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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 September 30, 2012

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

For the transition period from to

Commission file number 001-33957

HARVARD BIOSCIENCE, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**04-3306140**
(State or Other Jurisdiction of Incorporation or Organization)	**(IRS Employer Identification No.)**
84 October Hill Road, Holliston, MA	**01746**
(Address of Principal Executive Offices)	**(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. ☒ YES ☐ NO

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

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

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

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

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

As of November 1, 2012, there were 28,822,767 shares of Common Stock, par value $0.01 per share, outstanding.

HARVARD BIOSCIENCE, INC.

Form 10-Q
For the Quarter Ended September 30, 2012

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PART I. FINANCIAL INFORMATION

Financial Statements.

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
(unaudited, in thousands, except share and per share amounts)

	September 30, 2012	December 31, 2011
Assets		
Current assets:		
Cash and cash equivalents	$ 20,285	$ 17,916
Accounts receivable, net of allowance for doubtful accounts of $202 and $302, respectively	13,602	15,078
Inventories	17,992	18,160
Deferred income taxes	3,887	3,908
Other receivables and other assets	2,996	2,501
Total current assets	58,762	57,563
Property, plant and equipment, net	4,097	3,086
Deferred income taxes	8,635	7,925
Amortizable intangible assets, net	21,805	22,367
Goodwill	35,946	34,209
Other indefinite lived intangible assets	1,268	1,269
Other assets	67	215
Total assets	$ 130,580	$ 126,634
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 4,141	$ 4,959
Deferred revenue	585	483
Accrued income taxes payable	438	251
Accrued expenses	3,766	3,323
Other liabilities - current	601	543
Total current liabilities	9,531	9,559
Long-term debt	15,300	16,300
Deferred income taxes	537	369
Other liabilities - non-current	4,850	4,907
Total liabilities	30,218	31,135
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; 36,564,274 and 36,289,170 shares issued and 28,818,767 and 28,543,663 shares outstanding, respectively	364	362
Additional paid-in-capital	193,862	191,157
Accumulated deficit	(78,462)	(79,630)
Accumulated other comprehensive loss	(4,734)	(5,722)
Treasury stock at cost, 7,745,507 common shares	(10,668)	(10,668)
Total stockholders' equity	100,362	95,499
Total liabilities and stockholders' equity	$ 130,580	$ 126,634

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(Unaudited, in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Revenues	$26,104	$26,381	$82,922	$79,837
Cost of product revenues	14,110	14,503	43,913	42,804
Gross profit	11,994	11,878	39,009	37,033
Sales and marketing expenses	4,670	4,361	14,182	12,809
General and administrative expenses	4,832	4,560	14,593	13,122
Research and development expenses	1,861	1,554	5,549	3,948
Restructuring charges	29	477	166	449
Amortization of intangible assets	681	706	2,071	2,016
Total operating expenses	12,073	11,658	36,561	32,344
Operating (loss) income	(79)	220	2,448	4,689
Other (expense) income:				
Foreign exchange	(29)	(11)	(86)	(44)
Interest expense	(147)	(216)	(447)	(602)
Interest income	11	17	37	48
Other expense, net	(13)	(128)	(294)	(534)
Other (expense) income, net	(178)	(338)	(790)	(1,132)
(Loss) income before income taxes	(257)	(118)	1,658	3,557
Income tax (benefit) expense	(124)	(146)	490	483
Net (loss) income	$ (133)	$ 28	$ 1,168	$ 3,074
Income (loss) per share:				
Basic earnings per common share	$ —	$ —	$ 0.04	$ 0.11
Diluted earnings per common share	$ —	$ —	$ 0.04	$ 0.10
Weighted average common shares:				
Basic	28,798	28,489	28,759	28,435
Diluted	28,798	29,896	29,687	29,861
Comprehensive income (loss):				
Net (loss) income	$ (133)	$ 28	$ 1,168	$ 3,074
Foreign currency translation adjustments	1,444	(1,837)	988	335
Total comprehensive income (loss)	$ 1,311	$ (1,809)	$ 2,156	$ 3,409

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

	Nine Months Ended September 30,	
	2012	2011
Cash flows from operating activities:		
Net income	$ 1,168	$ 3,074
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	2,373	2,064
Depreciation	930	969
Gain on sales of fixed assets	(28)	(35)
Non-cash restructuring (credit) charge	(13)	280
Amortization of catalog costs	139	226
Provision (recovery) for allowance for doubtful accounts	(23)	—
Amortization of intangible assets	2,071	2,016
Amortization of deferred financing costs	67	67
Deferred income taxes	(628)	(294)
Changes in operating assets and liabilities:		
Decrease in accounts receivable	1,841	1,910
Decrease (increase) in inventories	861	(3,460)
Increase in other receivables and other assets	(107)	(445)
(Decrease) increase in trade accounts payable	(1,196)	321
Decrease in accrued income taxes payable	(21)	(291)
Decrease in accrued expenses	(342)	(1,427)
Increase (decrease) in deferred revenue	58	(93)
Decrease in other liabilities	(494)	(877)
Net cash provided by operating activities	6,656	4,005
Cash flows used in investing activities:		
Additions to property, plant and equipment	(1,151)	(1,152)
Additions to catalog costs	—	(154)
Proceeds from sales of property, plant and equipment	36	21
Acquisitions, net of cash acquired	(2,863)	(5,165)
Net cash used in investing activities	(3,978)	(6,450)
Cash flows used in financing activities:		
Proceeds from issuance of debt	500	—
Repayments of debt	(1,500)	(1,703)
Proceeds from issuance of common stock	461	449
Net cash used in financing activities	(539)	(1,254)
Effect of exchange rate changes on cash	230	232
Increase (decrease) in cash and cash equivalents	2,369	(3,467)
Cash and cash equivalents at the beginning of period	17,916	19,704
Cash and cash equivalents at the end of period	$20,285	$16,237
Supplemental disclosures of cash flow information:		
Cash paid for interest	$ 411	$ 491
Cash paid for income taxes, net of refunds	$ 1,142	$ 1,574

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," "our" or "we") as of September 30, 2012 and for the three and nine months ended September 30, 2012 and 2011 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 ("U.S. GAAP") have been condensed or omitted pursuant to such rules and regulations. The December 31, 2011 consolidated balance sheet was derived from audited financial statements, but does not include all disclosures required by U.S. GAAP. 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, 2011, which was filed with the SEC on March 15, 2012.

In the opinion of management, all adjustments, which include normal recurring adjustments necessary to present a fair statement of financial position as of September 30, 2012, results of operations and comprehensive income for the three and nine months ended September 30, 2012 and 2011 and cash flows for the nine months ended September 30, 2012 and 2011, as applicable, have been made. The results of operations for the three and nine months ended September 30, 2012 are not necessarily indicative of the operating results for the full fiscal year or any future periods.

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, 2011, which was filed with the SEC on March 15, 2012.

