

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

SCHEDULE 14A
(Rule 14a-101)

Information Required in Proxy Statement

Schedule 14a Information

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

(Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Under Rule 14a-12

Harvard Bioscience, Inc.

Payment of Filing Fee (Check all boxes that apply):

- No fee required
 - Fee paid previously with preliminary materials
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11
-



HARVARD BIOSCIENCE, INC.
84 October Hill Road
Holliston, Massachusetts 01746-1371

April 5, 2023

Dear Stockholder:

You are cordially invited to attend the 2023 Annual Meeting of Stockholders of Harvard Bioscience, Inc. (the “Annual Meeting”) to be held on Monday, May 15, 2023 at 11:00 a.m. EDT. The Annual Meeting will be held by virtual meeting only. You will not be able to attend the Annual Meeting in person. To be admitted to the Annual Meeting at www.virtualshareholdermeeting.com/HBIO2023, you must enter the control number found on your proxy card, voting instruction form or notice you previously received. You may vote during the Annual Meeting by following the instructions available on the meeting website during the meeting. At the meeting, we will be voting on the matters described in the accompanying proxy statement.

We are using the Internet as our primary means of furnishing the proxy materials to our stockholders. This process expedites the delivery of proxy materials, ensures materials remain easily accessible to stockholders, and allows stockholders to receive clear instructions for receiving materials and voting.

We are mailing the Notice of Internet Availability of Proxy Materials to stockholders on or about April 5, 2023. The proxy statement and our Annual Report on Form 10-K for the year ended December 31, 2022, are available at www.proxyvote.com.

The Notice of Internet Availability of Proxy Materials contains instructions for our stockholders’ use of this process, including how to access or receive copies of our proxy statement and 2022 Annual Report and how to vote by Internet or mail. To the extent you receive a proxy card, such proxy card will also contain instructions on how to vote, including the option to vote by telephone.

If you are unable to attend the meeting virtually, it is still important that your shares be represented and voted. Therefore, regardless of the number of shares you own, PLEASE VOTE THROUGH THE INTERNET, BY TELEPHONE OR BY MAIL. Any stockholder who attends the meeting virtually may vote through the meeting website, even if he or she has already voted through the Internet, by telephone or by mail.

The Board of Directors has fixed the close of business on March 21, 2023 as the record date for determination of stockholders entitled to notice of, and to vote at, the Annual Meeting and any adjournments or postponements thereof.

YOUR VOTE IS IMPORTANT. OUR ANNUAL MEETING WILL BE HELD AS A VIRTUAL MEETING. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING VIRTUALLY, PLEASE CAST YOUR VOTE ONLINE, BY TELEPHONE OR BY COMPLETING, DATING, SIGNING AND PROMPTLY RETURNING YOUR PROXY CARD OR VOTING INSTRUCTION CARD IN THE POSTAGE-PAID ENVELOPE (WHICH WILL BE PROVIDED TO THOSE STOCKHOLDERS WHO REQUEST TO RECEIVE PAPER COPIES OF THESE MATERIALS BY MAIL) BEFORE THE ANNUAL MEETING SO THAT YOUR SHARES ARE REPRESENTED AT THE ANNUAL MEETING.

Sincerely,

A handwritten signature in dark ink, appearing to read 'J. Green', written in a cursive style.

James W. Green
*Chairman of the Board, President and Chief
Executive Officer*



HARVARD BIOSCIENCE, INC.
84 October Hill Road
Holliston, Massachusetts 01746-1371
(508) 893-8999

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on Monday, May 15, 2023

NOTICE IS HEREBY GIVEN that the 2023 Annual Meeting of Stockholders (the “Annual Meeting”) of Harvard Bioscience, Inc. (the “Company”) will be held on May 15, 2023 at 11:00 a.m. EDT. The Annual Meeting will be held by virtual meeting only. You will not be able to attend the Annual Meeting in person. To be admitted to the Annual Meeting at www.virtualshareholdermeeting.com/HBIO2023, you must enter the control number found on your proxy card, voting instruction form or notice you previously received. You may vote during the Annual Meeting by following the instructions available on the meeting website during the meeting. The Annual Meeting will be held for the following purposes:

1. The election of two Class II Directors named in the accompanying proxy statement, nominated by the Board of Directors for a three-year term, such term to continue until the annual meeting of stockholders in 2026 and until such Director’s successor is duly elected and qualified or until his or her earlier resignation or removal;
2. The ratification of the appointment of Grant Thornton LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2023;
3. Approval, by a non-binding advisory vote, of the compensation of our named executive officers;
4. Recommendation, by a non-binding advisory vote, of the frequency (one, two or three years) of the shareholder vote to approve the compensation of the Company’s named executive officers; and
5. Such other business as may properly come before the Annual Meeting and any adjournments or postponements thereof.

The Board of Directors has fixed the close of business on March 21, 2023 as the record date for determination of stockholders entitled to notice of, and to vote at, the Annual Meeting and any adjournments or postponements thereof. Only holders of our Common Stock of record at the close of business on that date will be entitled to notice of, and to vote at, the Annual Meeting and any adjournments or postponements thereof. Each of the items of business listed above is more fully described in the proxy statement that accompanies this notice.

The Board of Directors of Harvard Bioscience, Inc. recommends that you vote:

- “FOR” the election of the nominees of the Board of Directors as Directors of the Company;
 - “FOR” the proposal to ratify the appointment of Grant Thornton LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2023;
 - “FOR” the proposal to approve, by a non-binding advisory vote, of the compensation of our named executive officers; and
 - “FOR” the proposal to recommend, by a non-binding advisory vote, 1 year as the frequency of the shareholder vote to approve the compensation of the Company’s named executive officers.
-

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on May 15, 2023. The proxy statement and the Annual Report on Form 10-K for the year ended December 31, 2022 are available at www.proxyvote.com. The Annual Report, however, is not part of the proxy solicitation material.

By Order of the Board of Directors,



James W. Green
*Chairman of the Board, President and Chief
Executive Officer*

Holliston, Massachusetts
April 5, 2023

YOUR VOTE IS IMPORTANT. OUR ANNUAL MEETING WILL BE HELD AS A VIRTUAL MEETING. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING VIRTUALLY, PLEASE CAST YOUR VOTE ONLINE, BY TELEPHONE OR BY COMPLETING, DATING, SIGNING AND PROMPTLY RETURNING YOUR PROXY CARD OR VOTING INSTRUCTIONS CARD IN THE POSTAGE-PAID ENVELOPE (WHICH WILL BE PROVIDED TO THOSE STOCKHOLDERS WHO REQUEST TO RECEIVE PAPER COPIES OF THESE MATERIALS BY MAIL) BEFORE THE ANNUAL MEETING SO THAT YOUR SHARES ARE REPRESENTED AT THE ANNUAL MEETING.

Harvard Bioscience, Inc.
Proxy Statement

Table of Contents

	Page
<u>PROXY STATEMENT</u>	<u>1</u>
<u>PROPOSAL 1 ELECTION OF DIRECTORS</u>	<u>3</u>
<u>INFORMATION REGARDING DIRECTORS</u>	<u>4</u>
<u>INFORMATION REGARDING THE BOARD OF DIRECTORS AND ITS COMMITTEES</u>	<u>6</u>
<u>CODE OF BUSINESS CONDUCT AND ETHICS</u>	<u>11</u>
<u>ENVIRONMENTAL, SOCIAL, AND GOVERNANCE</u>	<u>11</u>
<u>REPORT OF THE AUDIT COMMITTEE</u>	<u>12</u>
<u>DIRECTOR COMPENSATION</u>	<u>13</u>
<u>INFORMATION ABOUT OUR EXECUTIVE OFFICERS</u>	<u>14</u>
<u>COMPENSATION DISCUSSION AND ANALYSIS</u>	<u>15</u>
<u>2022 SUMMARY COMPENSATION TABLE</u>	<u>20</u>
<u>OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END—2022</u>	<u>22</u>
<u>PAY VERSUS PERFORMANCE</u>	<u>25</u>
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	<u>27</u>
<u>EQUITY COMPENSATION PLAN INFORMATION</u>	<u>29</u>
<u>TRANSACTIONS WITH RELATED PERSONS</u>	<u>29</u>
<u>DELINQUENT SECTION 16(A) REPORTS</u>	<u>29</u>
<u>STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS</u>	<u>29</u>
<u>INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	<u>30</u>
<u>PROPOSAL 2 RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	<u>30</u>
<u>PROPOSAL 3 ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS</u>	<u>31</u>
<u>PROPOSAL 4 ADVISORY VOTE ON FREQUENCY OF FUTURE ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS</u>	<u>32</u>
<u>SUBMISSION OF STOCKHOLDER PROPOSALS FOR THE 2024 ANNUAL MEETING</u>	<u>32</u>
<u>MULTIPLE STOCKHOLDERS SHARING THE SAME ADDRESS</u>	<u>33</u>
<u>OTHER MATTERS</u>	<u>33</u>

HARVARD BIOSCIENCE, INC.
84 October Hill Road
Holliston, Massachusetts 01746-1371
(508) 893-8999

PROXY STATEMENT

Annual Meeting of Stockholders to Be Held on Monday, May 15, 2023

This proxy statement is furnished in connection with the solicitation of proxies by the Board of Directors (the “Board”) of Harvard Bioscience, Inc. (the “Company” or “we”) for use at the 2023 Annual Meeting of Stockholders of the Company (the “Annual Meeting”) to be held on May 15, 2023, at 11:00 a.m. EDT, and any adjournments or postponements thereof. The Annual Meeting will be held by virtual meeting only. You will not be able to attend the Annual Meeting in person.

To be admitted to the Annual Meeting at www.virtualshareholdermeeting.com/HBIO2023, you must enter the control number found on your proxy card, voting instruction form or notice you previously received. You may vote during the Annual Meeting by following the instructions available on the meeting website during the meeting.

At the Annual Meeting, the stockholders of the Company will be asked to consider and vote upon:

1. The election of two Class II Directors named in this proxy statement, nominated by the Board for a three-year term, such term to continue until the annual meeting of stockholders in 2026 and until such Director’s successor is duly elected and qualified or until his or her earlier resignation or removal;
2. The ratification of the appointment of Grant Thornton LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2023;
3. Approval, by a non-binding advisory vote, of the compensation of our named executive officers;
4. Recommendation, by a non-binding advisory vote, of the frequency (one, two or three years) of the shareholder vote to approve the compensation of our named executive officers; and
5. Such other business as may properly come before the Annual Meeting and any adjournments or postponements thereof.

We are furnishing proxy materials, which include our proxy statement and our Annual Report on Form 10-K for the year ended December 31, 2022 (the “Annual Report”), to our stockholders over the Internet, and providing a Notice of Internet Availability of Proxy Materials (the “Notice”) by mail. We believe that this e-proxy process expedites stockholders’ receipt of proxy materials, including our proxy statement and Annual Report, while lowering the costs and reducing the environmental impact of our annual meeting. The Notice is first being mailed to stockholders of the Company on or about April 5, 2023, in connection with the solicitation of proxies for the Annual Meeting. The Board of Directors has fixed the close of business on March 21, 2023 as the record date for the determination of stockholders entitled to notice of, and to vote at, the Annual Meeting (the “Record Date”). Only holders of Common Stock, par value \$0.01 per share, of the Company (the “Common Stock”) of record at the close of business on the Record Date will be entitled to notice of, and to vote at, the Annual Meeting. As of the Record Date, there were 41,190,043 shares of Common Stock outstanding and entitled to vote at the Annual Meeting. Each holder of a share of Common Stock outstanding as of the close of business on the Record Date will be entitled to one vote for each share held of record with respect to each matter properly submitted at the Annual Meeting.

The presence, virtually online or by proxy, of holders of at least a majority of the total number of outstanding shares of Common Stock entitled to vote is necessary to constitute a quorum for the transaction of business at the Annual Meeting. Shares held of record by stockholders or their nominees who do not return a signed and dated proxy, properly deliver proxies via the Internet or telephone, or attend the Annual Meeting virtually will not be considered present or represented at the Annual Meeting and will not be counted in determining the presence of a quorum. Consistent with applicable law, we intend to count abstentions and broker non-votes only for the purpose of determining the presence or absence of a quorum for the transaction of business.

