>\$ 105</u>	\$ 101

For the three months ended March 31, 2009 and 2008, the Company made no contribution to its defined benefit plans. The Company expects to contribute approximately \$0.5 million to its defined benefit plans during 2009.

#### 10. Capital Stock

#### 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 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 quarter ended March 31, 2009, we repurchased in the open market 434,074 shares of common stock at an aggregate cost of \$1.2 million, including commissions under the stock repurchase program. During the quarter ended March 31, 2008, no shares were purchased by the Company pursuant to this program. At March 31, 2009, we had \$6.2 million remaining under the stock repurchase program authorization.

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.

The Company accounts for share-based payment awards in accordance with the provisions of SFAS No. 123 (revised 2004), *Share-Based Payment*, ("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 three months ended March 31, 2009 and 2008 was \$0.3 million and \$0.4 million, respectively, which consisted of stock-based compensation expense related to employee stock options and the employee stock purchase plan.

#### 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 three months ended March 31, 2009 and 2008, respectively, was allocated as follows:

		Three Months Ended March 31,		
	2	009	2008	
		(in thousan	ıds)	
Cost of sales	\$	11	<b>\$</b> 1	10
Sales and marketing		(4)	3	35
General and administrative		304	38	84
Research and development		1		1
Discontinued operations		_		4
Total stock-based compensation	\$	312	\$ 43	34

The Company did not capitalize any stock-based compensation. No significant tax benefit on the stock-based compensation was recorded in the three months ended March 31, 2009 and 2008 since the Company has established a valuation allowance against net deferred tax assets.

Stock-based compensation expense recognized in the consolidated statement of operations for the three months ended March 31, 2009 and 2008, is based on awards ultimately expected to vest and has been reduced for annualized estimated forfeitures of 5.96% and 4.52%, 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.

#### Weighted Average Common Shares Outstanding

Basic income per share is based upon net income divided by the number of weighted average common shares outstanding during the period. The calculation of diluted net income 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:

		Three Months Ended March 31,	
	2009	2008	
Basic	30,011,732	30,874,632	
Effect of assumed conversion of employee and director stock options	108,378	570,565	
Diluted	30,120,110	31,445,197	

Excluded from the shares used in calculating the diluted earnings per common share in the above table are options to purchase approximately 5,615,572 and 3,977,418 shares of common stock for the three months ended March 31, 2009 and 2008, respectively, as the impact of these shares would be anti-dilutive.

#### 11. Revolving Credit Facility

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 March 31, 2009 and December 31, 2008, we had no borrowings outstanding under our revolving credit facility.

As of March 31, 2009, we are in compliance with all financial covenants contained in the credit facility, which include covenants relating to 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 March 31, 2009, 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.

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. To date, 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.

In connection with our acquisition of Panlab, we assumed several working capital lines of credit totaling \$2.3 million. As of March 31, 2009, Panlab's borrowings under these lines of credit were \$1.0 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.

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

#### **Forward Looking Statements**

This Quarterly Report on Form 10-Q 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 2: 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, 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," "goals," "sees," "estimates," "projects," "predicts," "intends," "potential," "objectives," 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. Factors that may cause the Company's actual results to differ materially from those in the forward-looking statements include the Company's failure to successfully integrate acquired businesses or technologies, complete consolidations of business functions, expand its product offerings, introduce new products or commercialize new technologies, including our new micro liter spectrophotometer and electrophoresis products, unanticipated costs relating to acquisitions, unanticipated costs arising in connection with the Company's consolidation of business functions, decreased demand for the Company's products due to changes in its customers' needs, financial position, general economic outlook, or other circumstances, overall economic trends, the seasonal nature of purchasing in Europe, economic, political and other risks associated with international revenues and operations, the impact of the current economic and financial crisis, additional costs of complying with recent changes in regulatory rules applicable to public companies, our ability to manage our growth, our ability to retain key personnel, competition from our competitors, technological changes resulting in our products becoming obsolete, future changes to the operations or the activities of our subsidiaries due to manufacturing consolidations, our ability to extend our credit