2. Recently Issued Accounting Pronouncements

In July 2012, the FASB issued Accounting Standards Update No. 2012-02, *Intangibles- Goodwill and Other- Testing Indefinite-Lived Intangible Assets for Impairment (ASU 2012-02)*. Under the amendments in this update, the Company has the option first to assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the indefinite-lived intangible asset is impaired. If, after assessing the totality of events or circumstances, the Company concludes that it is not more likely than not that the indefinite-lived intangible asset is impaired, then the Company is not required to take further action. However, if the Company concludes otherwise, then it is required to determine the fair value of the indefinite-lived intangible asset and perform the quantitative impairment test by comparing the fair value with the carrying amount in accordance with subtopic 350-30. Under the amendments in this update, the Company has the option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to performing the quantitative impairment test. The Company may resume performing the qualitative assessment in any subsequent period. The provisions of this update will be effective for the Company in fiscal years beginning after September 15, 2012, and for the interim periods within fiscal years with early adoption permitted. The Company believes the adoption of this new guidance will not have a material impact on its consolidated results of operations or financial position.

3. Goodwill and Other Intangible Assets

Intangible assets consist of the following:

	September 30, 2012		December 31, 2011		Weighted Average Life (a)
	(in thousands)				
	Gross	Accumulated Amortization	Gross	Accumulated Amortization	
Amortizable intangible assets:					
Existing technology	$13,174	$ (9,942)	$12,405	$ (9,101)	5.3 Years
Tradename	6,154	(1,655)	5,840	(1,339)	11.9 Years
Distribution agreement/customer relationships	21,601	(7,529)	20,997	(6,438)	11.5 Years
Patents	9	(7)	9	(6)	3.6 Years
Total amortizable intangible assets	$40,938	$ (19,133)	$39,251	$ (16,884)	
Unamortizable intangible assets:					
Goodwill	$35,946		$34,209		
Other indefinite lived intangible assets	1,268		1,269		
Total goodwill and other indefinite lived intangible assets	$37,214		$35,478		

(a) Weighted average life is as of September 30, 2012

The change in the carrying amount of goodwill for the nine months ended September 30, 2012 was as follows:

Goodwill rollforward

	(in thousands)
Balance at December 31, 2011	$ 34,209
Goodwill arising from business combinations	1,346
Effect of change in foreign currencies	391
Balance at September 30, 2012	$ 35,946

The balance of goodwill and intangible assets at September 30, 2012 and December 31, 2011 were related to the Life Science Research Tools (“LSRT”) segment.

Intangible asset amortization expense was $ 0.7 million for the three month periods ended September 30, 2012 and 2011. Intangible asset amortization expense was $ 2.1 million and $ 2.0 million for the nine month periods ended September 30, 2012 and 2011, respectively. Amortization expense of existing amortizable intangible assets is currently estimated to be $2.8 million for the year ending December 31, 2012, $2.6 million for the year ending December 31, 2013, $2.5 million for the year ending December 31, 2014, $2.2 million for the year ending December 31, 2015 and $2.1 million for the year ending December 31, 2016.

4. Inventories

Inventories consist of the following:

	September 30, 2012	December 31, 2011
	(in thousands)	
Finished goods	$ 7,980	$ 8,372
Work in process	932	626
Raw materials	9,080	9,162
Total	$ 17,992	$ 18,160

5. Restructuring and Other Exit Costs

2012 Restructuring Plans

During the quarter ended March 31, 2012, the management of Harvard Bioscience initiated a plan to reduce operating expenses at Panlab s.l., its Harvard Apparatus Spain subsidiary. The Company recorded restructuring charges of approximately $0.2 million representing severance payments. No charges will be incurred beyond the third quarter of 2012 on this matter.

Activity and liability balances related to these charges were as follows:

	Severance and Related Costs	Total
	(in thousands)	
Restructuring charges	$ 179	$ 179
Cash payments	(179)	(179)
Restructuring balance at September 30, 2012	$ —	$ —

2011 Restructuring Plan

During the quarter ended September 30, 2011, the management of Harvard Bioscience initiated a plan to relocate its Hoefer subsidiary's San Francisco, California facility as part of a business improvement initiative. The Company recorded restructuring charges of approximately $0.5 million, which included $0.3 million in fixed asset write offs, $0.1 million in severance payments and $0.1 million in other expenses.

Activity and liability balances related to these charges were as follows:

	Severance and Related Costs	Fixed Asset Write offs	Other	Total
		(in thousands)		
Restructuring charges	$ 78	$ 307	$ 110	$ 495
Cash payments	(33)	—	(180)	(213)
Non-cash charges	—	(307)	70	(237)
Restructuring balance at December 31, 2011	45	—	—	45
Cash payments	(45)	—	—	(45)
Restructuring balance at September 30, 2012	$ —	$ —	$ —	$ —

Aggregate restructuring charges for the 2012 Restructuring Plan and the 2011 Restructuring Plan were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
	(in thousands)		(in thousands)	
Restructuring charges	$ 29	$ 477	$ 166	$ 449

6. Acquisitions

AHN Biotechnologie GmbH

On February 3, 2012, the Company acquired all issued and outstanding shares of AHN Biotechnologie GmbH ("AHN") for approximately $2.0 million. The Company funded the acquisition from its existing cash balances.

AHN is a manufacturer of plastic laboratory consumables which include pipettes, pipette tips, PCR tubes and spin columns. AHN is located in Nordhausen, Germany. This acquisition is complementary to the Company's molecular biology product line.

The aggregate purchase price for this acquisition was preliminarily allocated to tangible and intangible assets acquired as follows:

	(in thousands)
Tangible assets	$ 1,571
Liabilities assumed	(1,417)
Net assets acquired	154
Goodwill and intangible assets:	
Goodwill	1,201
Customer relationships	473
Trade name	180
Total goodwill and intangible assets	1,854
Acquisition purchase price	$ 2,008

The results of operations for AHN have been included in the LSRT segment in the Company's consolidated financial statements from the date of acquisition. The financial results of this acquisition are considered immaterial for the purposes of proforma financial statement disclosures. Goodwill recorded as a result of the acquisition of AHN is not deductible for tax purposes.

Modular SFC, Inc.

On May 31, 2012, the Company, through its Harvard Apparatus U.S. division, acquired substantially all of the assets of Modular SFC, Inc. ("Modular") for approximately $0.5 million. The Company funded the acquisition from its existing cash balances.

Consideration for the acquisition comprised of the following:

	(in thousands)
Cash	$ 500
Contingent consideration	20
Total	$ 520

The aggregate purchase price for this acquisition was allocated to tangible and intangible assets acquired as follows:

	(in thousands)
Tangible assets	$ 30
Net assets acquired	30
Goodwill and intangible assets:	
Goodwill	145
Technology	200
Customer relationships	50
Trade name	95
Total goodwill and intangible assets	490
Acquisition purchase price	$ 520

The results of operations for Modular have been included in the LSRT segment in the Company's consolidated financial statements from the date of acquisition. The financial results of this acquisition are considered immaterial for the purposes of proforma financial statement disclosures. Goodwill recorded as a result of the acquisition of Modular is deductible for tax purposes.