A broker “non-vote” refers to shares held by a broker or nominee that does not have the authority, either express or discretionary, to vote on a particular matter. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote the shares with respect to matters that are considered to be “routine,” but not with respect to “non-routine” matters. Proposal No. 2, the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023, is considered “routine” under applicable rules. A broker or other nominee may generally vote on routine matters without voting instructions from beneficial owners, and therefore no broker non-votes are expected to exist in connection with Proposal 2. The remaining proposals are considered “non-routine” under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on those proposals. Accordingly, if you own shares in street name through a broker, bank or other nominee, please be sure to provide voting instructions to your nominee to ensure that your vote is counted on each of the proposals.

With respect to Proposal No. 1, the election of two Class II Directors, such Directors are elected by a plurality of the votes cast if a quorum is present. Votes may be cast for or withheld from the Directors. In a plurality election, votes may only be cast in favor of or withheld from each nominee; votes that are withheld will be excluded entirely from the vote and will have no effect. This means that the person receiving the highest number of “FOR” votes will be elected as Director.

Approval of Proposal Nos. 2 (the ratification of the appointment of Grant Thornton LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2023) and 3 (approval, by a non-binding advisory vote, of the compensation of our named executive officers) require the affirmative vote of a majority of the votes cast at the Annual Meeting virtually online or by proxy.

With respect to Proposal No. 4, the advisory vote on the frequency of future advisory votes on the compensation for our named executive officers, the alternative (one year, two years or three years) receiving the highest number of votes cast at the Annual Meeting virtually online or by proxy, will be considered the frequency recommended by stockholders.

Any shares not voted (whether by abstention, broker non-vote or otherwise) will have no impact on the election of the Directors, except to the extent that the failure to vote for an individual results in another individual receiving a larger percentage of votes, and no impact on the voting results of each other matter expected to be voted on at the Annual Meeting.

You will not receive a printed copy of the proxy materials unless you request to receive these materials in hard copy by following the instructions provided in the Notice. Instead, the Notice will instruct you how you may access and review all of the important information contained in the proxy materials. The Notice also instructs you how you may submit your proxy via the Internet or mail. To the extent you receive a proxy card, such proxy card will also contain instructions on how you may also vote by telephone (in addition to voting by Internet or mail). If you received a Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting such materials included in the Notice.

We encourage you to vote either online, by telephone or by completing, signing, dating and returning a proxy card, or if you hold your shares through a broker or nominee, by completing and returning a voting instruction form. This ensures that your shares will be voted at the Annual Meeting and reduces the likelihood that we will be forced to incur additional expenses soliciting proxies for the Annual Meeting.

Voting over the Internet, by telephone or mailing a proxy card will not limit your right to vote virtually online or to attend the Annual Meeting virtually. Any record holder as of the Record Date may attend the Annual Meeting virtually and may revoke a previously provided proxy at any time by: (i) submitting a new vote on the Internet or by telephone or submitting a properly completed proxy card with a later date; (ii) sending written notice that you are revoking your proxy to the corporate secretary at Harvard Bioscience, Inc., 84 October Hill Road, Holliston, Massachusetts 01746-1371, with such notice received by May 12, 2023; or (iii) attend the Annual Meeting virtually online and vote through the Annual Meeting website. Attendance at the Annual Meeting will not, by itself, revoke a proxy. If your shares are held by your broker or nominee, you should follow the instructions provided by such broker or nominee to revoke an earlier vote.

Beneficial holders who wish to attend the Annual Meeting virtually and vote through the Annual Meeting website should contact their brokerage firm, bank or other financial institution holding shares of Common Stock on their behalf in order to obtain a “legal proxy”, which will allow them to vote through the Annual Meeting website.

You will be able to participate in the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/HBIO2023. To be admitted to the Annual Meeting, you must enter the control number found on your proxy card, voting instruction form or notice you received. You also will be able to vote your shares electronically prior to or during the Annual Meeting. If you want to submit a question during the Annual Meeting, log into www.virtualshareholdermeeting.com/HBIO2023, type your question into the “Ask a Question” field, and click “Submit.” Questions pertinent to meeting matters will be read and answered during the meeting, subject to time constraints.

If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the Virtual Shareholder Meeting log in page.

Our Board of Directors recommends a vote “FOR” the nominees of the Board of Directors with respect to Proposal No. 1 and “FOR” on Proposal Nos. 2 and 3. With respect to Proposal No. 4, our Board recommends a vote “FOR” 1 year as the frequency of the shareholder vote to approve the compensation of our named executive officers. Proxies will be voted as specified. If your proxy is properly submitted, it will be voted in the manner you direct. **If you submit a properly executed proxy but do not specify instructions with respect to any particular matter to be acted upon at the meeting, proxies will be voted in favor of the Board of Directors’ recommendations.**

We will pay the entire expense of soliciting proxies for the Annual Meeting. In addition to solicitations by mail, certain of our Directors, officers and employees (who will receive no compensation for their services other than their regular compensation) may solicit proxies by telephone, in person, e-mail or other means of electronic communication. Banks, brokerage houses, custodians, nominees and other fiduciaries have been requested to forward proxy materials to the beneficial owners of shares of Common Stock held of record by them as of the Record Date, and such custodians will be reimbursed for their expenses.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on Monday, May 15, 2023: The proxy statement and Annual Report, are available at www.proxyvote.com. The Annual Report, however, is not part of the proxy solicitation material.

PROPOSAL 1 ELECTION OF DIRECTORS

The Board of Directors of the Company currently consists of five members and is divided into three classes of Directors, with two Directors in Class I, two Directors in Class II and one Director in Class III.

Once elected, Directors serve for three-year terms with one class of Directors being elected by our stockholders at each annual meeting to succeed the Directors of the same class whose terms are then expiring. Each nominee elected as a Director will continue in office until his or her successor has been duly elected and qualified or until his or her earlier resignation or removal.

At the Annual Meeting, two Class II Directors, nominated by the Board of Directors, will stand for election to serve until the 2026 annual meeting of stockholders. At the recommendation of the Governance Committee, the Board of Directors has nominated Ms. Katherine A. Eade and Mr. Thomas W. Loewald for election as the two Class II Directors of the Company. The nominees have agreed to stand for election and, if elected, to serve as Directors. However, if any person nominated by the Board of Directors is unable to serve or will not serve, the proxies will be voted for the election of such other person or persons as the Governance Committee and the Board of Directors may recommend.

Vote Required

The affirmative vote of a plurality of the votes cast by holders of shares of Common Stock present or represented by proxy and entitled to vote on the matter at the Annual Meeting is required for the election of the nominees as Class II Directors of the Company.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THE ELECTION OF THE FOLLOWING NOMINEES OF THE BOARD OF DIRECTORS: KATHERINE A. EADE AND THOMAS W. LOEWALD.

INFORMATION REGARDING DIRECTORS

Set forth below is certain information regarding the Directors of the Company, including the two Class II Directors who have been nominated for election at the Annual Meeting, based on information furnished to the Company by such Directors. The biographical descriptions below for the Directors include, as of the date hereof, their age, all positions they hold with the Company, their principal occupation and business experience over at least the past five years, and the names of other publicly-held companies for which they currently serve as Directors or have served as Directors during at least the past five years. The biographical descriptions below for the Directors also include the specific experience, qualifications, attributes and skills that led to the conclusion by the Board of Directors that such persons should serve as Directors of the Company. In addition to such specific information, we also believe that all of our Directors have a reputation for integrity, honesty and adherence to high ethical standards. Further, they have each demonstrated business acumen and an ability to exercise sound judgment as well as a commitment of service to the Company and our Board.

Independence

The Board of Directors has determined that the incumbent Directors listed below, other than our Chief Executive Officer, Mr. Green, are “independent” as such term is currently defined by applicable Nasdaq rules.

Directors of Harvard Bioscience, Inc.

<u>Name</u>	<u>Age</u>	<u>Principal Occupation</u>	<u>Director Since</u>
Class I Directors—Term expires 2025			
<i>James W. Green</i>	64	President, Chief Executive Officer and Chairman of the Board of Directors of the Company	2015
<i>Bertrand Loy (CC)(GC)</i>	57	President, CEO and a Director of Entegris, Inc., Lead Independent Director of the Board of the Directors of the Company	2014
Class II Directors—Term expires 2023; Nominated to Serve a Term Expiring 2026			
<i>Thomas W. Loewald (CC)(AC)(GC)</i>	60	President and CEO of Cambrex	2017
<i>Katherine A. Eade (AC)(GC)</i>	49	Member of the Board of Directors of Vaxxinity, Inc.	2017
Class III Director—Term expires 2024			
<i>Alan Edrick (AC)(CC)</i>	55	Executive Vice President and Chief Financial Officer of OSI Systems, Inc.	2019

(AC) Member of the Audit Committee

(CC) Member of the Compensation Committee

(GC) Member of the Governance Committee

Incumbent Class I Directors—Terms Expiring in 2025

James W. Green has served as a Director of the Company since April 2015 and was appointed Chairman on June 5, 2017. Mr. Green was appointed President and Chief Executive Officer on July 8, 2019. Immediately prior to becoming our President and Chief Executive Officer, Mr. Green served as President of Spacelabs Healthcare, a manufacturer of medical equipment, beginning in April 2018. Prior to that position, Mr. Green was General Partner of Grantchester Group, a private equity investment firm with experience in healthcare and technology. Mr. Green also previously served as President, Chief Executive Officer and a Director of Analogic Corporation, a leading publicly held advanced medical and security imaging company from 2007 until October 2016. From 2005 to 2007, Mr. Green worked as Regional Vice President of Unilab Corp., a California division of Quest Diagnostics Corporation. From 1983 to 2005, Mr. Green worked in various other leadership positions at Koninklijke Philips Electronics NV, St. Jude Medical Inc., Beckman Instruments, McDonnell Douglas Corporation and Northrop Advanced Systems. Mr. Green holds a B.S. from the University of Missouri at Columbia, an M.S. from the University of Southern California and is a graduate of the Stanford University Executive Program. We believe Mr. Green's qualifications to serve on our Board of Directors include his executive leadership experience and global experience in technology, healthcare and life science industries in a variety of executive positions.

Bertrand Loy has served as a Director of the Company since November 2014 and currently serves as the Lead Independent Director and is a member of the Governance Committee and the Compensation Committee. Mr. Loy has been Chief Executive Officer, President and a director of Entegris, Inc. since November 2012. From July 2008 to November 2012, he served as the Executive Vice President and Chief Operating Officer of Entegris, Inc. From August 2005 until July 2008, he served as the Executive Vice President of Entegris, Inc., in charge of its information technology, global supply chain and manufacturing operations. He served as the Vice President and Chief Financial Officer of Mykrolis, a company spun out of Millipore Corporation, a life science products company, from January 2001 until August 2005. Prior to that, Mr. Loy served as the Chief Information Officer of Millipore Corporation during 1999 and 2000, and previously served in various strategic planning, global supply chain and financial roles with Millipore and Sandoz Pharmaceuticals (now Novartis), a pharmaceutical company. Since July 2013, Mr. Loy has also been on the board of directors of SEMI, the global industry association representing the electronics manufacturing supply chain. Mr. Loy holds an M.B.A. from ESSEC Business School in France. We believe Mr. Loy's qualifications to serve on our Board of Directors include his extensive experience as a Chief Executive Officer, as well as his experience in operational management and his extensive international experience in Europe, Asia-Pacific and the Americas.