facility, or obtain a new credit facility, our ability to meet the financial covenants contained in our credit facility, our ability to protect our intellectual property and operate without infringing on others' intellectual property, potential costs of any lawsuits to protect or enforce our intellectual property, economic and political conditions generally and those affecting pharmaceutical and biotechnology industries, research funding levels from endowments at our university customers, impact of any impairment of our goodwill or intangible assets, and our acquisition of Genomic Solutions failing to qualify as a tax-free reorganization for federal tax purposes, the amount of earn-out consideration that the Company receives in connection with the disposition of the Company's Capital Equipment Business segment and factors that may impact the receipt of this consideration, such as the revenues of the businesses disposed of, plus factors described under the heading "Item 1A. Risk Factors" in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed with the SEC on March 11, 2009. Our results may also be affected by factors of which we are not currently aware. 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.

#### General

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 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.

For 2009, we outlined our goal to drive organic growth through both new product development and direct marketing in our Annual Report on Form 10-K filed with the SEC. The key elements of this 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 the second quarter;
- the launch of a new product in the second quarter; and
- the development of new products that will have little impact on 2009 revenue but should position us well for future growth.

During the first quarter of 2009, we saw a mixed revenue picture with some product lines, particularly at the Harvard Apparatus business showing good organic growth but with others, particularly at our Biochrom group showing weakness. Towards the end of the first quarter of 2009, we saw a significant increase in quote activity in the US that, we believe, may lead to orders later in the year as the National Institute of Health (the "NIH") stimulus funding is disbursed. Outside the NIH funding, we expect overall demand to remain fairly soft.

In the second quarter of 2009, we will continue our strategy of driving organic growth with direct marketing and new product development. In May, we will mail approximately 28,000 copies of the new Hoefer electrophoresis catalog in the USA. Also in May, we expect to announce the launch of a major new product within one of our core product lines. We are continuing to invest in new product development, even during a recession, as we believe these new products will position us well for growth when the economy recovers. We expect to launch a further major new product later this year and are working on longer term new products that will be announced when they reach significant milestones.

In addition to organic growth programs and operational improvements, we believe that one of the best opportunities for us to grow this year is through acquisitions. We believe we have a strong balance sheet and line of credit to support our acquisition strategy.

In short, while we face challenging business conditions in 2009 and a significant foreign exchange headwind, we believe that through execution of our strategy of organic growth, tuck under acquisitions and operational improvements that we will be able to strengthen the company and position ourselves well for when the economy recovers. 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 fluctuations in foreign exchange rates, the current economic and financial crisis and its impact on our customers and our ability to obtain credit on terms favorable to us, 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" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008.

Generally, our management evaluates the financial performance of our 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.

#### Financing

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. The global credit markets continue to suffer a liquidity contraction. To date, 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.

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.

#### **Components of Operating Income from Continuing Operations**

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

For products primarily priced under \$10,000, we typically distribute a new, comprehensive catalog every one to three years, 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 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 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 33% and 30%, respectively, of our revenues for the three months ended March 31, 2009 and for the year ended December 31, 2008.

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 three months ended March 31, 2009 and for the year ended December 31, 2008, approximately 52% and 54%, respectively, of our revenues were derived from sales to distributors.

For the three months ended March 31, 2009 and for the year ended December 31, 2008, approximately 84% and 85%, respectively, of our revenues were derived from products we manufacture. The remaining 16% and 15%, respectively, of our revenues for the three months ended March 31, 2009 and for the year ended December 31, 2008, 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 three months ended March 31, 2009 and for the year ended December 31, 2008, approximately 58% and 60%, respectively, of our revenues were derived from sales made by our non-U.S. operations. A large portion of our international sales during these periods consisted of sales to GE Healthcare, the distributor for our spectrophotometers and plate readers. 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 a higher cost of product revenues as a percent of revenue 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 percent of 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 catalogs and supplements 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.

Stock compensation expenses. Stock-based compensation expense recognized under SFAS No. 123(R) was \$0.3 million for the three months ended March 31, 2009. Stock-based compensation expense recognized under SFAS No. 123(R) was \$0.4 million and \$4,000 for the three months ended March 31, 2008 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.

