UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 23, 2010

HARVARD BIOSCIENCE, INC.

(Exact name of registrant as specified in charter)

Delaware (State or other jurisdiction of incorporation) 000-31923 (Commission File Number) 04-3306140 (IRS Employer Identification No.)

84 October Hill Road, Holliston, MA (Address of principal executive offices)

(508) 893-8999

(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

01746 (Zip Code)

Item 7.01 Regulation FD Disclosure.

On April 23, 2010, Harvard Bioscience, Inc. (the "Company") mailed its 2009 Annual Report (the "Annual Report") to stockholders. Excerpts from the Annual Report are furnished hereto as Exhibit 99.1 and incorporated by reference into this Item 7.01 in satisfaction of the public disclosure requirements of Regulation FD.

The information set forth in this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number

99.1

Excerpts from Annual Report

Title

SIGNATURES

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

HARVARD BIOSCIENCE, INC.

Date: April 23, 2010

By:

/S/ THOMAS MCNAUGHTON Thomas McNaughton Chief Financial Officer 99.1 Excerpts from Annual Report

Title

DEAR FELLOW SHAREHOLDERS

Despite the tough economic conditions of 2009, revenues were up 3% and non-GAAP adjusted diluted earnings per share was \$0.31 on a constant currency basis as we continued with our growth strategy of organic growth through internal development of new products and new markets, acquisition growth and operational improvements.¹

2009 MAJOR ACCOMPLISHMENTS:

- In September 2009, we completed the acquisition of Denville Scientific, which had annual revenues of approximately \$23 million and over the last ten years a compound annual growth rate of 15%.
- We introduced two major new infusion pumps at Harvard Apparatus and continued to develop additional major new products for launch in 2010.
- We entered the emerging field of regenerative medicine with the license of a novel bioreactor, which was previously used to perform the world's first human transplant of a tissue engineered bronchus. We believe this product will make possible a wide range of research, and potentially clinical, applications of tissue engineered hollow organs. We also began collaborations with several key scientists working to advance regenerative medicine.
- We continued with the consolidation of some of our core business units to improve the efficiency of these operations.
- We repurchased approximately 0.8 million shares of our common stock during 2009, which when aggregated with prior year purchases under our stock repurchase program, totaled approximately 1.7 million shares.

We remain committed to being a leading manufacturer of specialty products used to advance life science research and we see the emerging field of regenerative medicine as a potential long-term growth opportunity for Harvard Bioscience.

We believe we are well positioned to achieve our growth objectives to double revenue and profits in the next three to five years.

See Exhibit II for reconciliation of US GAAP diluted earnings per common share from continuing operations to non-GAAP constant currency adjusted diluted earnings per common share from continuing operations on inside the back cover of this annual report. (see below)

EXHIBIT II

1

HARVARD BIOSCIENCE, INC.

Reconciliation of US GAAP Diluted Earnings Per Common Share from Continuing Operations to Non-GAAP Constant Currency Adjusted Diluted Earnings Per Common Share from Continuing Operations (unaudited)

	For the year ended December 31, 2009		
US GAAP diluted earnings per common share from continuing operations	\$ 0.24		
Adjustments:			
Effect of currency translation	0.01		
Amortization of intangible assets	0.06		
Inventory write-down due to restructuring	0.01		
Direct acquisition costs	0.01		
Gain from adjustment of acquisition contingencies	(0.09)		
Restructuring charges	0.02		
Stock-based compensation expense	0.08		
Income taxes (A)	(0.03)		
Non-GAAP adjusted diluted earnings per common share from continuing operations	\$ 0.31		

(A) Income taxes includes the tax effect of adjusting for the reconciling items and the utilization of deferred tax assets that have full valuation allowances.

OUR COMPANY

Tools to Advance Life Science Research and Regenerative Medicine

Harvard Bioscience is a global developer, manufacturer and marketer of a broad range of specialized scientific products used to advance life science research. In 2009, we started developing new versions of our market leading research products for the emerging field of regenerative medicine. Regenerative medicine means using stem cells to repair damaged tissue in the body and also growing organs outside the body for transplant. The US Department of Health and Human Services states, "...the US market for regenerative medicine is estimated at \$100 billion." In early 2010 we launched our first regenerative medicine product, a bioreactor previously used to perform the world's first human transplant of a tissue engineered bronchus. We believe that regenerative medicine represents a long-term growth opportunity for us.