Nominees for Election as Class II Directors—Nominated to Serve Terms Expiring in 2026

Thomas W. Loewald has served as a Director of the Company since October 2017. Mr. Loewald currently serves as Chair of the Compensation Committee and is a member of the Governance Committee and Audit Committee. Since September 2020, Mr. Loewald has served as President and Chief Executive Officer of Cambrex, a leading private equity-owned Contract Development & Manufacturing Organization. Previously, Mr. Loewald served as President of the Flexible Packaging Division of ProAmpac, a private-equity owned flexible packaging company from September 2017 to September 2020. Prior to that, he served as Senior Vice President and Chief Commercial Officer of Thermo Fisher Scientific, a multinational biotechnology product development company. He previously worked in various roles of Thermo Fisher Scientific from 2002 to 2016. Prior to Thermo Fisher, Mr. Loewald led sales, marketing, and customer service for the adhesives division of Tyco International from 1998 to 2002. Prior to Tyco, Tom held a series of roles with General Electric's Plastics and Materials businesses. Mr. Loewald holds a B.A. in economics from Middlebury College and an M.B.A. in business administration from The Amos Tuck School at Dartmouth College. We believe Mr. Loewald's qualifications to serve on our Board of Directors include his broad global business experience in a wide range of industries from commodity to high growth, his strong strategic management and leadership skills, and his extensive record of success in leading business growth and excellence.

Katherine A. Eade has served as a Director of the Company since October 2017. Ms. Eade currently serves as Chair of the Governance Committee and is a member of the Audit Committee. Ms. Eade has more than 20 years of experience advising public companies on M&A and other significant corporate transactions, governance matters and capital markets. In February 2023, Ms. Eade joined the board of directors of Vaxxinity, Inc., a publicly traded biotechnology company committed to democratizing healthcare across the globe, where she also serves as a member of the audit committee. Ms. Eade has also served as Interim General Counsel and advisor to Standard Biotech Inc., a publicly-traded supplier of life science research tools focused on proteomic and genomic applications, since January 2023. She previously served as General Counsel of Checkmate Pharmaceuticals, Inc. and President of Checkmate Pharmaceuticals Security Corporation from September 2020 until their acquisition by Regeneron Pharmaceuticals in May 2022. Previously, Ms. Eade served as Vice President, Strategic Commercial Affairs at Align Technology, a position she held from 2019 to 2020, and prior to that was Deputy General Counsel of La-Z-Boy Incorporated from 2018 to 2019. Prior to joining La-Z-Boy, Ms. Eade was the Director, M&A Law and Transactions for Corning Incorporated and Division Counsel for Corning's Life Sciences and Pharmaceutical Technologies divisions. Her life science acquisitions for Corning included the \$730 million purchase of BD's Discovery Labware business. Previous to her work at Corning, Ms. Eade was an attorney at Cleary Gottlieb Steen & Hamilton LLP, a leading international law firm, for over seven years. Earlier in her career, she served as a law clerk for Judge Morton I. Greenberg of the U.S. Court of Appeals for the Third Circuit. Ms. Eade earned a J.D., cum laude, from Harvard Law School and a B.A. in Government, summa cum laude, from Cornell University. We believe Ms. Eade's qualifications to serve on our Board of Directors include her significant experience in mergers and acquisitions, including in the life sciences industry, and her extensive experience in capital markets and corporate governance.

Alan Edrick has served as a Director of the Company since September 2019. Mr. Edrick currently serves as Chair of the Audit Committee and a member of the Compensation Committee. Mr. Edrick has over 30 years of financial management and public accounting experience, including mergers and acquisitions, capital markets, financial planning and analysis, and regulatory compliance. Mr. Edrick has been the Executive Vice President and Chief Financial Officer of OSI Systems, Inc., a publicly traded multinational company with leading market positions in homeland security, patient monitoring and optoelectronics, since 2006. Between 2004 and 2006, Mr. Edrick served as Executive Vice President and Chief Financial Officer of BioSource International, Inc. until its sale to Invitrogen Corporation. Between 1998 and 2004, Mr. Edrick served as Senior Vice President and Chief Financial Officer of North American Scientific, Inc., a medical device and specialty pharmaceutical company. Between 1989 and 1998, Mr. Edrick was employed by Price Waterhouse LLP in various positions including Senior Manager, Capital Markets. Mr. Edrick earned a Bachelor of Arts in economics/business from the University of California, Los Angeles (UCLA) and a Master of Business Administration from UCLA's Anderson School of Management. We believe Mr. Edrick's qualifications to serve on our Board of Directors include his executive leadership experience as a Chief Financial Officer, as well as his significant operating, accounting and financial management expertise, including in the life sciences industry.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND ITS COMMITTEES

During the year ended December 31, 2022, our Board of Directors met or acted by written consent eleven times. Each of the Directors attended at least 75% of the total number of meetings of the Board of Directors held while he or she was a Director and of the committees of which he or she was a member. The Board of Directors generally encourages Directors to attend in person the Annual Meeting of Stockholders of the Company, or Special Meeting in lieu thereof, or, if unable to attend in person, to participate by other means, if practicable. The Board of Directors encourages Directors to participate virtually for the 2023 Annual Meeting. All of the Directors in office at the time attended the 2022 Annual Meeting of Stockholders held on May 17, 2022. The non-employee Directors meet regularly in executive sessions outside the presence of management.

Board Leadership Structure

Our Board of Directors does not have a fixed policy as to whether the roles of Board Chair and Chief Executive Officer should be separated or combined. The Board believes that it is in the best interests of our Company to make this determination periodically based on the then-current circumstances, including the then-current strategic and operating environment and the composition of our Board of Directors and our management team. If the Board Chair is not an independent director, a Lead Independent Director is appointed by the Board.

The Lead Independent Director coordinates the activities of the other independent directors and performs such other duties and responsibilities as the Board of Directors may determine. The duties of the Lead Independent Director include:

- presiding at all meetings of the Board at which the Chairman is not present, including executive sessions of the independent Directors;
- calling meetings of independent Directors;
- serving as the principal liaison between the Chairman and the independent Directors;
- approving meeting agendas for the Board;
- approving the frequency of Board meetings and meeting schedules;
- assuring there is sufficient time for discussion of all agenda items;
- previewing information provided to the Board of Directors, as appropriate;
- being available, when appropriate, for consultation and direct communication with stockholders;
- retaining outside advisors and consultants who report directly to the Board on Board-wide issues;
- leading, together with the Chair of the Governance Committee, the Board of Director's annual self-assessment; and
- leading, together with the Chair of the Compensation Committee, the Board of Directors' evaluation of the CEO.

Our Board of Directors believes that it is currently in the best interest of our Company to combine the roles of Board Chair and Chief Executive Officer under the leadership of Mr. Green. Mr. Loy currently serves as our Lead Independent Director. The Board believes that this structure allows us to capitalize on Mr. Green's knowledge and experience to more effectively carry out our operating activities, execute our strategic plans, and foster effective communications between the Board of Directors, our management team, and our external stakeholders. The effectiveness of this structure is further enhanced by Mr. Loy's extensive executive and board experience, which provides a valuable independent perspective to our Board and its leadership.

Board Diversity Matrix (As of March 21, 2023)

Total Number of Directors				5
Part I. Gender Identity	Female	Male	Non-Binary	Did Not Disclose Gender
Directors	1	4	-	-
Part II. Demographic Background				
African American or Black	-	-	-	-
Alaskan Native or Native American	-	-	-	-
Asian	-	-	-	-
Hispanic or Latinx	-	-	-	-
Native Hawaiian or Pacific Islander	-	-	-	-
White	1	4	-	-
Two or More Races or Ethnicities	-	-	-	-
LGBTQ+	-	-	-	-
Did Not Disclose Demographic Background	-	-	-	-

Board Committees

The Board of Directors has established an Audit Committee (the "Audit Committee"), a Compensation Committee (the "Compensation Committee") and a Governance Committee (the "Governance Committee"). The charters of each our committees are available on the Corporate Governance page in the Investor Relations section of our website at www.harvardbioscience.com. Please note that the information contained on the Company website is not incorporated by reference in, or considered to be a part of, this proxy statement.

Audit Committee

The Audit Committee currently consists of Mr. Edrick, Ms. Eade and Mr. Loewald. Mr. Edrick serves as the Chair. The Audit Committee is comprised entirely of independent Directors and operates under a Board-approved charter that sets forth its duties and responsibilities. The Audit Committee met or acted by written consent nine times during 2022.

Under its charter, the Audit Committee is responsible for, among other things:

- reviewing our financial statements and related disclosures included in quarterly and annual financial statements, as well as quarterly earnings releases;
- reviewing the adequacy of our internal controls, and financial systems and management practices;
- appointing, retaining and terminating, and determining compensation of, our independent auditors;
- overseeing our independent auditors and the evaluation of the independent auditors' qualifications, performance and independence;
- pre-approving audit and non-audit services to be provided by the independent auditors, which may include the delegation of the pre-approval of non-audit services to one or more members of the committee;
- assessing the independence of the independent auditors, including consideration of the auditors' provision of non-audit services to the Company;
- assuring the regular rotation of audit partners, including any lead and concurring partners, in accordance with applicable laws and regulations;
- reporting matters that arise relating to quality or integrity of our financial statements and other matters to the Board and reviewing such matters with the Board;
- establishing and overseeing procedures for (1) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters and (2) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters;
- reviewing and discussing with management our policies with respect to risk assessment and risk management; and
- discussing matters relating to risks that arise or may arise with the Board.

The Board of Directors has determined that Ms. Eade, Mr. Edrick and Mr. Loewald are "independent" as such term is currently defined by Nasdaq rules for purposes of service on the Audit Committee. The Board of Directors has also determined that Mr. Edrick qualifies as an "audit committee financial expert" as this term has been defined under the rules of the Securities and Exchange Commission (the "SEC").

Compensation Committee

The Compensation Committee currently consists of Mr. Edrick, Mr. Loewald, and Mr. Loy. Mr. Loewald serves as the Chair. The Compensation Committee is comprised entirely of independent Directors and operates under a Board approved charter that sets forth its duties and responsibilities. The Compensation Committee met or acted by written consent eight times in 2022.

Under its charter, the Compensation Committee is responsible for, among other things:

- determining and overseeing the execution of our compensation philosophy;
- overseeing the administration of our executive compensation program;
- overseeing the Company's compensation and benefit plans and policies;
- retaining or terminating committee advisors;
- evaluating the independence of compensation advisors;
- administering its stock plans (including reviewing and approving equity grants); and
- reviewing and approving annually all compensation decisions for the Company's executive officers, including the CEO and the other executive officers named in the 2022 Summary Compensation Table. See "Executive Compensation—Compensation Discussion and Analysis" later in this proxy statement for information concerning the Compensation Committee's role, processes and activities in overseeing executive compensation.

The Board of Directors has determined that Mr. Edrick, Mr. Loewald, and Mr. Loy are "independent" as such term is currently defined by Nasdaq rules for purposes of service on the Compensation Committee.

Governance Committee

The current members of the Governance Committee are Ms. Eade, Mr. Loewald, and Mr. Loy. Ms. Eade serves as the Chair. The Governance Committee is comprised entirely of independent Directors and operates under a Board approved charter that sets forth its duties and responsibilities. The Governance Committee met or acted by written consent two times in 2022.

Under its charter, the Governance Committee is responsible for, among other things:

- identifying individuals qualified to become Board members, consistent with criteria recommended by the Governance Committee and approved by the Board of Directors;
- recommending that the Board of Directors select the director candidates for election at each annual meeting of stockholders;
- recommending to the Board of Directors the criteria for membership on the committees; and
- assisting the Board of Directors with such corporate governance matters as the Board of Directors may request.

In identifying and evaluating nominees for the Board of Directors, the Governance Committee may solicit recommendations from any or all of the following sources: non-management Directors, the Chief Executive Officer, other executive officers, third-party search firms or any other source it deems appropriate.

The Governance Committee has established procedures for stockholders to recommend Director candidates. All stockholder recommendations for Director candidates must be submitted in writing to our Chief Financial Officer at 84 October Hill Road, Holliston, Massachusetts 01746, who will forward all recommendations to the Governance Committee. All stockholder recommendations for Director candidates must be submitted to the Company not less than 120 calendar days prior to the anniversary of the date on which our proxy statement was released to stockholders in connection with the previous year's annual meeting. All stockholder recommendations for Director candidates must include:

- the name and address of record of the stockholder;
- a representation that the stockholder is a record holder of our securities, or if the stockholder is not a record holder, evidence of ownership in accordance with Rule 14a-8(b)(2) of the Securities Exchange Act of 1934 (the "Exchange Act");
- the name, age, business and residential address, educational background, public company directorships, current principal occupation or employment, and principal occupation or employment for the preceding five full fiscal years of the proposed Director candidate;
- a description of the qualifications and background of the proposed director candidate which addresses the minimum qualifications and other criteria for Board membership approved by the Board of Directors and set forth in the Governance Committee Charter;
- a description of all arrangements or understandings between the stockholder and the proposed Director candidate;
- the consent of the proposed Director candidate to be named in the proxy statement, to have all required information regarding such Director candidate included in the proxy statement, and to serve as a Director if elected; and
- any other information regarding the proposed Director candidate that is required to be included in a proxy statement filed pursuant to the rules of the SEC.