Direct acquisition costs recorded in other, net in our consolidated statements of operations, were $0.1 million and $0.3 million respectively, for the three and nine months ended September 30, 2012 for the above acquisitions.

7. Warranties

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

	Beginning Balance	Payments	Additions	Ending Balance
	(in thousands)			
Year ended December 31, 2011	$ 158	$ (46)	$ 32	$ 144
Nine months ended September 30, 2012	$ 144	$ (114)	$ 170	$ 200

8. 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 Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
	(in thousands)			
Components of net periodic benefit cost:				
Service cost	$ 83	$ 59	$ 241	$ 171
Interest cost	214	200	600	624
Expected return on plan assets	(147)	(148)	(414)	(463)
Net amortization loss	56	34	156	106
Net periodic benefit cost	$ 206	$ 145	$ 583	$ 438

In each of the three month periods ended September 30, 2012 and 2011, the Company contributed $0.2 million to its defined benefit plans. For the nine month periods ended September 30, 2012 and 2011, the Company contributed $0.7 million and $0.6 million, respectively, to its defined benefit plans. The Company expects to contribute approximately $0.2 million to its defined benefit plans during the remainder of 2012.

As of September 30, 2012 and December 31, 2011, the Company had an underfunded pension liability of approximately $4.9 million included in the other liabilities- non-current line item in the Consolidated Balance Sheets.

9. Leases

The Company has noncancelable operating leases for office and warehouse space expiring at various dates through 2017.

Rent expense, which is recorded on a straight-line basis, is estimated to be $1.2 million for the year ending December 31, 2012. Rent expense was $ 1.0 million and $1.1 million for the nine months ended September 30, 2012 and 2011, respectively. Future minimum lease payments for operating leases, with initial or remaining terms in excess of one year at September 30, 2012, are as follows:

	Operating Leases
	(in thousands)
2013	$ 1,064
2014	1,021
2015	901
2016	679
2017	418
Thereafter	130
Net minimum lease payments	$ 4,213

10. Capital Stock

Employee Stock Purchase Plan ("ESPP")

In 2000, the Company approved the ESPP. Under the ESPP, participating employees can authorize the Company to withhold a portion of their base pay during consecutive six-month payment periods for the purchase of shares of the Company's common stock. At the conclusion of the period, participating employees can purchase shares of the Company's common stock at 85% of the lower of the fair market value of the Company's common stock at the beginning or end of the period. Shares are issued under the plan for the six-month periods ending June 30 and December 31. Under this plan, 500,000 shares of common stock are authorized for issuance, of which 435,972 shares were issued as of September 30, 2012. During the nine months ended September 30, 2012, the Company issued 25,597 shares of the Company's common stock under the ESPP. During the nine months ended September 30, 2011, the Company issued 22,587 shares of the Company's common stock under the ESPP. During the three months ended September 30, 2012 and 2011, no shares of the Company's common stock were issued under the ESPP.

Stock Option Plans

The Company accounts for share-based payment awards in accordance with the provisions of FASB ASC 718 *"Compensation- Stock Compensation"*, which requires the Company to recognize compensation expense for all share-based payment awards made to employees and directors including employee stock options, restricted stock units ("RSUs") and employee stock purchases related to the ESPP.

On May 24, 2012, the Board of Directors approved the grant, as of June 1, 2012, of 349,295 RSUs and 1,210,934 stock options under the Third Amended and Restated 2000 Stock Option and Incentive Plan ("2000 Plan"). The RSUs were valued at the closing stock price on the date of grant. The Company utilized the Black-Scholes valuation model for estimating the fair value of the stock-based compensation.

Stock option and RSU activity under the Stock Option Plans for the nine months ended September 30, 2012 was as follows:

		Stock Options		Restricted Stock Units	
	Available for Grant	Stock Options Outstanding	Weighted Average Exercise Price	Restricted Stock Units Outstanding	Grant Date Fair Value
Balance at December 31, 2011	2,700,645	8,519,575	$ 4.52	539,450	$ 4.32
Granted	(1,560,229)	1,210,934	3.59	349,295	3.57
Fungible share adjustment for RSU's granted	(275,943)	—	—	—	—
Exercised	—	(123,000)	4.09	—	—
Vested (RSU's)	—	—	—	(164,090)	—
Shares withheld for taxes	45,912	—	—	—	—
Cancelled / forfeited	1,010,962	(963,500)	6.45	(47,462)	4.21
Fungible share adjustment for RSU's cancelled	11,109	—	—	—	—
Balance at September 30, 2012	1,932,456	8,644,009	$ 4.19	677,193	$ 3.97

The following assumptions were used to estimate the fair value of stock options and RSU's granted during the nine month periods ended September 30, 2012 and 2011:

	Nine Months Ended September 30,	
	2012	2011
Volatility	55.09 %	54.24 %
Risk-free interest rate	0.80 %	2.01 %
Expected holding period (in years)	5.98	5.94
Dividend Yield	0 %	0 %

There were no stock options and RSU's granted during the three months ended September 30, 2012 and 2011.

The weighted average fair values of the options granted under the 2000 Plan during the nine months ended September 30, 2012 was $1.84, using the Black Scholes option-pricing model.

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

Stock-based compensation expense for the three and nine months ended September 30, 2012 and 2011 consisted of stock-based compensation expense related to employee stock options, RSUs and the ESPP.

Stock-based compensation expense for the three and nine months ended September 30, 2012 and 2011, respectively, was allocated as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
	(in thousands)			
Cost of product revenues	$ 24	$ 22	$ 62	$ 56
Sales and marketing	67	68	157	132
General and administrative	859	754	2,134	1,864
Research and development	8	9	20	12
Total stock-based compensation	$ 958	$ 853	$2,373	$2,064

The Company did not capitalize any stock-based compensation.

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 September 30,		Nine Months Ended September 30,	
	2012	2011	2012	2011
Basic	28,797,887	28,488,692	28,758,621	28,435,483
Effect of assumed conversion of employee and director stock options and restricted stock units	—	1,407,337	928,743	1,426,015
Diluted	28,797,887	29,896,029	29,687,364	29,861,498

Diluted loss per share for the quarter ended September 30, 2012 was based only on the weighted-average number of shares outstanding during the period, as the inclusion of any common stock equivalents would have been anti-dilutive. Excluded from the shares used in calculating the diluted earnings per common share in the above table are options to purchase approximately 8,644,009 and 4,006,054 shares of common stock for the three months ended September 30, 2012 and 2011, respectively, as the impact of these shares would be anti-dilutive. Excluded from the shares used in calculating the diluted earnings per common share in the above table are options to purchase approximately 4,643,163 and 3,469,499 shares of common stock for the nine months ended September 30, 2012 and 2011, respectively, as the impact of these shares would be anti-dilutive.