#### **Selected Results of Operations**

#### Three months ended March 31, 2009 compared to three months ended March 31, 2008:

	Three Months Ended			
	Mar	ch 31,	Dollar	%
	2009	2008	Change	<b>Change</b>
		(dollars in thousand	ls, unaudited)	
Revenues	\$19,072	\$21,959	\$(2,887)	-13.1%
Cost of product revenues	9,662	11,628	(1,966)	-16.9%
Gross margin percentage	49.3%	47.0%	N/A	4.9%
Sales and marketing expenses	2,372	2,841	(469)	-16.5%
General and administrative expenses	3,317	3,756	(439)	-11.7%
Research and development expenses	999	1,081	(82)	-7.6%

#### Revenues.

Revenues decreased \$2.9 million, or 13.1%, to \$19.1 million for the three months ended March 31, 2009 compared to \$22.0 million for the same period in 2008. The decrease in revenues from the prior year was wholly due to the strengthening of the U.S. dollar. In constant currency, organic growth was 0% during the three months ended March 31, 2009 compared to March 31, 2008.

#### Cost of product revenues.

Cost of product revenues decreased \$2.0 million, or 16.9%, to \$9.7 million for the three months ended March 31, 2009 compared with \$11.6 million for the three months ended March 31, 2008. The decrease in cost of product revenues was primarily due to a \$1.4 million effect of a strengthened U.S. dollar and cost reductions in the Company's Biochrom group. Gross profit as a percentage of revenues increased to 49.3% for the three months ended March 31, 2009 compared with 47.0% for the same period in 2008. The increase in gross profit as a percentage of revenues was primarily due to write-downs in the prior year first quarter related to the consolidation of manufacturing facilities, production efficiency improvements and mix.

#### Sales and marketing expense.

Sales and marketing expenses decreased \$0.5 million, or 16.5%, to \$2.4 million for the three months ended March 31, 2009 compared with \$2.8 million for the three months ended March 31, 2008. This decrease was primarily due to the effect of a strengthened U.S. dollar and a decrease in salary related expenses at our Hoefer division as a result of our 2008 restructuring initiative. Excluding the impact of currency exchange rates, sales and marketing costs decreased 6.9% for the first quarter of 2009 from the prior year period.

#### General and administrative expense.

General and administrative expenses decreased \$0.4 million, or 11.7%, to \$3.3 million for the three months ended March 31, 2009 compared with \$3.8 million for the three months ended March 31, 2008. The year-to-year quarterly decrease was primarily due to changes in foreign exchange rates. Excluding the effects of foreign exchange, general and administrative expenses were flat in the first quarter of 2009 compared with the first quarter of 2008.

#### Research and development expense.

Research and development expenses were \$1.0 million, a decrease of \$0.1 million, or 7.6%, for the three months ended March 31, 2009 compared to \$1.1 million for the three months ended March 31, 2008. The year-to-year quarterly decrease was primarily due to changes in foreign exchange rates.

#### Amortization of intangible assets.

Amortization of intangibles was \$0.3 million and \$0.5 million for the three months ended March 31, 2009 and 2008, respectively.

#### Other income, net.

Other income, net, was \$0.1 million and \$0.2 million for the three months ended March 31, 2009 and 2008, respectively. Net interest expense was \$38,000 for the three months ended March 31, 2009 compared to net interest expense of \$52,000 for the three months ended March 31, 2008. The decrease in net interest expense was primarily due to lower average debt balances in the first quarter of 2009 compared to the first quarter of 2008. Other income, net, also included foreign exchange gains of \$0.1 million and \$0.2 million for the three months ended March 31, 2009 and 2008, 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 \$0.6 million and \$0.5 million for the three months ended March 31, 2009 and 2008, respectively. The effective income tax rate for continuing operations was 24.7% for the three months ended March 31, 2009, compared with 30.9% for the same period of 2008. 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 actions in 2008 were related to the separation of our electrophoresis product lines from our spectrophotometer and plate reader product lines. As part of these initiatives we 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. The combined costs of these activities recorded in the year ended December 31, 2008 were \$1.8 million.