The Governance Committee will evaluate all such proposed Director candidates, including those recommended by stockholders, in compliance with the procedures established by the Governance Committee, in the same manner, with no regard to the source of the initial recommendation of such proposed Director candidate. When considering a potential candidate for membership on the Board of Directors, the Governance Committee may consider, in addition to the minimum qualifications and other criteria for Board membership approved by the Board of Directors, all facts and circumstances that the Governance Committee deems appropriate or advisable, including, among other things, the skills of the proposed Director candidate, his or her availability, depth and breadth of business experience or other background characteristics, his or her independence and the needs of the Board of Directors. At a minimum, each candidate must have high personal and professional integrity, have demonstrated ability and judgment, and be effective, in conjunction with the other Directors and candidates, in collectively serving the long-term interests of the stockholders. In addition, the Governance Committee will recommend that the Board select candidates for nomination to help ensure that a majority of the Board shall be "independent" in accordance with Nasdaq rules and that each of its Audit, Compensation and Governance Committees shall be comprised entirely of independent Directors, subject to certain exceptions under the Nasdaq rules to such requirement. Although there is no specific policy regarding the consideration of diversity in identifying Director candidates, the Governance Committee may consider whether the candidate, if elected, assists in achieving a mix of Board members that represents a diversity of background and experience. The Governance Committee also may consider whether the candidate has direct experience in the biotechnology, pharmaceutical and/or life science research industries or in the markets in which the Company operates.

The Board's Role in Risk Oversight

Risks to the Company are discussed by the Board of Directors during the year. Management is responsible for the day-to-day management of risks we face, while the Board, as a whole and through its committees, oversees risk management. The Board reviews and discusses, including with management, the risks that arise or may arise, including in relation to legal, compliance and cyber-security matters, as well as novel risks that arise such as the impact of the COVID-19 global pandemic. The Board discusses with management, the Audit Committee, and our independent registered public accounting firm the financial risk, including with respect to financial reporting and internal controls, and the steps management has taken to address such risks. Our Board also administers its risk oversight function through the required approval by the Board (or a committee of the Board) of significant transactions and other material decisions.

Risk Considerations in our Compensation Programs

The Compensation Committee believes that risks arising from our policies and practices for compensating employees are not reasonably likely to have a material adverse effect on the Company.

Non-Employee Director Stock Ownership Guidelines

Our Board has implemented equity ownership guidelines with respect to our non-employee Directors. The ownership guidelines require each non-employee member of the Board of Directors, within five years from their initial election to the Board, to own shares of our Common Stock having a value of at least three times the annual retainer of the non-employee Directors. With respect to satisfying the guidelines, unvested awards of restricted stock units are included in the calculation while stock options are excluded. All of our Directors are currently in compliance with these equity ownership guidelines.

CODE OF BUSINESS CONDUCT AND ETHICS

The Board of Directors has adopted a Code of Business Conduct and Ethics, which applies to all Directors, officers and employees of the Company and its subsidiaries including the Chief Executive Officer, the Chief Financial Officer, principal accounting officer, controller and any person performing similar functions. The Code of Business Conduct and Ethics is available on the Corporate Governance page in the Investor Relations section of our website at www.harvardbioscience.com. We intend to post any amendments to or waivers from our Code of Business Conduct and Ethics at this location on our website.

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

At Harvard Bioscience, we are committed to enabling the discovery, safety and regulatory testing, and production of tomorrow's therapeutics. We strive to be a trusted partner to our customers by supplying products and services that enable advances in life science research and drug development across the continuum from fundamental research, therapy discovery, pre-clinical regulatory safety pharmacology and toxicology testing, to bioproduction.

We believe that conducting our business in a socially, environmentally, and ethically responsible manner is important to our long-term success and the well-being of our stakeholders.

Environmental. We strive to minimize our environmental impact, including through more efficient energy and water usage, minimizing waste and emissions, and encouraging recycling. Consistent with these goals, our product development teams strive to minimize the use of hazardous substances in our products through initiatives such as the European Union's directive on the Restriction of Hazardous Substances (RoHS). We also work closely with our suppliers to advance the responsible sourcing of materials such as conflict minerals and compliance with the European Union's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation to manage the use of chemical substances.

Social. We believe that providing our customers with products and services that enable the development, testing, and production of tomorrow's therapeutics plays a fundamental role in improving the health and well-being of the global community. We value our employees, customers, and communities and are committed to fostering a workplace that promotes fairness, respect, and opportunity for all. This commitment includes our participation in equal employment opportunity outreach programs and in the SkillBridge program, which provides valuable opportunities for armed service members to transition to civilian employment.

Governance. We are focused on sound corporate governance. This includes a commitment to ethics and integrity, foundational values that we believe are key to our continued success. We have established a Code of Business Conduct and Ethics that applies across all levels of our business, including our Board of Directors, senior executives, and all employees worldwide. We have also established a confidential ethics hotline that allows employees to report ethical or legal concerns. More information on our governance policies and procedures and our Code of Business Conduct and Ethics is available elsewhere in this proxy statement and the Investor Relations section of our website at www.harvardbioscience.com.

REPORT OF THE AUDIT COMMITTEE

Notwithstanding anything to the contrary set forth in any of the Company's previous or future filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate this proxy statement or any future filing with the Securities and Exchange Commission, in whole or in part, the following report shall not be deemed incorporated by reference into any such filing.

The undersigned members of the Audit Committee of the Board of Directors of the Company submit this report in connection with the committee's review of the financial reports of the Company for the fiscal year ended December 31, 2022 as follows:

1. The Audit Committee has reviewed and discussed with management the audited financial statements of the Company for the fiscal year ended December 31, 2022.
2. The Audit Committee has discussed with representatives of Grant Thornton LLP the matters required to be discussed with them by applicable requirements of the Public Company Accounting Oversight Board and the SEC.
3. The Audit Committee has received the written disclosures and the letter from the independent accountant required by the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the independent accountant the independent accountant's independence.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 for filing with the Securities and Exchange Commission.

Audit Committee:

Alan Edrick, Chair
Katherine A. Eade
Thomas W. Loewald

DIRECTOR COMPENSATION

Our Board of Directors has the authority to approve all compensation payable to our Directors, although our Compensation Committee is responsible for making recommendations to our Board regarding Board compensation. Our Board of Directors and Compensation Committee periodically review our Board compensation to evaluate whether it remains competitive such that we are able to recruit and retain qualified Directors. We use a mix of cash and/or stock-based incentive compensation to attract and retain qualified candidates to serve on our Board. In setting Board compensation, the Board of Directors and the Compensation Committee consider the significant amount of time that Directors expend in fulfilling their duties to the Company as well as the skill-level required by the Company of members of the Board.

Directors who are also employees of the Company receive no additional compensation for service as a Director. Non-employee Directors receive the compensation described below.

Compensation of Non-Employee Directors Upon Initial Election to the Board

Each new non-employee Director, upon his or her initial election to the Board, is entitled to receive a restricted stock unit (“RSU”) award having a grant date fair value of \$150,000. Such RSU award will vest annually over three years and be granted on the fifth business day following his or her initial election to the Board.

Annual Compensation of Non-Employee Directors

Annual Board and Committee Retainers

Each non-employee Director is entitled to receive an annual retainer award, paid in RSUs, for such Director’s service on the Board of Directors. The annual retainer award is granted on the fifth business day following each annual meeting of stockholders and will vest in full on the earlier of (i) immediately prior to the Company’s next annual meeting and (ii) one year from the date of grant, subject to the Director’s continued service through the applicable vesting date. The Lead Independent Director receives an additional retainer paid in RSUs which has the same date of grant and vesting schedule as the annual Board retainers. Further, each non-employee Director is entitled to receive cash retainers for such Director’s service on committees of the Board of Directors. The Chairs of each committee also receive an additional cash retainer for service in such role. Committee retainers are paid quarterly in arrears.

The current annual retainers for service on the Board and its committees are as follows:

Role	Form of Retainer	Annual Retainer Value
Non-employee Director	RSUs	\$45,000
Lead Independent Director	RSUs	\$35,000
Audit Committee chair	Cash	\$17,500
Audit Committee member	Cash	\$10,000
Compensation Committee chair	Cash	\$7,000
Compensation Committee member	Cash	\$7,000
Governance Committee chair	Cash	\$5,000
Governance Committee member	Cash	\$5,000

Annual Equity Award

In addition, each non-employee Director is entitled to receive an annual equity award, paid in RSUs, for such Director’s service on the Board of Directors. The annual equity award is granted on the fifth business day following each annual meeting of stockholders and will vest in full on the earlier of (i) immediately prior to the Company’s next annual meeting of stockholders, and (ii) one year from the date of grant, subject to the Director’s continued service through the applicable vesting date.

The current annual equity award for service on the Board is as follows:

Role	Form of Retainer	Annual Equity Award Value
Non-employee Director	RSUs	\$100,000

Expenses

In addition, non-employee Directors shall be reimbursed for expenses incurred in connection with attending Board and committee meetings.

2022 Director Compensation Table

The following table presents the compensation provided to the non-employee Directors who served during the fiscal year ended December 31, 2022.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$) (1)	Option Awards (\$) (3)	Total
<i>Katherine Eade</i>	20,000	145,000	\$ -	165,000
<i>Alan Edrick</i>	34,500	145,000	-	179,500
<i>Thomas Loewald</i>	29,000	145,000	-	174,000
<i>Bertrand Loy</i>	12,000	180,000	-	192,000

- (1) Based on the aggregate grant date fair value computed awards in accordance with the provisions of FASB ASC 718, “Compensation—Stock Compensation.” Assumptions used in the calculation of this amount are included in Note 10 to the Company’s audited financial statements for the fiscal year ended December 31, 2022 included in the Company’s Annual Report on Form 10-K filed with the SEC on March 9, 2023.
- (2) The aggregate number of unvested RSU awards outstanding at December 31, 2022 and held by the non-employee Directors were as follows: 38,259 awards for Ms. Eade; 38,259 awards for Mr. Edrick; 38,259 awards for Mr. Loewald; 47,493 awards for Mr. Loy.
- (3) The aggregate number of stock options outstanding at December 31, 2022 and held by the non-employee Directors were as follows:

Name	Aggregate Number of Stock Options Outstanding
<i>Katherine A. Eade</i>	87,600
<i>Alan Edrick</i>	101,800
<i>Thomas W. Loewald</i>	87,600
<i>Bertrand Loy</i>	55,300

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Our current executive officers are:

Name	Age	Position
James W. Green	64	President, Chief Executive Officer and Chairman of the Board of Directors
Jennifer Cote	51	Interim Chief Financial Officer and Treasurer

Biographical information for Mr. Green is provided above under the heading “Directors of Harvard Bioscience, Inc.” above.

Jennifer Cote joined the Company as Vice President of Global Finance in May 2022 and was named Interim Chief Financial Officer and Treasurer as of January 1, 2023. Prior to joining the Company, Ms. Cote held various financial, strategy, and operating roles of increasing responsibility at Bose Corporation, a leading supplier of speakers, headphones, electronics and other related products for the consumer audio, automotive, health, and professional audio market from 1999 to March 2022. She served as Bose’s Head of Global Business Services – Strategy Enablement and Finance Services from September 2019 to March 2022 and Global Service Owner for Finance Services from December 2016 to September 2019. Ms. Cote’s previous roles at Bose included Head of Finance for Bose’s Headphones Business Unit, Head of Global Business Operations and Head of Finance for its Professional Systems Division. Earlier in her career, Ms. Cote held various positions of increasing responsibility, including Audit Manager, at Arthur Andersen LLP. A Certified Public Accountant and Chartered Global Management Accountant, Mr. Cote holds a Bachelor of Science in Accountancy from Villanova University.