11. Revolving Credit Facility

On August 7, 2009, the Company entered into an amended and restated $20.0 million revolving credit loan agreement with Bank of America, as agent, and Bank of America and Brown Brothers Harriman & Co as lenders. On September 30, 2011, the Company entered into the First Amendment to the Amended and Restated Revolving Credit Loan Agreement (the "First

Amendment") with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co as lenders. The First Amendment extended the maturity date of the credit facility to August 7, 2013 and reduced the interest rate to the London Interbank Offered Rate ("LIBOR") plus 3.0%. On October 4, 2012, the Company entered into the Second Amendment to the Amended and Restated Revolving Credit Loan Agreement (the "Second Amendment") with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co as lenders. The Second Amendment extends the maturity date of the credit facility to August 7, 2014 with no changes to other terms. At September 30, 2012, the interest rate for the facility was 3.22%. The amended and restated facility includes covenants relating to income, debt coverage and cash flow, as well as minimum working capital requirements. The credit facility also contains limitations on the Company's ability to incur additional indebtedness and requires lender 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.

As of September 30, 2012 and December 31, 2011, the Company had borrowings of $15.3 million and $16.3 million, respectively, outstanding under its credit facility. The borrowings under the credit facility were primarily related to the acquisitions and stock repurchases. As of September 30, 2012, the Company was in compliance with all financial covenants contained in the credit facility; the Company was not subject to any borrowing restrictions under the financial covenants and had available borrowing capacity under our revolving credit facility of $4.7 million.

12. Income Tax

Income tax was a $0.1 million benefit and a $0.5 million expense, respectively for the three and nine months ended September 30, 2012. The effective income tax rate was 29.6% for the nine months ended September 30, 2012. The difference between the effective tax rate and the U.S. statutory tax rate for the nine months ended September 30, 2012 was principally attributable to the effects of favorable tax law changes in the U.K., foreign tax rate differential and increased research and development tax credits, partially offset by discrete expense items related to acquisition and restructuring costs, and stock compensation expense. As described in Note 13 in the Notes to Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2011, the Company had recorded an uncertain tax liability of $0.7 million at the end of 2010. In January 2011, the statute of limitations expired for the return that included $0.5 million of these uncertain tax positions with no change from the tax authorities. Accordingly, the uncertain tax liability of $0.5 million and the associated accrued interest was reversed in the first quarter of 2011 as a discrete item and was included as a benefit in the Income tax (benefit) expense line item in the Consolidated Statements of Operations and Comprehensive Income.

13. Segment Reporting

The Company has two reportable segments, namely the LSRT segment and the Regenerative Medicine Device ("RMD") segment. The Company has two operating segments aggregated under the LSRT segment. These operating segments have similar products and services, customer channels, distribution methods and historical margins. The LSRT segment is engaged in the development, manufacture and marketing of specialized products, primarily apparatus and scientific instruments, used to advance life science research at pharmaceutical and biotechnology companies, universities and government laboratories worldwide.

The RMD segment is engaged in the development, manufacturing and marketing of devices used by clinicians and researchers in the field of regenerative medicine.

Non operating expenses that are not allocated to operating divisions are under the caption "Unallocated Expenses". Unallocated expenses also include certain corporate related expenses that are not allocable to the operating segments.

Summarized financial information on the Company's reportable segments for the three and nine months ended September 30, 2012 and 2011 are shown in the following table. There were no inter segment revenues.

	LSRT	RMD	Unallocated	Total
		(in thousands)		
Three months ended September 30, 2012				
Total revenues	$ 26,104	$ —	$ —	$ 26,104
Operating income (loss)	2,675	(1,647)	(1,107)	(79)
Income (loss) before income taxes	2,629	(1,647)	(1,239)	(257)
Total assets	129,931	295	354	130,580
Three months ended September 30, 2011				
Total revenues	26,381	—	—	26,381
Operating income (loss)	2,244	(915)	(1,109)	220
Income (loss) before income taxes	2,244	(915)	(1,447)	(118)
Total assets	126,465	113	390	126,968
Nine months ended September 30, 2012				
Total revenues	82,922	—	—	82,922
Operating income (loss)	10,449	(4,434)	(3,567)	2,448
Income (loss) before income taxes	10,103	(4,434)	(4,011)	1,658
Total assets	129,931	295	354	130,580
Nine months ended September 30, 2011				
Total revenues	79,837	—	—	79,837
Operating income (loss)	10,081	(1,950)	(3,442)	4,689
Income (loss) before income taxes	9,618	(1,950)	(4,111)	3,557
Total assets	$126,465	$ 113	$ 390	$126,968

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 "Exchange Act"). 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," "think," "potential," "objectives," "optimistic," "strategy," 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 identify potential acquisition candidates, successfully integrate acquired businesses or technologies, successfully negotiate favorable pricing and other terms with acquisition candidates to enable potential acquisitions to close, complete consolidations of business functions, expand our distribution channels, expand our product offerings, introduce new products or commercialize new technologies on a timely basis, including in the field of regenerative medicine, unanticipated costs relating to acquisitions, unanticipated costs arising in connection with the Company's consolidation of business functions and any restructuring initiative, lack of demand or decreased demand for the Company's products due to changes in our customers' needs, success of our efforts with our distributors to promote sales of our microvolume spectrophotometer products and success of our strategies to increase the sales of other products, our ability to obtain regulatory approvals, including FDA approval, for our products including any products in the field of regenerative medicine, the current size or anticipated size of the regenerative medicine market, the existence and size of opportunities in the regenerative medicine market, our 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 global economic and financial uncertainty, 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 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, our acquisition of Genomic Solutions failing to qualify as a tax-free reorganization for federal tax purposes, our ability to utilize deferred tax assets after the release of our valuation allowances, 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, 2011, filed with the SEC on March 15, 2012. 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

Harvard Bioscience consists of a Life Science Research Tools ("LSRT") business and a Regenerative Medicine Device ("RMD") business.

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

- having a broad product offering reduces the risk of being dependent on a single technology;
- having relatively inexpensive products reduces the volatility associated with expensive capital equipment; and
- focusing on niche markets reduces head-to-head competition with the major instrument companies.

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

In addition to driving growth in our core research markets, we have been investing to create new products to address what we believe is a long term growth opportunity in the emerging field of regenerative medicine. Regenerative medicine is using stem cells to repair damaged organs and to grow organs outside the body for transplant. The U.S. Department of Health and Human Services has projected that the U.S. market for regenerative medicine may be $100 billion in the coming years. The government's estimate appears to include the value of all regenerative medicine protocols and therapies, including potential cost savings versus current methodologies. Our strategy is not to become a therapeutics company, but instead, to provide tools to researchers and clinicians in the field of regenerative medicine. These new tools currently fall into two main categories: bioreactors for growing tissue and organs outside the body; and injectors for stem cell therapy. These new tools we are creating are being built on our existing technologies—such as our market leading Harvard Apparatus precision syringe pumps and market leading Hugo-Sachs isolated organ systems.