During the quarter ended March 31, 2009, no charges were recorded relating to the 2008 restructuring. During the quarter ended March 31, 2008, we recorded charges relating to the 2008 restructuring of approximately \$0.8 million. These charges were comprised of \$0.4 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) and \$0.2 million in various other costs.

During the quarter ended March 31, 2009, the management of Harvard Bioscience initiated a plan to relocate the Scie-Plas operation and exit its general fabrication business as part of the Company's ongoing initiative to improve operating results. During the quarter ended March 31, 2009, we recorded charges relating to this plan of approximately \$55,000. These charges were comprised of approximately \$9,000 in severance payments, approximately \$28,000 in inventory impairment charges related to the discontinuance of certain product lines (included in cost of product revenues) and approximately \$18,000 in various other costs.

#### **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.

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.

#### 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 the first quarter of 2009 with cash and cash equivalents of \$15.9 million compared to \$13.7 million at December 31, 2008. As of March 31, 2009 and December 31, 2008, we had no borrowings outstanding on our revolving credit facility. Additionally, our Panlab subsidiary had \$1.0 million in notes payable at March 31, 2009 compared to \$1.4 million in notes payable at December 31, 2008.

# Overview of Cash Flows

(Cash flow information includes cash flows for both continuing and discontinued operations)

(in thousands, unaudited)

		Three Months Ended March 31,	
	2009	2008	
Cash flows from operations:			
Net income	\$ 1,839	\$ 687	
Changes in assets and liabilities	1,424	(1,766)	
Other adjustments to operating cash flows	1,028	1,791	
Net cash provided by operating activities	4,291	712	
Investing activities:			
Net cash used in investing activities	(310)	(688)	
Financing activities:			
Repayments of debt, net	(376)	(5,615)	
Other financing activities	(1,206)	224	
Net cash used in financing activities	(1,582)	(5,391)	
Effect of exchange rate changes on cash	(214)	216	
Increase (decrease) in cash and cash equivalents	\$ 2,185	\$(5,151)	

Our operating activities generated cash of \$4.3 million for the three months ended March 31, 2009 compared to \$0.7 million for the three months ended March 31, 2008. The increase in cash flows from operations was primarily due to working capital fluctuations during the first quarter of 2009, particularly a decrease in accounts receivable and improved net income.

Our investing activities used cash of \$0.3 million in the three months ended March 31, 2009 compared to \$0.7 million in the three months ended March 31, 2008. Investing activities during both 2008 and 2009 included purchases of property, plant and equipment and expenditures for our catalogs. Catalog costs were approximately \$11,000 for the three months ended March 31, 2009, compared to \$0.4 million for the same period last year. The greater spending during the first quarter of 2008 reflected the cost of issuing a 900-page Harvard Apparatus catalog. We spent \$0.3 million in the three months ended March 31, 2009 and 2008 on capital expenditures. During the next twelve months, we expect to spend approximately \$1.2 million on capital expenditures.

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 March 31, 2009 and December 31, 2008, we had no borrowings outstanding on our revolving credit facility. During the three months ended March 31, 2009, financing activities used cash of \$1.6 million. We repurchased in the open market approximately 0.4 million shares of our common stock at a total cost of \$1.2 million, including commissions.

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 March 31, 2009, 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 acquisition portion of our growth strategy. As of March 31, 2009 and December 31, 2008, we had no borrowings outstanding under the credit facility. 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 March 31, 2009.

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. To date, 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.

#### **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 the past year, the U.S. dollar strengthened against these currencies resulting in an adverse translation effect on our consolidated revenue and earnings growth. Changes in foreign currency exchange rates resulted in a decrease in revenues of \$2.9 million and expenses of \$2.1 million (net \$0.8 million) during the three months ended March 31, 2009.

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 \$1.0 million during the three months ended March 31, 2009. The gain associated with the translation of foreign equity into U.S. dollars was approximately \$1.1 million during the three months ended March 31, 2008. In addition, currency fluctuations resulted in approximately \$0.1 million and \$0.2 million in foreign currency gains during the three months ended March 31, 2009 and 2008, respectively.

