

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. 2)*

Harvard Bioscience Inc.
(Name of Issuer)

Common Stock, .01 Par Value
(Title of Class of Securities)

416906105
(CUSIP Number)

Check the following box if a fee is being paid with this statement []. (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

* 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 disclosure 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).

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

CUSIP No. **416906105**

1) Name of Reporting Persons
S.S. or I.R.S. Identification Nos. of Persons

Kopp Investment Advisors, LLC
I.D. No. 76-0744828

2) Check the appropriate box if a Member of a Group (See Instructions)

(a)

(b)

3) SEC Use Only

4) Citizenship or Place of Organization:

Minnesota

Number of shares Beneficially Owned by Each Reporting Person With:

5) Sole Voting Power: **2,343,480**

6) Shared Voting Power:

7) Sole Dispositive Power: **703,000**

8) Shared Dispositive Power: ***2,221,380**

9) Aggregate Amount Beneficially Owned by Each Reporting Person

3,026,880

10) Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares (See instructions) []

11) Percent of Class Represented by Amount in Row (9):

Approx. 10.0%

14) Type of Reporting Person

IA

*Although Kopp Investment Advisors, Inc. exercises investment discretion as to these shares, it is not the owner of them.

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

CUSIP No. **416906105**

1) Name of Reporting Persons

S.S. or I.R.S. Identification Nos. of Persons

Kopp Holding Company, LLC
I.D. No. 52-2421382

2) Check the appropriate box if a Member of a Group (See Instructions)

(a)

(b)

3) SEC Use Only

4) Citizenship or Place of Organization:

Minnesota

Number of shares Beneficially Owned by Each Reporting Person With:

5) Sole Voting Power:

6) Shared Voting Power:

7) Sole Dispositive Power:

8) Shared Dispositive Power:

9) Aggregate Amount Beneficially Owned by Each Reporting Person

3,026,880

10) Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares (See instructions) []

11) Percent of Class Represented by Amount in Row (9):

Approx. 10.0%

14) Type of Reporting Person

HC

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

CUSIP No. **416906105**

1) Name of Reporting Persons

S.S. or I.R.S. Identification Nos. of Persons

Kopp Holding Company
I.D. No. 41-1875362

2) Check the appropriate box if a Member of a Group (See Instructions)

(a)

(b)

3) SEC Use Only

4) Citizenship or Place of Organization:

Minnesota

Number of shares Beneficially Owned by Each Reporting Person With:

5) Sole Voting Power:

6) Shared Voting Power:

7) Sole Dispositive Power:

8) Shared Dispositive Power:

9) Aggregate Amount Beneficially Owned by Each Reporting Person

3,026,880

10) Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares (See instructions) []

11) Percent of Class Represented by Amount in Row (9):

Approx. 10.0%

14) Type of Reporting Person

HC

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

CUSIP No. **416906105**

1) Name of Reporting Persons

S.S. or I.R.S. Identification Nos. of Persons

LeRoy C. Kopp

2) Check the appropriate box if a Member of a Group (See Instructions)

(a)

(b)

3) SEC Use Only

4) Citizenship or Place of Organization:

United States

Number of shares Beneficially Owned by Each Reporting Person With:

5) Sole Voting Power: **240,000**

6) Shared Voting Power:

7) Sole Dispositive Power: **240,000**

8) Shared Dispositive Power:

9) Aggregate Amount Beneficially Owned by Each Reporting Person

3,164,380

10) Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares (See instructions) []

11) Percent of Class Represented by Amount in Row (9):

Approx. 10.4%

14) Type of Reporting Person

IN

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Item 1(a). Name of Issuer.

Harvard Bioscience Inc.

Item 1(b). Address of Issuer's Principal Executive Offices.

**84 October Hill Road
Holliston, MA 01746**

Item 2(a). Name of Person Filing.

- 1. Kopp Investment Advisors, LLC**
- 2. Kopp Holding Company, LLC**
- 3. Kopp Holding Company**
- 4. LeRoy C. Kopp**

This Statement is filed by Kopp Investment Advisors, LLC, on behalf of all of the above persons pursuant to Rule 13d-1(k). Attached is an agreement in writing among the above persons that this Statement be so filed on behalf of each of them. KIA is an investment adviser registered under the Investment Advisers Act of 1940. It is wholly-owned by Kopp Holding Company, LLC which is controlled by Mr. Kopp through Kopp Holding Company.

Item 2(b), 2(c), 2(d), and 2(e). Address of Principal Business Office; Citizenship; Title of Class of Securities; CUSIP Number.

All reporting persons may be contacted at 7701 France Avenue South, Suite 500, Edina, MN 55435. Kopp Investment Advisors, LLC and Kopp Holding Company, LLC are Minnesota limited liability companies. Kopp Holding Company is a Minnesota business corporation. Mr. Kopp is a United States citizen. This report pertains to the Common Shares, .01 par value, of Harvard Bioscience Inc., CUSIP #416906105.

Item 3.

This statement is filed pursuant to Rule 13d-1(b). The persons filing are an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 and two parent holding companies and a control person in accordance with 13d-1 (b) (ii) (G).

Item 4. Ownership as of 12/31/04:

The information contained in Items 5 - 11 on the cover pages is incorporated herein by reference.

The filing of this Statement shall be **NOT** be construed as an admission that the persons filing are beneficial owners of the shares covered by this Statement for any purpose, including purposes of Sections 13, 14 or 16 of the Securities Exchange Act of 1934, as amended.

Item 5. Ownership of Five Percent or Less of a Class.

N/A

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Of the shares covered by this Statement, **2,924,380** are held in a fiduciary or representative capacity. Accordingly, persons other than the reporting persons have the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of, such sales. No person individually has an interest that relates to more than five percent of the class.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on By the Parent Holding Company.

N/A

Item 8. Identification and Classification of Members of the Group.

N/A

Item 9. Notice of Dissolution of Group.

N/A

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired 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.

Date: **01/24/05**

KOPP INVESTMENT ADVISORS, LLC

By:

John P. Flakne, Chief Financial Officer

AGREEMENT

The undersigned hereby agrees that the Statement on Schedule 13G to which this Agreement is attached be filed on behalf of Kopp Investment Advisors, LLC, a Minnesota limited liability company; Kopp Holding Company, LLC, a Minnesota limited liability company, of which Kopp Investment Advisors, LLC is a wholly-owned subsidiary; and LeRoy C. Kopp, who holds 100% of the outstanding capital stock of Kopp Holding Company.

Dated: **01/24/05**

KOPP INVESTMENT ADVISORS, LLC

By:

LeRoy C. Kopp
Title: Chief Executive Officer

LeRoy C. Kopp

KOPP HOLDING COMPANY, LLC

By:

LeRoy C. Kopp, Chief Executive Officer

KOPP HOLDING COMPANY

By:

John P. Flakne, CFO