
OMB APPROVAL

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13G

Under The Securities Exchange Act of 1934

(AMENDMENT NO. 4)*

Harvard BioScience Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

416906105

(CUSIP Number)

December 31, 2004

(Date of Event which requires filing of this statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

\x\ Rule 13d-1(b)

\ \ Rule 13d-1(c)

\ \ Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO OF ABOVE PERSON
Kern Capital Management, LLC
13-3958232

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*
(a) / /
(b) / /

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER	2,380,500
	6	SHARED VOTING POWER	-
	7	SOLE DISPOSITIVE POWER	2,380,500
	8	SHARED DISPOSITIVE POWER	-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
2,380,500

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*
-

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9
7.8%

12 TYPE OF REPORTING PERSON*
IA

*SEE INSTRUCTION BEFORE FILLING OUT!

1 NAME OF REPORTING PERSON
 S.S. OR I.R.S. IDENTIFICATION NO OF ABOVE PERSON
 Robert E Kern Jr.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(c) / /

(d) / /

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

5 SOLE VOTING POWER

NUMBER OF
 SHARES BENEFICIALLY
 OWNED BY
 EACH
 REPORTING
 PERSON WITH

-

6 SHARED VOTING POWER

2,380,500 - (See Schedule Item 4
 incorporated by reference)

7 SOLE DISPOSITIVE POWER

-

8 SHARED DISPOSITIVE POWER

2,380,500 - (See Schedule Item 4
 incorporated by reference)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,380,500 - (See Schedule Item 4
 incorporated by reference)

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

-

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

7.8%

12 TYPE OF REPORTING PERSON*

IN

*SEE INSTRUCTION BEFORE FILLING OUT!

1 NAME OF REPORTING PERSON
 S.S. OR I.R.S. IDENTIFICATION NO OF ABOVE PERSON
 David G. Kern

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(e) / /

(f) / /

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

	5	SOLE VOTING POWER	-
NUMBER OF			
SHARES BENEFICIALLY			
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING		2,380,500 - (See Schedule Item 4	
PERSON WITH		incorporated by reference)	
	7	SOLE DISPOSITIVE POWER	
			-
	8	SHARED DISPOSITIVE POWER	
		2,380,500 - (See Schedule Item 4	
		incorporated by reference)	

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,380,500 - (See Schedule Item 4
 incorporated by reference)

10 CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

-

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

7.8%

12 TYPE OF REPORTING PERSON*

IN

*SEE INSTRUCTION BEFORE FILLING OUT!

- ITEM 1 (a). NAME OF ISSUER:
Harvard BioScience Inc.
- ITEM 1 (b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:
84 October Hill Rd
Holliston, MA 01746
- ITEM 2 (c). NAME OF PERSON FILING:
Kern Capital Management, LLC ("KCM"), Robert E. Kern Jr.(R. Kern)
and David G. Kern (D. Kern). R. Kern, D. Kern are Principals
and controlling members of KCM.
- ITEM 2 (b). ADDRESS OR PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:
The address of the principal business office of each reporting
person is: 114 West 47th Street, Suite 1926, New York, NY 10036.
- ITEM 2 (c). CITIZENSHIP:
Reference is made to Item 4 of each of the cover page of this
Schedule, which Items are incorporated by reference herein.
- ITEM 2 (d). TITLE OF CLASS OF SECURITIES:
Common Stock
- ITEM 2 (e). CUSIP NUMBER:
416906105
- ITEM 3 (e) THE PERSONS FILING THIS SCHEDULE, PURSUANT TO
PARAGRAPH 240.13d-1(b) ARE A:
(X) Investment Advisor registered under section 203 of the
Investment Advisors Act of 1940.
- ITEM 4. OWNERSHIP:
Reference is made to Items 5-9 and 11 of cover pages which
Items are incorporated by reference herein.
- R. Kern and D. Kern as controlling members of KCM may be
deemed the beneficial owner of the securities of the company
owned by KCM as of December 31, 2004 in that they might be
deemed to share the power to direct the voting or disposition
of the securities. Neither the filing of this Schedule nor any
of its contents shall be deemed to constitute an admission
that either R. Kern or D. Kern is, for any purpose, the
beneficial owner of any such securities to which this Schedule
relates, and such beneficial ownership is expressly denied.

ITEM 5. OWNERSHIP OF MORE THAN FIVE PERCENT OR LESS OF A CLASS:
If this statement is being filed to report the fact that as of the date here of the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following / /.

Not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:
The shares reported are held in institutional accounts for the economic benefit of the beneficiaries of those accounts.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY:

Not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP:
Not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP:
Not applicable.

ITEM 10. CERTIFICATION:
BY SIGNING BELOW I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE SECURITIES REFERRED TO ABOVE WERE ACQUIRED AND ARE HELD IN THE ORDINARY COURSE OF BUSINESS AND WERE NOT ACQUIRED AND ARE NOT HELD FOR THE PURPOSE OF OR WITH THE EFFECT OF CHANGING OR INFLUENCING THE CONTROL OF THE ISSUER OF SUCH THE SECURITIES AND WERE NOT ACQUIRED AND ARE NOT HELD IN CONNECTION WITH OR AS A PARTICIPANT IN ANY TRANSACTION HAVING SUCH PURPOSES OR EFFECT.

SIGNATURE:
AFTER REASONABLE INQUIRY AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, I CERTIFY THAT THE INFORMATION SET FORTH IN THIS STATEMENT IS TRUE, COMPLETE AND CORRECT.

February 14, 2005

DATED

/s/ John J. Crimmins
By: -----
John J. Crimmins
Senior Vice President
Chief Financial & Operations Officer
Kern Capital Management LLC

/s/ Robert E. Kern Jr.
By: -----
Robert E. Kern Jr.

/s/ David G. Kern
By: -----
David G. Kern

EXHIBIT 1

AGREEMENT AS TO JOINT FILING OF SCHEDULE 13G

This agreement is made pursuant to Rule 13d-1(f)(1) under the Securities and Exchange Act of 1934, as amended (the "Act"), by and among the parties listed below, each referred to herein as "Joint Filer". The Joint Filers agree that a statement of beneficial ownership as required by Section 13(d) of the Act and the Rules thereunder may be filed on each of their behalf on Schedule 13G and that said joint filing may thereafter be amended by further joint filings. The Joint Filers state that they each satisfy the requirements for making a joint filing under rule 13d-1.

February 14, 2005

DATED

By: /s/ John J. Crimmins

John J. Crimmins
Senior Vice President
Chief Financial & Operations Officer
Kern Capital Management LLC

By: /s/ Robert E. Kern Jr.

Robert E. Kern Jr.

By: /s/ David G. Kern

David G. Kern