Since March 31, 2008, the U.S. dollar appreciated approximately 28% against the British pound and 16% against the Euro. Approximately 58% 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 March 31, 2009, the Company's Stockholders' Equity was lower by \$1.0 million as compared to the value at December 31, 2008, 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 March 31, 2009, there were no borrowings outstanding under the credit facility. In addition, as of March 31, 2009, our Panlab subsidiary held notes payable of \$1.0 million denominated in Euros. These Eurocurrency borrowings are sensitive to changes in currency exchange rates.

In order to mitigate the impact of changes in foreign currency exchange rates, during the first quarter of 2009 we used derivative financial instruments (or "foreign currency contracts") to hedge the foreign currency effects on the value of certain loans between subsidiaries and do not designate these derivative instruments as accounting hedges.

## **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 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 returns 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.

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 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 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 c

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 inprocess 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 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 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 3—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.

Stock-based compensation expense recognized under SFAS No. 123(R) for the three months ended March 31, 2009 and 2008 was \$0.3 million and \$0.4 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 proferumes. 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 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.

#### **Recent Accounting Pronouncements**

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. The adoption of FSP EITF 03-6-1 did not have a material impact on the Company's consolidated results of operations or financial position.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133* ("SFAS 161"). SFAS 161 amends FASB Statement No. 133 to require enhanced disclosures about an entity's derivative and hedging activities thereby improving the transparency of financial reporting. Entities are required to provide enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under Statement 133 and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. This Statement is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. Since SFAS No. 161 requires only additional disclosures concerning derivatives and hedging activities, the adoption of SFAS 161 did not affect our consolidated results of operations or financial position.

# Item 3. 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 rates from time to time may affect our operating results. In order to mitigate the impact of changes in foreign currency exchange rates, we use derivative financial instruments (or "foreign currency contracts") to hedge the foreign currency effects on the value of certain loans between subsidiaries and do not designate these derivative instruments as accounting hedges.

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 March 31, 2009, we had no debt outstanding under our revolving credit facility.

In addition, as of March 31, 2009, our Panlab subsidiary held notes payable of \$1.0 million compared to \$1.4 million at December 31, 2008, denominated in Euros. These Eurocurrency borrowings are sensitive to changes in currency exchange rates. A 10% appreciation in the U.S. dollar relative to the Euro at the March 31, 2009 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 4. 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.

We continue to review our internal controls over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that our systems evolve with our business. These efforts have led to various changes in our internal controls over financial reporting. There were no changes in our internal controls over financial reporting that occurred during the quarter ended March 31, 2009 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

# PART II. OTHER INFORMATION

#### Item 1A. Risk Factors

To our knowledge and except to the extent additional factual information disclosed in this Quarterly Report on Form 10-Q relates to such risk factors, there have been no material changes in the risk factors described in "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2008, which was filed with the SEC on March 11, 2009.

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

The following table provides information relating to the Company's purchases of its common stock during the three months ended March 31, 2009:

## **ISSUER PURCHASES OF EQUITY SECURITIES**

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Valu May Y	roximate Dollar e of Shares That Vet Be Purchased ler the Plans or Programs
January 1, 2009 - January 31, 2009	162,147	\$ 2.86	162,147	\$	6,939,938
February 1, 2009 - February 28, 2009	138,463	\$ 2.71	138,463	\$	6,564,350
March 1, 2009 - March 31, 2009	133,464	\$ 2.75	133,464	\$	6,197,816
Total	434,074	\$ 2.78	434,074		

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 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.

During the three months ended March 31, 2009, the Company repurchased in the open market 434,074 shares of common stock at an aggregate cost of \$1.2 million, including commissions under the stock repurchase program.

# Item 6. Exhibits Exhibit Index First Amendment to the Harvard Bioscience, Inc. Second Amended and Restated 2000 Stock Option and Incentive Plan 31.1+ Certification of Chief Financial Officer of Harvard Bioscience, Inc., pursuant to Rules 13a-14(a) and 15d-14(a), 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-14(a) and 15d-14(a), 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.

+ 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.

# 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 undersigned thereunto duly authorized.

HARVARD BIOSCIENCE, INC.