Our strategy in our RMD business is to (i) create devices in collaboration with leading surgeons, researchers and clinicians, (ii) build these devices using our existing technologies and brands in an effort to reduce the investment needed to get the devices to market, and (iii) develop devices with significant disposable components to improve clinical safety and allow us to participate on a per-procedure basis following the sale of an instrument.

Our first regenerative medicine tool, the "InBreath" hollow organ bioreactor, was used to perform the world's first human transplant of a regenerated bronchus. Dr. Paolo Macchiarini of the Karolinska University Hospital and Karolinska Institutet, in collaboration with his colleagues, reported this success in The Lancet, a leading general medicine journal, in November 2008. We have licensed the "InBreath" hollow organ bioreactor from Dr. Macchiarini's team, and worked to make it a commercial device. We believe that it is the world's first commercially available bioreactor that has been used to perform a human transplant of a regenerated organ. We believe it marks an important milestone in the development of the regenerative medicine field as the tools evolve from concepts to commercial quality products.

During the first half of 2010, one of our collaborators, Dr. Harald Ott at Massachusetts General Hospital ("MGH") succeeded in regenerating a lung and subsequently transplanting it into a rat. In collaboration with Dr. Ott and MGH, we designed and developed a novel bioreactor, LB-2 Solid organ bioreactor, that was used to grow the lung. The work was published online in Nature Medicine in July 2010. The bioreactor used by Dr. Ott was a modified version of one of our market leading Hugo-Sachs isolated organ systems.

In June 2011, the "InBreath" bioreactor was used for the world's first successful transplantation of a synthetic tissue engineered windpipe. For the first time in history, a patient was given a new trachea made from a synthetic scaffold seeded with his own stem cells in a bioreactor. The cells were grown on the scaffold inside the bioreactor for two days before transplantation into the patient. Because the cells used to regenerate the trachea were the patient's own, there has been no rejection of the transplant, and the patient is not taking immunosuppressive drugs. The patient had been suffering from late stage tracheal cancer, which before this surgery would have been inoperable, and is now alive and well seventeen months after the surgery. The operation was performed at the Karolinska University Hospital in Huddinge, Stockholm, by Dr. Macchiarini and colleagues. Dr. Macchiarini led an international team of medical professionals and other individuals who designed and built the nanocomposite tracheal scaffold, and we produced a specifically designed bioreactor used to seed the scaffold with the patient's own stem cells. The success of this transplant surgery was noted in The Lancet on November 24, 2011.

In November 2011, a second patient was given a new trachea made from a synthetic scaffold seeded with his own stem cells in a bioreactor. The patient had been suffering from late stage tracheal cancer. The patient was discharged from the hospital in January 2012. On March 5, 2012, this patient died. The official cause of death recorded on the death certificate was pneumonia secondary to tracheal cancer. We know of no evidence that either the scaffold or the bioreactor played any part in the patient's death.

In June 2012, the “InBreath” bioreactors were used for the world’s first and second successful laryngotracheal implants, using synthetic laryngotracheal scaffolds seeded with cells taken from the patients’ bone marrow. The surgeries took place at Krasnodar Regional Hospital in Krasnodar, Russia on June 19th and June 21st. Each bioreactor was loaded with a synthetic scaffold in the shape of the patient’s original organ. The scaffolds were then seeded with the patient’s own stem cells. Over the course of about two days, the bioreactor promoted proper cell seeding and development. Because the patients’ own stem cells were used, their bodies have accepted the transplants without the use of immunosuppressive drugs. The recipients of the implants are doing well four months after the surgery. These surgeries are a part of a clinical trial to be funded under a $4.8 million grant provided by the Russian government to the Krasnodar Regional Hospital.

In addition to the Russian clinical trial, a European clinical trial in tracheal cancer patients is expected to start in 2014. The European clinical trial is expected to enroll approximately 25 patients. This project is a consortium of European companies, hospitals and universities led by Dr. Macchiarini.

In addition to the bioreactors described above, we have also made progress on our clinical version of one of our market leading Harvard Apparatus research syringe pumps. The research version of this pump is called the “PHD Ultra Nanomite” stem cell therapy injection system. Based on our progress to date, we expect to begin marketing a version of the clinical pump for research applications this year. We anticipate that this pump will be used to inject cells into damaged tissue in cell therapy. We expect to submit this pump to the regulatory agencies in 2013 for approval.

We are also actively evaluating strategic alternatives to fund the RMD business going forward.

While we expect the initiatives discussed above to 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 condition and their 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, 2011, which was filed with the SEC on March 15, 2012.

Financing

On August 7, 2009, we entered into an amended and restated $20.0 million revolving credit loan agreement with Bank of America, as agent, and Bank of America and Brown Brothers Harriman & Co. as lenders. On September 30, 2011, we entered into the First Amendment with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co. as lenders. The First Amendment extended the maturity date of our credit facility to August 7, 2013 and reduced our interest rate to LIBOR plus 3.0%. On October 4, 2012, we entered into the Second Amendment with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co as lenders. The Second Amendment extends the maturity date of our credit facility to August 7, 2014 with no changes to other terms. At September 30, 2012, the interest rate for the facility was 3.22%. The amended and restated facility includes covenants relating to income, debt coverage and cash flow, as well as minimum working capital requirements. The credit facility also contains limitations on our ability to incur additional indebtedness and requires lender 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.

At September 30, 2012, we had borrowings of $15.3 million outstanding under our credit facility with Bank of America and Brown Brothers Harriman & Co.

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 thereof.

Components of Operating Income

Revenues. We generate revenues by selling apparatus, instruments, devices and consumables through our catalogs, 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 editions of our comprehensive catalog and our catalog supplements will be timed at least in part with the incidence of new product introductions. 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 March 2010, with approximately 850 pages, 11,000 products and approximately 65,000 copies printed. Revenues from direct sales to end users represented approximately 57% and 58%, respectively, of our revenues for the nine months ended September 30, 2012 and for the year ended December 31, 2011.

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 nine months ended September 30, 2012 and for the year ended December 31, 2011, approximately 43% and 42%, respectively, of our revenues were derived from sales to distributors.

For the nine months ended September 30, 2012, approximately 65% of our revenues were derived from products we manufacture; approximately 24% were derived from distributed products sold under our brand names and approximately 11% 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 year ended December 31, 2011, approximately 62% of our revenues were derived from products we manufacture; approximately 25% were derived from distributed products sold under our brand names and approximately 13% 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 nine months ended September 30, 2012 and for the year ended December 31, 2011, approximately 41% and 40%, 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 percentage of revenues as compared with the cost of non-manufactured products for the foreseeable future. Additionally, our cost of product revenues as a percent of product revenues will vary based on mix of direct to end user sales and distributor sales, mix by product line and mix by geography.