In the twelve years under our current management team, revenue has grown at a compound annual rate of approximately 18% and our non-GAAP adjusted operating income from continuing operations has grown at a compound annual growth rate of approximately 16%.² This is despite two major recessions during this period.

Our goal is to become a leading provider of tools for life science research and regenerative medicine. We focus on relatively low price point products to avoid the volatility of capital equipment. We also focus on strong brand names like Harvard Apparatus, Hoefer and Denville Scientific to help communicate the value of our products to our research customers.

Our growth strategy is to combine organic growth (driven by new product development and distribution channel expansion) with tuckunder acquisitions and operational improvements. We have acquired 20 companies since 1997. We believe that implementing this strategy will lead to growth in non-GAAP earnings per diluted share of 15-25% on average over the next three to five years.

We believe we have a strong balance sheet, a conservative approach to financing and the financial resources to implement this tuckunder acquisition strategy.

Both our company and our management team have a strong commitment to shareholder value creation. Our management team collectively holds approximately 18% of our outstanding shares. We have a \$10 million share repurchase program under which we have repurchased approximately 6% of the shares outstanding.

We believe our strategy has produced a relatively high level of earnings per share growth with a relatively high level of consistency. We believe the regenerative medicine opportunity could have long-term growth potential.

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

² See the inside front cover of this annual report for a reconciliation of the twelve-year revenue compound annual growth rate from continuing operations and the non-GAAP twelve-year adjusted operating income from continuing operations compound annual growth rate from 1997 to 2009. (see below)

From Inside Front Cover of Annual Report

	For the years ended December 31,											
	1997 1998	1999	2000 (IPO)	2001	2002	2003	2004	2005	2006	2007	2008	2009
	(\$US in thousands, unaudited)											
Revenues	\$11,464 \$12,154	\$26,178	\$ 30,575	\$38,088	\$47,009	\$52,024	\$64,745	\$67,431	\$76,181	\$83,407	\$88,049	\$85,772

Revenue twelve-year compound annual growth rate from 1997 to 2009: 18.3%

	For the years ended December 31,												
Reconciliation of US GAAP to <u>Non-GAAP Adju</u> sted:	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
US GAAP operating income (loss)	\$ 2,119	\$ 2,412	\$ 1,196	\$(10,438)	\$ 3,112	\$ 5,425	\$ 7,173	\$ 8,384	\$ 7,924	\$ 8,690	\$ 9,533	\$ 8,479	\$ 8,055
Restructuring and severance related expenses	_		_			474			302	_		1,771	516
Inventory write-down due to restructuring		_	_		_			_		_		252	159
Stock compensation expense			3,284	14,676	2,656	1,269	519	69		1,934	2,335	2,003	2,514
In-process research and development expense		_	_		159	_		_		_		_	_
Amortization of intangible assets		27	368	604	956	595	891	1,582	1,664	1,697	1,824	1,966	1,844
Fair value adjustments to costs of product sales							336	258		50	61		_
Non-GAAP adjusted operating income	\$ 2,119	\$ 2,439	\$ 4,848	\$ 4,842	\$ 6,883	\$ 7,763	\$ 8,919	\$10,293	\$ 9,890	\$12,371	\$13,753	\$14,471	\$13,088

Non-GAAP twelve-year adjusted operating income from continuing operations compound annual growth rate from 1997 to 2009:16.4%

Forward-Looking Statements

This Annual Report contains forward-looking statements, which can be identified by our use of "guidance," "objectives," "emerging," "long-term," "growth," "potential," "future," "expects," "plans," "achieve," "could," "will," "lead," "opportunity," "estimate," "continue," "strategy," "intend," "believe," "see" and similar expressions. Such statements include, but are not limited to, statements or inferences about our beliefs, plans or objectives, our anticipated future revenues and earnings, the strength of our market position and business model, the outlook for the life sciences industry and the field of regenerative medicine, our ability to execute our business strategy, our positioning for growth and the market demand and opportunity for our products.

These statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual performance to be materially different from any future performance expressed or implied by the forward-looking statements. Such factors include our failure to consummate acquisitions, expand our product offerings or introduce new products, including in the field of regenerative medicine, the current and anticipated size of the regenerative medicine market, our ability to manage our growth, and factors described under "Item 1A. Risk Factors" in our 2009 Form 10-K or in our other public filings.