By: /s/ CHANE GRAZIANO

Chane Graziano Chief Executive Officer

By: /s/ THOMAS MCNAUGHTON

Thomas McNaughton Chief Financial Officer

Date: May 7, 2009

## FIRST AMENDMENT TO HARVARD BIOSCIENCE, INC. SECOND AMENDED AND RESTATED 2000 STOCK OPTION AND INCENTIVE PLAN

This First Amendment ("First Amendment") to the Harvard Bioscience, Inc. Second Amended and Restated 2000 Stock Option and Incentive Plan (the "Plan") is effective as of February 24, 2009. The Plan is hereby amended as set forth below.

1. Section 5(b) of the Plan is hereby amended and restated as follows:

b) <u>Stock Options Granted to Independent Directors.</u>

i) Automatic Grant of Options.

(1) Each Independent Director who is first elected to serve as a Director shall be granted, on the fifth business day after his election, a Non-Qualified Stock Option to acquire 25,000 shares of Stock.

(2) The exercise price per share for the Stock covered by a Stock Option granted under this Section 5(b) shall be equal to the Fair Market Value of the Stock on the date the Stock Option is granted.

(3) The Administrator, in its discretion, may grant additional Non-Qualified Stock Options to Independent Directors. Any such grant may vary among individual Independent Directors.

ii) Exercise; Termination.

(1) Unless otherwise determined by the Administrator, an Option granted under Section 5(b) shall be exercisable as to one-third of the shares of Stock covered thereby as of the first anniversary of the grant date, as to a second one-third of the shares of Stock covered thereby as of the remaining one-third of the shares of Stock covered thereby as of the third anniversary of the grant date. An Option issued under this Section 5(b) shall not be exercisable after the expiration of ten years from the date of grant.

(2) Options granted under this Section 5(b) may be exercised only by written notice to the Company specifying the number of shares to be purchased. Payment of the full purchase price of the shares to be purchased may be made by one or more of the methods specified in Section 5(a) (iv). An optionee shall have the rights of a stockholder only as to shares acquired upon the exercise of a Stock Option and not as to unexercised Stock Options.

DATE FIRST AMENDMENT APPROVED BY BOARD OF DIRECTORS: February 24, 2009

Certification

I, Thomas McNaughton, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Harvard Bioscience, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 7, 2009

/s/ Thomas McNaughton

Thomas McNaughton Chief Financial Officer Certification

I, Chane Graziano, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Harvard Bioscience, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 7, 2009

/s/ Chane Graziano

Chane Graziano Chief Executive Officer

#### CERTIFICATION OF PERIODIC FINANCIAL REPORT PURSUANT TO 18 U.S.C. SECTION 1350

The undersigned officer of Harvard Bioscience, Inc. (the "Company") hereby certifies to his knowledge that the Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2009 (the "Report") to which this certification is being furnished as an exhibit, as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This certification is provided solely pursuant to 18 U.S.C. Section 1350 and Item 601(b)(32) of Regulation S-K ("Item 601(b)(32)") promulgated under the Securities Act of 1933, as amended (the "Securities Act"), and the Exchange Act. In accordance with clause (ii) of Item 601(b)(32), this certification (A) shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and (B) shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Date: May 7, 2009

/s/ Thomas McNaughton

Name: Thomas McNaughton Title: Chief Financial Officer

#### CERTIFICATION OF PERIODIC FINANCIAL REPORT PURSUANT TO 18 U.S.C. SECTION 1350

The undersigned officer of Harvard Bioscience, Inc. (the "Company") hereby certifies to his knowledge that the Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2009 (the "Report") to which this certification is being furnished as an exhibit, as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This certification is provided solely pursuant to 18 U.S.C. Section 1350 and Item 601(b)(32) of Regulation S-K ("Item 601(b)(32)") promulgated under the Securities Act of 1933, as amended (the "Securities Act"), and the Exchange Act. In accordance with clause (ii) of Item 601(b)(32), this certification (A) shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and (B) shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Date: May 7, 2009

/s/ Chane Graziano

Name: Chane Graziano Title: Chief Executive Officer