Sales and marketing expenses. Sales and marketing expense consists primarily of salaries and related expenses for personnel in sales, marketing and customer support functions. We also incur costs for travel, trade shows, demonstration equipment, public relations and marketing materials, consisting primarily of the printing and distribution of our catalogs, 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, 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 spending to develop and enhance our products. 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 for existing markets. Additionally, we are working to develop new products aimed at long term opportunities in the emerging field of regenerative medicine.

Stock-based compensation expenses. Stock-based compensation expense recognized under FASB ASC 718, "*Compensation – Stock Compensation,*" was related to employee stock options, RSUs 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 and research and development expenses.

Bookings and Backlog

We monitor bookings and backlog as these are indicators of future revenue and business activity levels. Bookings were $25.8 million and $26.3 million for three months ended September 30, 2012 and 2011, respectively. Bookings increased by $2.0 million, or 2.5% to $82.3 million for the nine months ended September 30, 2012 compared with $80.3 million for the same period in 2011. The increase in bookings was primarily due to the acquisition of CMA Microdialysis AB ("CMA") in July 2011 and AHN in February 2012.

Backlog decreased by $0.8 million, or 15.2% to $4.7 million on September 30, 2012 compared with $5.5 million on September 30, 2011. The decrease was primarily due to weak sales in the month of September which saw a decrease in demand for our products primarily in the university/government research market due to the uncertainty of the level of future funding in this political/economic environment. This had an impact on our third quarter performance.

Selected Results of Operations

Three months ended September 30, 2012 compared to three months ended September 30, 2011:

	Three Months Ended September 30,			
	2012	2011	Dollar Change	% Change
	($ in thousands, unaudited)			
Revenues	$26,104	$26,381	$(277)	-1.0%
Cost of product revenues	14,110	14,503	(393)	-2.7%
Gross margin percentage	45.9%	45.0%		2.0%
Sales and marketing expenses	4,670	4,361	309	7.1%
General and administrative expenses	4,832	4,560	272	6.0%
Research and development expenses	1,861	1,554	307	19.8%

Revenues.

Revenues were lower by $0.3 million, or 1.0%, to $26.1 million for the three months ended September 30, 2012 compared to $26.4 million for the same period in 2011. Our acquisition of AHN contributed approximately $0.4 million, or 1.6% to third quarter 2012 revenues. The effect of a stronger U.S. dollar decreased our third quarter revenues by $0.4 million, or 1.4%, compared with the same period in 2011. Adjusting for the effect of foreign currency fluctuation and acquisitions, revenues were down $0.3 million, or 1.2%, primarily at our Harvard Apparatus U.S., Canada and Spain subsidiaries and our Hoefer business, partially offset by increased revenue in our Harvard Apparatus U.K., Biochrom U.K. and Denville businesses.

Cost of product revenues.

Cost of product revenues decreased $0.4 million, or 2.7%, to $14.1 million for the three months ended September 30, 2012 compared with $14.5 million for the three months ended September 30, 2011. Gross profit as a percentage of revenues increased to 45.9% for the three months ended September 30, 2012 compared with 45.0% for the same period in 2011. The increase in gross profit as a percentage of revenues was primarily due to a more favorable sales mix in the third quarter of 2012 compared with the third quarter of 2011.

Sales and marketing expense.

Sales and marketing expenses increased $0.3 million, or 7.1%, to $4.7 million for the three months ended September 30, 2012 compared with $4.4 million for the three months ended September 30, 2011. In LSRT, sales and marketing expenses increased $0.2 million, or 4.7%, to $4.4 million, compared to $4.2 million for the three months ended September 30, 2011 primarily due to $0.1 million, or 1.6%, of expenses related to our acquisition of AHN and $0.2 million, or 4.7%, mainly due to increased selling activities at our Denville business. This was partially offset by the effect of a stronger U.S. dollar which caused a $0.1 million, or 1.6%, favorable currency effect on sales and marketing expenses for the three months ended September 30, 2012. In RMD, sales and marketing expenses increased $0.1 million compared with the third quarter of 2011 primarily due to an increase in business development efforts.

General and administrative expense.

General and administrative expenses increased $0.3 million, or 6.0% to $4.8 million for the three months ended September 30, 2012 compared with $4.6 million for the three months ended September 30, 2011. In LSRT, general and administrative expenses remained flat at approximately $4.3 million for the three months ended September 30, 2012 and 2011. In RMD, general and administrative expenses increased $0.3 million due to increased activity in our regenerative medicine device initiative.

Research and development expense.

Research and development expenses increased $0.3 million, or 19.8% to $1.9 million for the three months ended September 30, 2012 compared with $1.6 million for the three months ended September 30, 2011. In LSRT, research and development expenses were flat at $1.0 million for the three months ended September 30, 2012 and 2011. In RMD, research and development expenses increased $0.3 million, primarily due to increased development activities for our stem cell therapy injector and bioreactor products.

Amortization of intangible assets.

Amortization of intangible assets expense remained flat at $0.7 million for the three months ended September 30, 2012 and 2011 and included amortization expense of intangible assets related to our historical acquisitions.

Other (expense) income, net.

Other income and expense, net, was a $0.2 million expense and a $0.3 million expense for the three months ended September 30, 2012 and 2011, respectively. Net interest expense was $0.1 million for the three months ended September 30, 2012 compared to net interest expense of $0.2 million for the three months ended September 30, 2011. The decrease in net interest expense was primarily due to a lower interest rate on our credit facility and lower average debt balances in the third quarter of 2012 compared to the third quarter of 2011. Other expense, net, for the three months ended September 30, 2011 also included $0.1 million of acquisition related expenses.

Income tax (benefit) expense.

Income tax benefit was $0.1 million for the three months ended September 30, 2012 and 2011. The difference between our effective tax rate and the U.S. statutory tax rate for the three months ended September 30, 2012 was principally attributable to the effects of favorable tax law changes in the U.K., foreign tax rate differential and increased research and development tax credits partially offset by discrete expense items related to acquisition and restructuring costs. The difference between our effective tax rate and the U.S. statutory tax rate for the three months ended September 30, 2011 was principally attributable to the foreign tax rate differential and increased research and development tax credits.

Selected Results of Operations

Nine months ended September 30, 2012 compared to nine months ended September 30, 2011:

	Nine Months Ended September 30,			
	2012	2011	Dollar Change	% Change
	($ in thousands, unaudited)			
Revenues	$82,922	$79,837	$3,085	3.9%
Cost of product revenues	43,913	42,804	1,109	2.6%
Gross margin percentage	47.0%	46.4%		1.3%
Sales and marketing expenses	14,182	12,809	1,373	10.7%
General and administrative expenses	14,593	13,122	1,471	11.2%
Research and development expenses	5,549	3,948	1,601	40.6%

Revenues.

Revenues increased $3.1 million, or 3.9%, to $82.9 million for the nine months ended September 30, 2012 compared to $79.8 million for the same period in 2011. Our acquisitions of CMA and AHN contributed approximately $2.9 million, or 3.7% to the nine months ended September 30, 2012 revenues. The effect of a stronger U.S. dollar decreased our revenues by $1.2 million, or 1.5%, compared with the same period in 2011. Adjusting for the effect of foreign currency fluctuation and acquisitions, revenues were up $1.4 million, or 1.7%, year-to-year and reflected organic growth across our Biochrom, Denville and Hoefer businesses.