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis, which should be read together with the executive compensation tables set forth below, provides information regarding our executive compensation program for our named executive officers. Our named executive officers for 2022 were:

Name	Title
James W. Green	President and Chief Executive Officer
Kenneth Olson ⁽¹⁾	Chief Operating Officer
Michael Rossi ⁽²⁾	Chief Financial Officer and Treasurer

- (1) Mr. Olson resigned from his position as Chief Operating Officer effective January 31, 2022 and assisted on various projects and in the transition of the Chief Operating Officer role until his departure from the Company on December 31, 2022.
- (2) Mr. Rossi resigned from his position as Chief Financial Officer and Treasurer effective December 31, 2022.

Objectives of Our Executive Compensation Programs

Our compensation programs for our executive officers are designed to achieve the following key objectives:

- attract and retain high performing and experienced executives;
- motivate and reward executives whose knowledge, skills and performance are deemed critical to our success;
- align the interests of our executives and stockholders by motivating executives to increase stockholder value and rewarding executives when stockholder value increases;
- foster a shared commitment among executives by coordinating their goals; and
- motivate our executives to manage our business to meet our short- and long-term objectives, and reward them for meeting these objectives, including growing our revenues, earnings per share, total market capitalization and share price.

Role and Authority of the Compensation Committee

The Compensation Committee oversees our executive compensation programs. In this role, the Compensation Committee reviews and approves the compensation of our executive officers. Additional information about the Compensation Committee, including its composition and responsibilities, can be found under the heading "Compensation Committee" above. The Compensation Committee's practice has been to establish fiscal year base salaries, and to approve bonus programs and long-term incentive awards, on an annual basis. From time to time, the Compensation Committee makes other adjustments to individual compensation arrangements due to promotions, changes of responsibilities, or other appropriate circumstances.

Role of Independent Compensation Consultant

The Compensation Committee engages an independent compensation consultant to provide guidance with respect to the development and implementation of our compensation programs. The Compensation Committee utilizes input from its compensation consultant in determining the appropriate compensation, including base salary, bonus and equity grants, with respect to our named executive officers. The Compensation Committee engaged Frederic W. Cook & Co., Inc. (“FW Cook”) as its independent compensation consultant for 2022.

FW Cook provides no services to the Company other than those performed on behalf of the Compensation Committee. The Compensation Committee considers the independence of its compensation consultant on an annual basis.

Role of Management

The Compensation Committee receives input from our Chief Executive Officer and other members of our senior management team with respect to compensation programs for our executives. The Compensation Committee also receives input from our Chief Executive Officer on the performance of our other executives and on compensation decisions for those executives. The Compensation Committee considers, but is not bound by and does not always accept, the recommendations of our Chief Executive Officer or the other members of our management team with respect to compensation matters. While our Chief Executive Officer and other members of our senior management team typically attend Compensation Committee meetings, the Compensation Committee regularly meets in executive session without management present. Our Chief Executive Officer is not present during voting or deliberations on his compensation. The Compensation Committee also makes compensation decisions with respect to our other executives without them present.

Bases for Our Compensation Policies and Decisions

As a general guideline, the Compensation Committee seeks to establish the target compensation of our executive officers at approximately the median of similarly situated executives, assuming that our Company meets the performance targets established for incentive-based programs. An individual executive’s target compensation may be higher or lower than this guideline based on his or her particular background, experience and performance, market factors, and internal equity. These factors are weighed by the Compensation Committee in its judgment, and no one factor takes precedence over the others.

Given then-prevailing economic conditions and a desire that year-over-year compensation remain largely unchanged, the Compensation Committee did not obtain peer group data in establishing the 2022 compensation of our named executive officers.

Compensation Practices

Our executive compensation practices include the following, each of which the Compensation Committee believes reinforces our executive compensation objectives:

- market comparison of executive compensation against a relevant peer group, as appropriate;
- use of an independent compensation consultant reporting directly to the Compensation Committee and providing no other services to the Company;
- double-trigger vesting for equity awards in the event of a change in control;
- limited perquisites;
- executive stock ownership guidelines;
- clawback policy;
- anti-short selling, anti-margin and hedging policies; and
- annual say-on-pay vote.

Compensation Elements

The elements of executive compensation include base salary, annual cash incentive bonuses, long-term equity incentive compensation, employment agreements, and broad-based benefits programs. We have not adopted any formal guidelines for allocating total compensation between long-term and short-term compensation, cash compensation and non-cash compensation, or among different forms of non-cash compensation.

Base Salary

We pay our executive officers a base salary, which our Compensation Committee reviews and determines annually. We believe that a competitive base salary is a necessary element of any compensation program that is designed to attract and retain talented and experienced executives. We also believe that attractive base salaries can motivate and reward executives for their overall performance. The 2022 annualized base salary of each of our named executive officers was as follows:

Executive	2022 Base Salary	Increase over 2021
James Green	\$573,710	0%
Michael Rossi	\$340,000	0%

In view of Mr. Olson's resignation as the Company's Chief Operating Officer effective January 31, 2022, the Compensation Committee did not establish a 2022 base salary for Mr. Olson.

Annual Cash Incentive Bonuses

Our 2022 annual cash incentive bonus plan (the "2022 Annual Cash Incentive Plan"), as approved by the Compensation Committee, was designed to encourage our executives to achieve predetermined corporate financial performance objectives. The Annual Cash Incentive Plan emphasizes pay for performance and is intended to align executive compensation with the achievement of specified operating results.

The metrics and weightings of the 2022 Annual Cash Incentive Plan were as follows:

Metric	Weighting	Rationale for Metric
Revenue Growth	50%	Strategic goal to return the Company to organic growth
Adjusted Operating Income (1)	50%	Achievement of Adjusted Operating Income targets designed to significantly improve the core profitability of the business and invest in products and revenue growth activities.

- (1) Adjusted operating income is a non-GAAP measure and excludes certain expenses and income primarily resulting from purchase accounting or events that management does not believe are related to the underlying operations of the business such as amortization of intangibles related to acquisitions, costs related to acquisition, disposition and integration initiatives, impairment charges, severance, restructuring and other business transformation expenses, and stock-based compensation expense. The effect of the current year's annual cash incentive bonus is also excluded from adjusted operating income.

Target awards for our named executive officers under the 2022 Annual Cash Incentive Plan were established by the Compensation Committee as follows:

Executive	2022 Target Award (% of Base Salary)
James Green	100%
Michael Rossi	50%

The target awards for Messrs. Green and Rossi were unchanged from 2021. In view of Mr. Olson’s resignation as the Company’s Chief Operating Officer effective January 31, 2022, Mr. Olson did not receive a target award for fiscal 2022.

Under the terms of their awards, Messrs. Green and Rossi were each eligible to receive a cash payment between 0% and 150% of their respective target awards based on our performance with respect to the predetermined financial goals established in connection with the 2022 Annual Cash Incentive Plan.

The Compensation Committee evaluated our 2022 performance against these goals and determined that neither Mr. Green nor Mr. Rossi was eligible to receive a payment under the 2022 Annual Cash Incentive Plan.

Long-Term Equity Incentive Compensation

We grant long-term equity incentive awards in the form of time- and performance-based RSUs to executives as part of our total compensation package. These awards generally represent a significant portion of total executive compensation. We use long-term equity incentive awards in order to align the interests of our executives and our stockholders by providing our executives with strong incentives to increase stockholder value and a significant reward for doing so.

The Compensation Committee’s long-term incentive strategy allows for use of a portfolio approach when granting awards. Each element of the portfolio is intended to address a different aspect of long-term incentive compensation, as set forth below:

- Time-based RSUs serve as a retentive device and provide an interest in the value of the Company’s shares, because, even though they vest over time, they provide recipients with a certain equity interest, assuming continued employment. In addition to promoting retention, time-based RSUs further align executives’ interests with the interests of shareholders and provide a long-term ownership mentality as well as motivation to succeed in the long term.
- Performance-based RSUs provide an additional incentive for executive officers to create shareholder value, as the vesting of these awards is subject to the achievement of pre-defined performance goals. Vesting of performance-based RSUs awarded to our named executive officers in 2022 is based on the relative total shareholder return (“TSR”) of our Common Stock as compared to companies in the Russell 2000 stock index. The Committee believes that the Russell 2000 stock index is an appropriate measure of our performance as it consists of small market capitalization companies with whom the company competes for investment capital. Measuring TSR on a relative, rather than on an absolute, basis provides a more relevant measure of the performance of the Company’s stock. By mitigating the impact of macroeconomic factors (both positive and negative) that are beyond the control of the Company and its executives, we believe relative TSR provides rewards that are better aligned with relative performance through varying economic cycles.

Holders of RSUs do not have any rights of a stockholder until the RSUs vest and are converted to Common Stock.

The Compensation Committee’s decisions regarding the amount and type of long-term equity incentive compensation and relative weighting of these awards among total executive compensation have also been based on its understanding of market practices of our comparable companies and take into account additional factors such as level of individual responsibility, experience and performance. The vesting of our long-term equity incentive compensation is typically subject to continued employment with our Company, and in some instances, to acceleration in connection with certain termination events and a change-in-control.

The Compensation Committee approved 2022 long term equity incentive awards for our named executive officers as follows:

Executive	Award Value (\$)	Target Number of Performance-based RSUs	Number of Time-based RSUs
James Green	\$1,721,120	145,365	157,037
Michael Rossi	\$340,000	28,716	31,021

In view of Mr. Olson's resignation as the Company's Chief Operating Officer effective January 31, 2022, Mr. Olson did not receive a long term equity incentive award for fiscal 2022.

Performance-based RSUs will vest based on the relative TSR of our Common Stock during the period beginning on March 1, 2022 and ending on December 31, 2024. Performance is measured with respect to the companies in the Russell 2000 stock index, as follows:

Relative TSR Percentile Rank	Performance Factor
Below 25th percentile	0%
25th to 50th percentile	50%, plus an additional 1.923% for each whole percentile above 25th percentile
51st to 74th percentile	100%, plus an additional 2.083% for each whole percentile above 51 st percentile
75th percentile or higher	150%

The time-based RSUs vest in three equal installments on each of December 29, 2022, 2023 and 2024.

Vesting of both the performance-based RSUs and time-based RSUs is subject to the executive's continued employment with the Company on the applicable vesting date.

Broad-Based Benefits Programs

All full-time employees in the United States, including our named executive officers, may participate in our Employee Stock Purchase Plan and in our health and welfare benefit programs, including medical coverage, dental coverage, disability insurance, life insurance and our 401(k) plan. The 401(k) plan provides for matching contributions equal to 100% of each dollar contributed up to 1% of eligible compensation plus 50% of each additional 1% of eligible compensation up to 6% for a maximum matching contribution of 3.5%. We offer similar plans in certain foreign countries.

Executive Stock Ownership Guidelines

At the recommendation of our Compensation Committee, our Board of Directors has implemented executive stock ownership guidelines with respect to our named executive officers. The ownership guidelines require that, within five years from their initial appointment or designation as named executive officers, our named executive officers own our Common Stock with a market value equal to at least three times their respective annual base salary. With respect to satisfying such guidelines, stock options are excluded in the calculation while shares owned outright or beneficially owned (as defined under Rule 13d-3 of the Exchange Act), restricted shares, including shares granted but not vested, shares issuable upon the settlement of RSUs and shares acquired pursuant to our Employee Stock Purchase Plan are all included. The Compensation Committee monitors compliance with the stock ownership guidelines.