Cost of product revenues.

Cost of product revenues increased $1.1 million, or 2.6%, to $43.9 million for the nine months ended September 30, 2012 compared with $42.8 million for the nine months ended September 30, 2011. The increase in cost of product revenues included $2.0 million, or 4.7%, attributable to our acquisitions of CMA and AHN. A stronger U.S. dollar caused a $0.6 million, or 1.5%, favorable currency effect on the cost of product revenues for the nine months ended September 30, 2012. Excluding the effects of currency changes and acquisitions, the cost of product revenues decreased by $0.3 million, or 0.6% from the same period in the previous year.

Gross profit as a percentage of revenues was 47.0% for the nine months ended September 30, 2012 compared with 46.4% for the same period in 2011. The increase in gross profit as a percentage of revenues was primarily due to favorable changes in sales mix for the nine months ended September 30, 2012 compared with the same period in 2011.

Sales and marketing expense.

Sales and marketing expenses increased $1.4 million, or 10.7%, to $14.2 million for the nine months ended September 30, 2012 compared with $12.8 million for the nine months ended September 30, 2011. In LSRT, sales and marketing expenses increased $1.1 million, or 8.8%, to $13.6 million, compared to $12.5 million for the nine months ended September 30, 2011 primarily due to $0.3 million, or 2.7%, of expenses related to our acquisitions of CMA and AHN, and $0.9 million, or 7.4%, mainly due to increased selling activities at our Denville business. This was partially offset by the effect of a stronger U.S. dollar that decreased our sales and marketing expenses for the nine months ended September 30, 2012 by $0.2 million, or 1.3%, compared with the same period in 2011. In RMD, sales and marketing expenses increased $0.3 million primarily due to an increase in business development efforts.

General and administrative expense.

General and administrative expenses increased $1.5 million, or 11.2% to $14.6 million for the nine months ended September 30, 2012 compared with $13.1 million for the nine months ended September 30, 2011. In LSRT, general and administrative expenses increased $0.5 million, or 4.0%, to $13.2 million, compared to $12.7 million for the nine months ended September 30, 2011 primarily due to our acquisitions of CMA and AHN. In RMD, general and administrative expenses increased $0.9 million due to increased activity in our regenerative medicine device initiative.

Research and development expense.

Research and development expenses increased $1.6 million, or 40.6% to $5.5 million for the nine months ended September 30, 2012 compared with $3.9 million for the nine months ended September 30, 2011. In LSRT, the research and development expenses increased $0.3 million, or 11.2%, to $3.1 million for the nine months ended September 30, 2012, compared to $2.8 million for the nine months ended September 30, 2011 due to greater new product development initiatives at our Harvard Apparatus U.S. business. In RMD, research and development expenses increased $1.3 million, primarily due to increased development activities in our stem cell therapy injector and bioreactor products.

Amortization of intangible assets.

Amortization of intangible asset expenses increased $0.1 million, or 2.7%, to $2.1 million for the nine months ended September 30, 2012 compared with $2.0 million for the same period in 2011. The year-to-year increase in the amortization expense was primarily due to our acquisitions of CMA and AHN.

Other (expense) income, net.

Other income and expense, net, was a $0.8 million expense and a $1.1 million expense for the nine months ended September 30, 2012 and 2011, respectively. Net interest expense was $0.4 million for the nine months ended September 30, 2012 compared to net interest expense of $0.6 million for the nine months ended September 30, 2011. The decrease in net interest expense was primarily due to a lower interest rate on our credit facility and lower average borrowings during the nine months ended September 30, 2012 compared to the same period in 2011. Other expense, net, for the nine months ended September 30, 2012 and 2011, also included $0.3 million and $0.5 million, respectively, of acquisition-related expenses.

Income Taxes.

Income tax expense from continuing operations was approximately $0.5 million for the nine months ended September 30, 2012 and 2011. The effective income tax rate for continuing operations was 29.6% for the nine months ended September 30, 2012, compared with 13.6% for the same period of 2011. The difference between our effective tax rate and the U.S. statutory tax rate for the nine months ended September 30, 2012 was principally attributable to the effects of favorable tax law changes in the U.K., foreign tax rate differential and increased research and development tax credits partially offset by discrete expense items related to acquisition and restructuring costs, and stock compensation expense. The difference between our effective tax rate and the U.S. statutory tax rate for the nine months ended September 30, 2011 was principally attributable to the reversal of a previously uncertain tax liability of $0.5 million and the associated accrued interest in the first quarter of 2011, foreign tax rate differential and increased research and development tax credits.

Liquidity and Capital Resources

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

We ended the third quarter of 2012 with cash and cash equivalents of $20.3 million compared to $17.9 million at December 31, 2011. As of September 30, 2012 and December 31, 2011, we had $15.3 million and $16.3 million, respectively, of borrowings outstanding under our credit facility. Total cash and cash equivalents, net of debt was $5.0 million and $1.6 million at September 30, 2012 and December 31, 2011, respectively.

As of September 30, 2012 and December 31, 2011, cash and cash equivalents held by our foreign subsidiaries was $18.8 million and $15.9 million, respectively. These funds are not available for domestic operations unless the funds are repatriated. If we planned to or did repatriate these funds then U.S. federal and state income taxes would have to be recorded on such amounts. We currently have no plans and do not intend to repatriate any of our undistributed foreign earnings. These balances are considered permanently reinvested and will be used for foreign items including foreign acquisitions, capital investments and operations. It is impracticable to estimate the total tax liability, if any, which would be created by the future distribution of these earnings. In February 2012, we acquired all issued and outstanding shares of AHN, a German manufacturer, and utilized approximately $2.0 million of our foreign cash on hand. During 2012 and 2013, we plan to use approximately $2.6 million additional foreign cash on hand for capital improvements at this new subsidiary.

Overview of Cash Flows

	Nine Months Ended September 30,	
	2012	2011
	(in thousands, unaudited)	
Cash flows from operations:		
Net income	$ 1,168	$ 3,074
Other adjustments to operating cash flows	4,888	5,293
Changes in assets and liabilities	600	(4,362)
Net cash provided by operating activities	6,656	4,005
Investing activities:		
Acquisition, net of cash acquired	(2,863)	(5,165)
Other investing activities	(1,115)	(1,285)
Net cash used in investing activities	(3,978)	(6,450)
Financing activities:		
Repayment of debt, net	(1,000)	(1,703)
Other financing activities	461	449
Net cash used in financing activities	(539)	(1,254)
Effect of exchange rate changes on cash	230	232
Increase (decrease) in cash and cash equivalents	$ 2,369	$ (3,467)

Our operating activities generated cash of $6.7 million for the nine months ended September 30, 2012 compared to $4.0 million for the nine months ended September 30, 2011. The increase in cash flows from operations was primarily due to favorable changes to working capital year to year, partially offset by a lower net income due to increased spending in our RMD business.

Our investing activities used cash of $4.0 million during the nine months ended September 30, 2012 compared to $6.5 million during the nine months ended September 30, 2011. Investing activities during 2012 included acquisitions of businesses and purchases and sales of property, plant and equipment. Investing activities during 2011 included acquisitions of businesses, purchases and sales of property, plant and equipment and expenditures for our catalogs. In February 2012, we acquired AHN for approximately $2.0 million. In May 2012, we acquired Modular for approximately $0.5 million. In July 2011, we acquired CMA for approximately $5.2 million. These acquisitions were funded from our existing cash balances. All these payments were included in “Acquisitions, net of cash acquired” under investing activities. We spent $0.2 million during the nine months ended September 30, 2011 on catalog costs. We

had no spending on catalog costs for the nine months ended September 30, 2012. We spent $1.2 million in the nine months ended September 30, 2012 and 2011 on capital expenditures. We currently expect to make approximately $0.4 million of capital expenditures during the fourth quarter of 2012.

Our financing activities have historically consisted of borrowings and repayments under a revolving credit facility, long-term debt, the issuance of common stock, including the common stock issued in our initial public offering, and repurchases of our common stock under our stock repurchase program. During the nine months ended September 30, 2012, financing activities used cash of $0.5 million, compared to $1.3 million during the nine months ended September 30, 2011. During the nine months ended September 30, 2012 and 2011 we repaid, net $1.0 million and $1.7 million, respectively, of debt under our credit facility. Other financing activities for the nine months ended September 30, 2012 and 2011 included the net proceeds from the issuance of common stock of $0.5 million and $0.4 million, respectively.

On August 7, 2009, we entered into an amended and restated $20.0 million revolving credit loan agreement with Bank of America, as agent, and Bank of America and Brown Brothers Harriman & Co. as lenders. On September 30, 2011, we entered into the First Amendment with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co. as lenders. The Amendment extended the maturity date of our credit facility to August 7, 2013 and reduced our interest rate to LIBOR plus 3.0%. On October 4, 2012, we entered into the Second Amendment with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co as lenders. The Second Amendment extends the maturity date of our credit facility to August 7, 2014 with no changes to other terms. The facility includes covenants relating to income, debt coverage and cash flow, as well as minimum working capital requirements. The credit facility also contains limitations on our ability to incur additional indebtedness and requires lender 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.

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. We are also currently exploring strategic alternatives to fund our RMD business going forward. This may involve incurring additional debt or raising equity capital for this business. 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, the Euro and the Swedish krona.

Changes in foreign currency exchange rates resulted in decreases in revenues of $1.2 million and expenses of $1.1 million during the nine months ended September 30, 2012, compared to increases in revenues of $1.7 million and expenses of $1.3 million during the nine months ended September 30, 2011.

The gain associated with the translation of foreign subsidiaries equity into U.S. dollars included as a component of comprehensive income, was approximately $1.0 million and $0.3 million during the nine months ended September 30, 2012 and 2011, respectively. In addition, currency exchange rate fluctuations included as a component of net (loss) income resulted in approximately $0.1 million and $44,000 in foreign currency losses during the nine months ended September 30, 2012 and 2011, respectively.

Critical Accounting Policies

The critical accounting policies underlying the accompanying unaudited consolidated financial statements are those set forth in Part II, Item 7 included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 which was filed with the SEC on March 15, 2012.

Recent Accounting Pronouncements

In July 2012, the FASB issued Accounting Standards Update No. 2012-02, *Intangibles- Goodwill and Other- Testing Indefinite-Lived Intangible Assets for Impairment (ASU 2012-02)*. Under the amendments in this update, we have the option first to assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the indefinite-lived intangible asset is impaired. If, after assessing the totality of events or circumstances, we conclude that it is not more likely than not that the indefinite-lived intangible asset is impaired, then we are not required to take further action. However, if we conclude otherwise, then we are required to determine the fair value of the indefinite-lived intangible asset and perform the quantitative impairment test by comparing the fair value with the carrying amount in accordance with subtopic 350-30. Under the amendments in this update, we have the option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to performing the quantitative impairment test. We may resume performing the qualitative assessment in

any subsequent period. The provisions of this update will be effective for us in fiscal years beginning after September 15, 2012, and for the interim periods within fiscal years with early adoption permitted. We believe adoption of this new guidance will not have a material impact on our consolidated results of operations or financial position.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

The majority of our manufacturing and testing of products occurs in our facilities in the United States, the United Kingdom, Germany, Sweden 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.

We are exposed to market risk from changes in interest rates primarily through our financing activities. As of September 30, 2012, we had $15.3 million outstanding under our revolving credit facility. On September 30, 2011, we entered into the First Amendment with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co. as lenders. The First Amendment extended the maturity date of our credit facility to August 7, 2013 and reduced our interest rate to LIBOR plus 3.0%. On October 4, 2012, we entered into the Second Amendment with Bank of America as agent, and Bank of America and Brown Brothers Harriman & Co as lenders. The Second Amendment extends the maturity date of our credit facility to August 7, 2014 with no changes to other terms. At September 30, 2012, the interest rate on our debt was 3.22%. Assuming no other changes which would affect the margin of the interest rate under our revolving credit facility, the effect of interest rate fluctuations on outstanding borrowings under our revolving credit facility as of September 30, 2012 over the next twelve months is quantified and summarized as follows:

If compared to the rate as of September 30, 2012	**Interest expense increase** (in thousands)
Interest rates increase by 1%	$ 153
Interest rates increase by 2%	$ 306

Item 4. Controls and Procedures.

Disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) are designed to ensure that information required to be disclosed in reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms and that such information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures.

As required by Rules 13a-15(e) and 15d-15(e) under the Exchange Act, our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2012. 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 Quarterly Report on Form 10-Q, 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 accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures, and 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 third quarter ended September 30, 2012 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, 2011, which was filed with the SEC on March 15, 2012.

Item 6. Exhibits

Exhibit Index	
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.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB**	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document

\+ 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.

** XBRL (Extensive Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

SIGNATURES

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

Date: November 8, 2012

HARVARD BIOSCIENCE, INC.

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

By: /S/ THOMAS MCNAUGHTON
Thomas McNaughton
Chief Financial Officer

Exhibit 31.1

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 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: November 8, 2012

/s/ Thomas McNaughton

Thomas McNaughton
Chief Financial Officer

Exhibit 31.2

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 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: November 8, 2012

/s/ Chane Graziano

Chane Graziano
Chief Executive Officer

Exhibit 32.1

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 September 30, 2012 (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: November 8, 2012

/s/ Thomas McNaughton
Name: Thomas McNaughton
Title: Chief Financial Officer

Exhibit 32.2

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 September 30, 2012 (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: November 8, 2012

/s/ Chane Graziano

Name: Chane Graziano
Title: Chief Executive Officer