Clawbacks

Awards under the Company's 2021 Incentive Plan and any shares issued pursuant to such awards will be subject to recovery or "clawback" by the Company if and to the extent that the vesting of such awards was determined or calculated based on materially inaccurate financial statements or any other material inaccurate performance metric criteria; or if the Company or its subsidiaries terminate a grantee's service relationship due to the grantee's gross negligence or willful misconduct, or determine there are grounds for such a termination (whether or not such actions also constitute "cause" under an award agreement), any awards under the 2021 Incentive Plan, whether or not vested, as well as any shares of stock issued pursuant to awards under the 2021 Incentive Plan shall be subject to forfeiture, recovery and "clawback." In addition, the 2021 Incentive Plan provides that if the Company is required to prepare an accounting restatement due to material noncompliance with the financial reporting requirements of the securities laws, in certain cases the Compensation Committee may require the repayment of amounts paid under the 2021 Incentive Plan in excess of what the employee would have received under the accounting restatement.

Further, if the Company is required to prepare an accounting restatement due to the material noncompliance with any financial reporting requirement under the securities laws as a result of misconduct, the Company's Chief Executive Officer and Chief Financial Officer are required to reimburse the Company for any bonus or other incentive-based or equity-based compensation received by such officer from the Company during the twelve-month period following the first public issuance or filing with the SEC (whichever first occurs) of the financial document embodying such financial reporting requirement, and any profits realized from the sale of securities of Company during such twelve-month period.

Anti-Short Selling, Anti-Margin and Hedging Policies

The Company's Insider Trading Guidelines explicitly prohibit directors, officers, employees, contractors and part-time and temporary workers in possession of material non-public information from (i) buying, selling, or otherwise transacting in Company's securities, including common stock, options and any other securities that the Company may issue, such as preferred stock, notes, bonds and convertible securities, as well as derivative securities; and (ii) disclosing information to another individual for the purpose of enabling such individual to trade in the Company's securities on the basis of such information. The Insider Trading Guidelines also explicitly prohibit directors, officers, employees, contractors and part-time and temporary workers, whether or not in possession of material non-public information, from (i) engaging in transactions designed to hedge or offset economic risks of owning the Company's securities, including short sales of the Company's securities and selling security futures related to the Company's securities; (ii) trading in options or derivatives related to the Company's securities; and (iii) and purchasing the Company's securities on margin (i.e. borrowing money to fund the stock purchase) other than the cashless exercises of employee stock options.

2022 SUMMARY COMPENSATION TABLE

The table below summarizes the total compensation paid or earned during the years ending December 31, 2022 and 2021 by our (i) President and Chief Executive Officer; (ii) former Chief Financial Officer, who was the only other person serving in an executive officer capacity as of December 31, 2022; and (iii) former Chief Operating Officer, who would have been the next most highly compensated executive officer but for the fact that he was not an executive officer as of December 31, 2022. No other persons served as an executive officer of the Company during the year ended December 31, 2022.

<u>Name and Principal Position</u>	Year	Salary (\$)	Stock Awards \$(1)	Non-Equity Incentive Plan Compensation \$(2)	All Other Compensation (\$)	Total (\$)
James W. Green Chairman, President & Chief Executive Officer	2022	573,710	1,721,120	-	33,640 ⁽³⁾	2,328,470
	2021	573,710	1,721,140	390,123	30,712	2,715,685
Michael A. Rossi Chief Financial Officer	2022	340,000	340,000	-	2,746 ⁽⁴⁾	682,746
	2021	340,000	340,000	115,600	1,381	796,981
Kenneth Olson (5) Chief Operating Officer	2022	290,000	-	-	17,940 ⁽⁶⁾	307,940
	2021	290,000	290,000	98,600	17,608	696,208

- (1) Based on the aggregate grant date fair value computed in accordance with the provisions of FASB ASC 718, "Compensation—Stock Compensation." Under FASB ASC 718, the vesting condition related to the performance-based RSUs is considered a market condition and not a financial performance condition. Accordingly, there is no grant date fair value below or in excess of the amount reflected in the table above for the named executive officers that could be calculated and disclosed based on achievement of the underlying market condition. Assumptions used in the calculation of this amount are set forth in Note 10 to the Company's audited financial statements for the fiscal year ended December 31, 2022, included in the Company's Annual Report on Form 10-K filed with the SEC on March 9, 2023.
- (2) Amounts shown represent amounts earned under the 2022 and 2021 annual cash incentive plans and paid in 2023 and 2022, respectively. No amounts were earned under the 2022 annual cash incentive plan.
- (3) Amount shown for 2022 includes \$12,000 for personal usage of Company leased automobile, \$11,490 in president's club travel, and \$10,150 in matching contributions made by the Company to Mr. Green's tax-qualified 401(k) Savings Plan account. Amount shown for 2021 includes Amounts shown for 2021 include \$12,000 for personal usage of Company leased automobile, \$8,562 in president's club travel, and \$10,150 in matching contributions made by the Company to Mr. Green's tax-qualified 401(k) Savings Plan account.
- (4) Amounts shown include matching contributions made by the Company to Mr. Rossi's tax-qualified 401(k) Savings Plan account in 2022 and 2021, respectively.
- (5) Mr. Olson resigned from his position as Chief Operating Officer effective January 31, 2022.
- (6) Amount shown for 2022 includes \$8,400 for personal usage of Company leased automobile, and \$9,540 in matching contributions made by the Company to Mr. Olson's tax-qualified 401(k) Savings Plan account. Amount shown for 2021 includes \$8,400 for personal usage of Company leased automobile and \$9,208 in matching contributions made by the Company to Mr. Olson's tax-qualified 401(k) Savings Plan account.

Employment Agreements

Chief Executive Officer

We have entered into an employment agreement with Mr. Green, dated July 2, 2019, which provides for a term of two years from his commencement date of July 8, 2019, which term shall automatically be extended for two additional years on each anniversary of the commencement date unless, not less than 90 days prior to each such date, either party shall have given written notice to the other that it does not wish to extend the agreement. In addition, the agreement provides for an annual base salary, which is subject to review annually by our Board of Directors or Compensation Committee. Furthermore, commencing with fiscal year 2020, Mr. Green is eligible to receive cash incentive compensation on an annual basis of up to one hundred fifty percent (150%) of his base salary upon meeting objectives as determined by the Board of Directors or the Compensation Committee from time to time. Mr. Green is also eligible to participate in other incentive compensation plans as the Board of Directors or Committee shall provide for the Company's senior executive officers.

Chief Financial Officer

We entered into an employment agreement with Mr. Rossi, dated July 18, 2019, which provided for a term of one year from such date, which term was subject to automatic extension for additional one-year periods on each anniversary of thereof unless, not less than 90 days prior to each such anniversary, either party shall have given written notice to the other that it does not wish to extend the agreement. In addition, the agreement provided for an annual base salary, which was subject to review annually by our Board of Directors or Compensation Committee. Furthermore, commencing with fiscal year 2020, Mr. Rossi was eligible to receive cash incentive compensation on an annual basis of up to fifty percent (50%) of his base salary upon meeting objectives as determined by the Board of Directors or the Compensation Committee from time to time. Mr. Rossi was also eligible to participate in other incentive compensation plans as the Board of Directors or Compensation Committee shall provide for the Company's senior executive officers.

Mr. Rossi resigned from his position as our Chief Financial Officer and Treasurer effective December 31, 2022. For information on Mr. Rossi's separation from the Company, please see the heading "Termination Arrangements with Named Executive Officers" below.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END—2022

The following table sets forth information concerning the number and value of exercisable and unexercisable options to purchase Common Stock, and the number of time-based and performance-based RSUs held by the applicable named executive officers noted below as of December 31, 2022.

	Option Awards				Stock Awards			Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)(1)
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)(1)	Equity Incentive Plan Awards: Number of Shares, Units or Other Rights That Have Not Vested (#)	
James W. Green	60,000 235,127	- 117,563 ⁽⁴⁾	\$ 5.27 2.63	5/5/2025 6/11/2030	104,590 ⁽²⁾ 54,535 ⁽⁵⁾ 64,899 ⁽⁷⁾ 109,071 ⁽⁸⁾ 104,691 ⁽⁹⁾	289,714 151,062 179,770 302,127 289,994	186,674 ⁽³⁾ 145,365 ⁽⁶⁾	517,087 402,661
Michael A. Rossi	83,881 69,672	27,961 ⁽¹⁰⁾ 23,224 ⁽⁴⁾	\$ 1.78 2.63	7/18/2029 6/11/2030	10,773 ⁽⁵⁾ 12,821 ⁽⁷⁾ 21,546 ⁽¹¹⁾ 20,681 ⁽⁹⁾	29,841 35,514 59,682 57,286	36,876 ⁽³⁾ 28,716 ⁽⁶⁾	102,147 79,543
Kenneth Olson ⁽¹³⁾	27,777 59,426	9,260 ⁽¹²⁾ 19,809 ⁽⁴⁾	\$ 2.95 2.63	11/1/2029 6/11/2030				

(1) Based on a closing stock price of \$2.77 per share on December 31, 2022.

(2) These RSUs were granted on July 8, 2019 and, assuming continued employment with the Company, the unvested shares vest on January 1, 2023.

(3) These performance-based RSUs were granted on March 1, 2021 subject to relative TSR vesting conditions. The RSUs vest in full on December 31, 2023, and are linked to the achievement of a relative total shareholder return of the Company's Common Stock from March 1, 2021 to the earlier of December 31, 2023 or the date of a change of control (measured relative to the Russell 2000 Index and based on the 20-day trading average beginning on the first day of the measurement period and ending on the last day of the measurement period). The target number of these RSUs that may be earned is noted above; the maximum amount is 150% of the amount reported.

(4) The option was granted on June 11, 2020 and, assuming continued employment with the Company, the unvested options would become exercisable on December 31, 2023. Pursuant to the terms of the Separation Agreement and Release entered into with Mr. Olson, all unvested stock options outstanding as of December 31, 2022 were cancelled on that date.

(5) These RSUs were granted on June 11, 2020 and, assuming continued employment with the Company, the unvested shares vest on December 29, 2023.

(6) These performance-based RSUs were granted on March 1, 2022 subject to relative TSR vesting conditions. The RSUs vest in full on December 31, 2024, and are linked to the achievement of a relative total shareholder return of the Company's Common Stock from March 1, 2022 to the earlier of December 31, 2024 or the date of a change of control (measured relative to the Russell 2000 Index and based on the 20-day trading average beginning on the first day of the measurement period and ending on the last day of the measurement period). The target number of these RSUs that may be earned is noted above; the maximum amount is 150% of the amount reported.

(7) These RSUs were granted on March 1, 2021 and, assuming continued employment with the Company, the unvested shares vest on December 29, 2023.

(8) These performance-based RSUs were granted on June 11, 2020. The RSUs vest in three equal installments on June 11, 2021, June 11, 2022 and June 11, 2023, and are linked to the achievement of a relative total shareholder return of the Company's Common Stock from June 11, 2020 to the earlier of June 11, 2021 or upon a change of control (measured relative to the Nasdaq Biotechnology index and based on the 20-day trading average price before each such date, or for a change of control, the per share purchase price in such change of control). The maximum number of these RSUs was earned on June 11, 2021 and an additional 109,070 shares was added to the award.

(9) These RSUs were granted on March 1, 2022 and, assuming continued employment with the Company, the unvested shares vest in equal installments on each of December 29, 2023 and December 29, 2024.

(10) The option was granted on July 18, 2019 and, assuming continued employment with the Company, the unvested options become exercisable on July 18, 2023.

- (11) These performance-based RSUs were granted on June 11, 2020. The RSUs vest in three equal installments on June 11, 2021, June 11, 2022 and June 11, 2023, and are linked to the achievement of a relative total shareholder return of the Company's Common Stock from June 11, 2020 to the earlier of June 11, 2021 or upon a change of control (measured relative to the Nasdaq Biotechnology index and based on the 20-day trading average price before each such date, or for a change of control, the per share purchase price in such change of control). The maximum number of these RSUs was earned on June 11, 2021 and an additional 21,546 shares was added to the award.
- (12) The option was granted on November 1, 2019 and, assuming continued employment with the Company, the unvested options would have become exercisable on November 1, 2023. Pursuant to the terms of the Separation Agreement and Release entered into with Mr. Olson, all unvested stock options outstanding as of December 31, 2022 were cancelled on that date.
- (13) Pursuant to the terms of the Separation Agreement and Release entered into with Mr. Olson, all unvested RSUs outstanding as of December 31, 2022 were cancelled on that date.

Potential Payments upon Termination or Change-in-Control

Termination Arrangements with Messrs. Rossi and Green

The employment agreements with Mr. Green and Mr. Rossi also require the Company to provide certain payments and benefits in the event of a termination of the executive's employment by us without cause, by the executive for good reason, upon death or disability or in relation to a change-in-control. The events constituting cause, good reason and a change-in-control are specified in the respective agreement. Such benefits include, without limitation, accrued and unpaid base salary to the date of termination, accrued and unused vacation, and if to the extent required by law, any bonuses or other compensation actually earned for periods ended prior to the termination event. These employment agreements also provide change-in-control benefits, and have customary best net/modified economic cutback provisions in relation to Section 280G of the Internal Revenue Code. In some instances, the executive's receipt of such payments and other benefits in connection with such a termination is subject to the executive signing a general release of claims, as provided in the respective employment agreement.

With respect to termination due to death or disability, all equity awards of the named executive officers shall accelerate and fully vest and we shall also pay a cash lump sum equal to the value of COBRA premiums for a period of twelve (12) months following the termination that may be used by the executive or his spouse and dependents, as applicable, to pay for health insurance coverage that is substantially similar to the coverage executive and his eligible dependents received prior to the termination.

In the case of a termination by the executive for good reason, or by us without cause, and subject to the terms of the agreement, (i) we shall pay the executive an amount equal to eighteen (18) months for Mr. Green, and twelve (12) months for Mr. Rossi of his respective base salary rate in equal installments over the period of one year from the date of termination in accordance with our payroll procedures and (ii) any stock options or other stock based grants which would otherwise vest within 12 months of the date of termination shall become fully vested or non-forfeitable (provided that with respect to Mr. Green, as to the time-based RSUs granted in connection with his hiring, such period shall be 24 months, and with respect to the performance-based RSUs granted in connection with his hiring, the performance period would be measured as to the period from grant through the termination event). Further, following any such termination, we shall reasonably determine what annual bonus the executive would have received had he remained employed throughout the fiscal year in which the termination occurs, and if any such annual bonus would have been earned, we shall pay the executive a pro rata portion of such determined annual bonus by a lump-sum cash payment. In addition, following the termination we shall also pay a cash lump sum equal to the value of COBRA premiums for a period of eighteen (18) months for Mr. Green, and twelve (12) months for Mr. Rossi, following the termination that may be used by the respective executive to pay for health insurance coverage that is substantially similar to the coverage executive and his eligible dependents received prior to the termination.

In the event that the executive is terminated within three months prior to, or twelve months after, a change in control (as described in his employment agreement), we shall pay the executive a single lump sum in cash equal to twenty-four (24) months as to Mr. Green, and eighteen (18) months as to Mr. Rossi, of his respective base salary, and all stock options and other stock-based awards granted to the executive shall immediately accelerate and become exercisable or non-forfeitable as of the date of the change in control (and as to Mr. Green, with respect to the performance-based RSUs granted in connection with his hiring, the performance period would be measured as to the period from grant through the change of control event). In addition, following such termination we shall also pay a cash lump sum equal to the value of COBRA premiums for a period of twenty four (24) months for Mr. Green, and eighteen (18) months for Mr. Rossi, following the termination that may be used by the respective executive to pay for health insurance coverage that is substantially similar to the coverage executive and his eligible dependents received prior to the termination.

Separation Agreement with Mr. Rossi

In connection with Mr. Rossi's resignation as the Company's Chief Financial Officer and Treasurer effective December 31, 2022, the Company and Mr. Rossi entered into a Separation Agreement and Release dated January 18, 2023 (the "Rossi Separation Agreement"). Under the terms of the Rossi Separation Agreement, Mr. Rossi will be required to provide transition assistance and will remain an employee of the Company through May 10, 2023 (the "Rossi Separation Date"). Pursuant to the Rossi Separation Agreement, the Company will continue to pay Mr. Rossi's base salary for the period between January 1, 2023 and the Rossi Separation Date. Mr. Rossi is also eligible to participate in all applicable employee benefit plans through the Rossi Separation Date.

Separation Agreement with Mr. Olson

In connection with Mr. Olson's resignation as the Company's Chief Operating Officer effective January 31, 2022, the Company and Mr. Olson entered into a Separation Agreement and Release dated January 26, 2022 (the "Olson Separation Agreement"). Under the terms of the Olson Separation Agreement, Mr. Olson was required to provide transition assistance and remained an employee of the Company through December 31, 2022 (the "Olson Separation Date"). Pursuant to the Olson Separation Agreement, the Company continued to pay Mr. Olson's base salary for the period between February 1, 2022 and the Olson Separation Date. Mr. Olson was also eligible to participate in all applicable employee benefit plans through the Olson Separation Date.

PAY VERSUS PERFORMANCE

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 402(v) of Regulation S-K, we are providing the following information about the relationship between executive compensation actually paid (as defined by SEC rules) and certain financial performance of the Company. The Compensation Committee did not consider the pay versus performance disclosure when making its compensation decisions for the 2022 fiscal year. For further information about how we align executive compensation with the company's performance, please refer to the Compensation Discussion and Analysis, above. The amounts in the table below are calculated in accordance with SEC rules and do not represent amounts actually earned or realized by our NEOs, including with respect to RSUs and PSUs.

The following table sets forth the compensation for our principal executive officer and the average compensation for certain of our other named executive officers, each as reported in the Summary Compensation Table and with certain adjustments to reflect Compensation Actually Paid ("CAP") as defined under the SEC rules. The table also provides information with respect to cumulative TSR and Net Income.

Pay Versus Performance						
(a)	(b)	(c)	(d)	(e)	(f)	(h)
Year	Summary compensation table total for PEO	Compensation actually paid to PEO	Average summary compensation table total for non-PEO named executives	Average compensation actually paid to non-PEO named executive officers	Value of initial fixed \$100 investment based on total shareholder return	Net Loss (in thousands)
2022	\$ 2,351,725	\$ (3,681,672)	\$ 511,197	\$ (1,014,026)	\$ 64.57	\$ (9,516)
2021	\$ 2,737,454	\$ 9,166,465	\$ 761,531	\$ 1,653,283	\$ 164.34	\$ (288)

(1) The dollar amounts reported in column (b) are the amounts of total compensation reported for Mr. Green (our Principal Executive Officer) for each corresponding year in the "Total" column of the Summary Compensation Table. Refer to "Executive Compensation – Summary Compensation Table."

(2) The dollar amounts reported in column (c) represent the amount of "compensation actually paid" to Mr. Green, as computed in accordance with Item 402(v) of Regulation S-K. The dollar amounts do not reflect the actual amount of compensation earned by or paid to Mr. Green during the applicable year. In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to Mr. Green's total compensation for each year to determine the compensation actually paid:

PEO Stock Award Adjustments					
Year	Subtract	Subtract	Add	Add	Add
Year	Amounts reported in "Stock Awards" column in SCT	Awards forfeited during year using prior year-end values	Year-end fair value of awards granted during covered fiscal year that were outstanding and unvested at year-end	Year-over-year change in fair value at year-end of awards granted in prior fiscal years that were outstanding and unvested at year-end	Change as of vesting date (from end of prior fiscal year) in fair value of awards granted in prior fiscal years for which all applicable vesting conditions were satisfied during covered fiscal year
2022	(1,721,120)	—	727,176	(3,176,423)	(1,863,029)
2021	(1,721,140)	—	2,429,009	2,930,672	2,790,470

(3) The dollar amounts reported in column (d) represent the average of the amounts reported for our named executive officers as a group (excluding Mr. Green) in the "Total" column of the Summary Compensation Table in each applicable year. The named executive officers included for purposes of calculating the average amounts in each applicable year were Messrs. Rossi and Olson (the "Other NEOs").

(4) The dollar amounts reported in column (e) represent the average amount of "compensation actually paid" to the Other NEOs, as computed in accordance with Item 402(v) of Regulation S-K. The dollar amounts do not reflect the actual average amount of compensation earned by or paid to the Other NEOs as a group (excluding Mr. Green) during the applicable year. In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to average total compensation for the Other NEOs for each year to determine the compensation actually paid, using the same methodology described above in Note 2.

Non-PEO Named Executive Officers Stock Award Adjustments

	Subtract	Subtract	Add	Add	Add
				Year-over-year change in fair value at year- end of awards granted in prior fiscal years that were outstanding and unvested at year- end	Change as of vesting date (from end of prior fiscal year) in fair value of awards granted in prior fiscal years for which all applicable vesting conditions were satisfied during covered fiscal year
Year	Amounts reported in "Stock Awards" column in SCT	Awards forfeited during year using prior year-end values	Year-end fair value of awards granted during covered fiscal year that were outstanding and unvested at year-end		
2022	(169,997)	(334,572)	71,824	(744,216)	(348,262)
2021	(315,000)	—	444,550	459,942	302,260

(5) Total Shareholder Return assumes \$100 was invested in our Common Shares on December 31, 2020.

Analysis of the Information Presented in the Pay Versus Performance Table

As described in more detail under Compensation Discussion and Analysis, above, a significant portion of our executive compensation is linked directly to our Company's financial and stock price performance. This linkage is reflected in the amounts shown in the Pay Versus Performance table above. As shown, the compensation actually paid to our Principal Executive Officer in 2021 and 2022 decreased from approximately \$9.2 million in 2021 to negative \$3.7 million in 2022, consistent with the year-over-year changes in net income and total shareholder return as shown in the table. The compensation actually paid to our Other NEOs follows a similar trend.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the beneficial ownership of our outstanding Common Stock as of March 21, 2023 by: (i) all persons known by us to own beneficially more than 5% of our Common Stock; (ii) each of our Directors and nominees for Director; (iii) each of the named executive officers; and (iv) all of our Directors and executive officers as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and includes any shares as to which the individual or entity has the right to acquire beneficial ownership within 60 days after March 21, 2023 through the exercise of any warrant, stock option or other right. The inclusion in this proxy statement of such shares, however, does not constitute an admission that the named stockholder is a direct or indirect beneficial owner of such shares. Common stock subject to options currently exercisable, or exercisable within 60 days after March 21, 2023, are deemed outstanding for the purpose of computing the percentage ownership of the person holding those options, but are not deemed outstanding for computing the percentage ownership of any other person.

Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of Common Stock, except to the extent spouses share authority under community property laws.

<u>Name and Address of Beneficial Owner</u> ⁽¹⁾	<u>Common Stock Beneficially Owned</u>	
	<u>Shares</u>	<u>Percent (2)</u>
Greater than 5% Holders		
B. Riley Asset Management, LLC. 3811 Turtle Creek Blvd, Suite 2125 Dallas, TX 75219	3,264,796	7.74% ⁽³⁾
Harvey Partners, LLC. 120 White Plains Road, Suite 430 Tarrytown, NY 10591	2,911,500	6.90% ⁽⁴⁾
Punch & Associates Investment Management, Inc. 7701 France Ave. So., Suite 300 Edina, MN 55435	2,764,039	6.6% ⁽⁵⁾
Non-Employee Directors ⁽¹⁾		
Bertrand Loy	523,417	1.2% ⁽⁶⁾
Thomas Loewald	311,485	* ⁽⁷⁾
Katherine Eade	327,300	* ⁽⁷⁾
Alan Edrick	304,285	* ⁽⁸⁾
Named Executive Officers ⁽¹⁾		
James Green	1,823,194	4.3% ⁽⁹⁾
Michael A. Rossi	282,680	* ⁽¹⁰⁾
Kenneth Olson	82,471	*
All Directors and Current Executive Officers, as a group (6 persons)	3,297,603	7.7% ⁽¹¹⁾

* Represents beneficial ownership of less than one percent (1%) of our outstanding Common Stock.

(1) The address for all non-employee directors and named executive officers is c/o Harvard Bioscience, Inc., 84 October Hill Road, Holliston, Massachusetts 01746.

(2) Based on 42,190,043 shares outstanding on March 21, 2023 together with the applicable options and restricted stock units for each stockholder.

- (3) This information is based solely upon a Schedule 13G/A filed by B. Riley Asset Management, LLC with the SEC on February 16, 2023, reporting shared voting power over 3,264,796 shares and shared dispositive power over 3,296,796 shares.
- (4) This information is based solely upon a Schedule 13G filed by Harvey Partners, LLC with the SEC on February 14, 2023, reporting sole voting power over 2,720,733 shares and sole dispositive power over 2,911,500 shares.
- (5) This information is based solely upon a Schedule 13G filed by Punch & Associates Investment Management, Inc. with the SEC on February 9, 2023, reporting sole voting power over 2,764,039 shares and sole dispositive power over 2,764,039 shares.
- (6) Includes options to acquire 55,300 shares that are exercisable within 60 days after March 21, 2023, as well as 47,493 restricted stock units that will fully vest within 60 days after March 21, 2023.
- (7) Includes options to acquire 87,600 shares that are exercisable within 60 days after March 21, 2023, as well as 38,259 restricted stock units that will fully vest within 60 days after March 21, 2023.
- (8) Includes options to acquire 101,800 shares that are exercisable within 60 days after March 21, 2023, as well as 38,259 restricted stock units that will fully vest within 60 days after March 21, 2023.
- (9) Includes options to acquire 295,127 shares that are exercisable within 60 days after March 21, 2023.
- (10) Includes options to acquire 153,553 shares that are exercisable within 60 days after March 21, 2023.
- (11) Group includes our non-employee directors, Mr. Green and Ms. Cote. Includes options to acquire 627,427 shares that are exercisable within 60 days after March 21, 2023 as well as 162,270 restricted stock units that will fully vest within 60 days after March 21, 2023.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information as of December 31, 2022 concerning the number of shares of Common Stock issuable under our existing equity compensation plans.

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock Units, Warrants and Rights</u> (a)	<u>Weighted Average Exercise Price of Outstanding Options, Warrants, And Rights</u> (b)	<u>Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected In Column (a))</u> (c)
Equity compensation plans approved by security holders ⁽¹⁾	2,978,812	\$3.15	4,326,030 ⁽²⁾
Equity compensation plans not approved by security holders.....	-	\$0.00	-
Total.....	<u>2,978,812</u>		<u>4,326,030</u>

(1) Consists of the Harvard Bioscience, Inc. Fourth Amended and Restated 2000 Stock Option and Incentive Plan, the Harvard Bioscience, Inc. 2021 Incentive Plan (the “2021 Plan”) and the Harvard Bioscience, Inc. Employee Stock Purchase Plan (as amended, the “ESPP”). The number of securities in column (a) for plans approved by security holders consists of 1,238,776 outstanding stock options and 1,740,036 RSUs.

(2) Represents 3,904,861 shares available for future issuance under the 2021 Plan and 421,169 shares available for future issuance under the ESPP.

TRANSACTIONS WITH RELATED PERSONS

The Audit Committee charter sets forth the standards, policies and procedures that we follow for the review, approval or ratification of any related person transaction that we are required to report pursuant to Item 404(a) of Regulation S-K promulgated by the SEC. Pursuant to the Audit Committee charter, the Audit Committee reviews these related person transactions on an ongoing basis and the approval of the Audit Committee is required for all such transactions. The Audit Committee relies on management to identify related person transactions and bring them to the attention of the Audit Committee.

Aside from the indemnification agreements we have entered into with each of our Directors, each of which provides that we will indemnify our Directors for expenses incurred because of their status as a Director to the fullest extent permitted by Delaware law, our certificate of incorporation and our by-laws, during the 2021 and 2022 fiscal years, we were not a participant in any related person transactions that required disclosure under this heading.

DELINQUENT SECTION 16(A) REPORTS

Our executive officers, Directors and beneficial owners of more than 10% of our Common Stock are required under Section 16(a) of the Exchange Act to file reports of ownership and changes in ownership with the SEC. Copies of those reports must also be furnished to us.

Based solely on a review of the copies of the reports furnished to us, and written representations from certain reporting persons that no other reports were required, we believe that during the year ended December 31, 2022, the reporting persons complied on a timely basis with all Section 16(a) filing requirements applicable to them.

STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Stockholders and other interested parties wishing to communicate with the Board of Directors may do so by sending a written communication to any Director at the following address: Harvard Bioscience, Inc., 84 October Hill Road, Holliston, Massachusetts 01746. The mailing envelope should contain a notation indicating that the enclosed letter is a “Board Communication.” All such letters should clearly state whether the intended recipients are all members of the Board of Directors or certain specified individual Directors. Our Secretary or his or her designee will make a copy of any such communication so received and promptly forward it to the Director or Directors to whom it is addressed.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The following table presents fees for professional services provided by Grant Thornton LLP for the audits of the Company's annual consolidated financial statements for the last two fiscal years, in each of the following categories is as set forth in the table below.

	<u>2022</u>	<u>2021</u>
Audit Fees (1)	\$ 1,151,966	\$ 1,027,304
Audit-Related Fees	—	—
Tax Fees (2)	7,426	7,218
Other	—	—
Total Fees	<u>\$ 1,159,392</u>	<u>\$ 1,034,522</u>

(1) Audit Fees included fees billed or expected to be billed for professional services associated with the annual audit of our consolidated financial statements and internal controls over financial reporting and the reviews of our quarterly reports on Form 10-Q, and fees related to a registration statement on Form S-8 filed in 2022.

(2) Tax Fees included domestic and international tax compliance, tax advice and tax planning.

All of the services performed in the year ended December 31, 2022 were pre-approved by the Audit Committee. It is the Audit Committee's policy to pre-approve all audit and permitted non-audit services to be provided to us by the independent registered public accounting firm. The Audit Committee's authority to pre-approve non-audit services may be delegated to one or more members of the Audit Committee, who shall present all decisions to pre-approve an activity to the full Audit Committee at its first meeting following such decision. The Audit Committee has delegated this pre-approval authority for non-audit services to the Audit Committee Chair. In addition, the Audit Committee has considered whether the provision of the non-audit services above is compatible with maintaining the independent registered public accounting firm's independence.

PROPOSAL 2 RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has appointed Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023. Grant Thornton LLP has served as our independent registered public accounting firm since 2017. The Audit Committee is responsible for the appointment, retention, termination, compensation and oversight of the work of our independent registered public accounting firm. To execute this responsibility, the Audit Committee annually evaluates the independent auditor's qualifications, performance and independence and whether the independent registered public accounting firm should be rotated, and considers the advisability and potential impact of selecting a different independent registered public accounting firm.

The Board is submitting the appointment of Grant Thornton LLP to our stockholders for ratification because we value the views of our stockholders. In the event that our stockholders fail to ratify the appointment of Grant Thornton LLP, the Audit Committee will reconsider the appointment of Grant Thornton LLP. Even if the appointment is ratified, the ratification is not binding and the Audit Committee may in its discretion select a different independent registered public accounting firm at any time during the year if it determines that such a change would be in the best interests of the Company and our stockholders.

A representative of Grant Thornton LLP is expected to be present virtually at the Annual Meeting. He or she will have an opportunity to make a statement, if he or she desires to do so, and will be available to respond to appropriate questions.

Vote Required

The affirmative vote of a majority of the votes cast by holders of shares of Common Stock present or represented by proxy and entitled to vote on the matter at the Annual Meeting is required for the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THE RATIFICATION OF THE APPOINTMENT OF GRANT THORNTON LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2023.

PROPOSAL 3 ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

Background

We are seeking an advisory vote from our stockholders, as required under Section 951 of the Dodd-Frank Act, to approve our named executive officer compensation, as set forth below. The Compensation Committee and Board of Directors welcome our stockholders’ views on this subject, and will carefully consider the outcome of this vote consistent with the best interests of all stockholders. As an advisory vote, however, the outcome is not binding on us or the Compensation Committee or the Board of Directors.

As described in detail under the heading “Compensation Discussion and Analysis,” our executive compensation program is designed to attract and retain high performing and experienced executives; motivate and reward executives whose knowledge, skills and performance are critical to our success; align the interests of our executives and stockholders by motivating executives to increase stockholder value and rewarding executives when stockholder value increases; foster a shared commitment among executives by coordinating their goals; and motivate our executives to manage our business to meet our short and long-term objectives, and reward them for meeting these objectives. The elements of executive compensation include base salary, annual cash incentive bonuses, employment agreements, long-term equity incentive compensation and broad-based benefits programs. Please read the “Compensation Discussion and Analysis” for additional details about our executive compensation programs, including information about the fiscal year 2022 compensation of our named executive officers. Specifically, we are seeking a vote on the following resolution:

RESOLVED, that the stockholders approve, on a non-binding advisory basis, the compensation of our named executive officers as disclosed in this proxy statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables and related narrative discussion.

Vote Required

The affirmative vote of a majority of the votes cast by holders of shares of Common Stock present or represented by proxy and entitled to vote on the matter at the Annual Meeting is required for the approval of the resolution to approve the compensation of our named executive officers.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THE RESOLUTION TO APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.

PROPOSAL 4
ADVISORY VOTE ON FREQUENCY OF FUTURE ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

Background

We are seeking your input with regard to the frequency of holding future stockholder advisory votes on the compensation of our named executive officers. In particular, we are asking whether the advisory vote on the compensation of our named executive officers (Proposal No. 3) should occur every year, every two years or every three years. Because your vote is advisory, it will not be binding on our Compensation Committee or our Board of Directors. However, the Compensation Committee and our Board of Directors will review the voting results and take them into consideration when making future decisions regarding how frequently it should present the advisory vote on the compensation of our named executive officers to our stockholders.

The Compensation Committee, Board of Directors and management believe that it is appropriate and in our best interests of our stockholders to vote in favor of an annual advisory vote on the compensation of our named executive officers. An advisory vote each year will permit our stockholders to provide annual feedback to us on our compensation policies, practices and compensation awards for our named executive officers. This is consistent with our policy of giving stockholders the opportunity to voice concerns with management or our Board of Directors. An annual advisory vote will give the Board of Directors, the Compensation Committee and management more timely feedback from the stockholders to allow us to evaluate and adjust, when we consider appropriate, the compensation of our named executive officers. If our stockholders approve the recommended frequency of holding the advisory vote once per year, we will implement that frequency without further action by the Board of Directors.

The proxy card provides stockholders with the opportunity to choose among four alternatives (holding the vote every one, two or three years, or abstaining) and, therefore, stockholders will not be voting to approve or disapprove our Board of Directors' recommendation. The alternative (one year, two years or three years) that received the highest number of votes casted at the Annual Meeting, virtually online or by proxy, will be the frequency approved on an advisory basis by our stockholders.

Recommendation

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE “*FOR*” “1 YEAR” AS THE FREQUENCY FOR WHICH STOCKHOLDERS SHALL HAVE AN ADVISORY VOTE ON THE COMPENSATION OF THE COMPANY’S NAMED EXECUTIVE OFFICERS.

SUBMISSION OF STOCKHOLDER PROPOSALS FOR THE 2024 ANNUAL MEETING

In order to be considered for inclusion in our proxy statement and form of proxy for our 2024 annual meeting, stockholder proposals intended to be presented at our 2024 annual meeting of stockholders must be received by us on or before December 7, 2023 and otherwise comply with the requirements set forth in Rule 14a-8 under the Exchange Act. These proposals must also comply with the rules of the Securities and Exchange Commission governing the form and content of proposals in order to be included in our proxy statement and form of proxy and should be mailed to: Secretary, Harvard Bioscience, Inc., 84 October Hill Road, Holliston, Massachusetts 01746.

To the extent a stockholder of record wishes to have a stockholder proposal or Director nomination considered at an annual meeting even though such proposal is not included in our proxy statement, our Bylaws provide that such stockholder of record must provide written notice of such proposal or nomination and appropriate supporting documentation, as set forth in the Bylaws, to our Secretary at our principal executive office not less than 90 days or not more than 120 days prior to the first anniversary of the date of the preceding year’s annual meeting. For the 2024 annual meeting of stockholders, such proposal or nomination must be received no earlier than January 16, 2024 and no later than February 15, 2024.

In addition to the notice and information requirements contained in our Bylaws, to comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than the Company’s nominees must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than March 16, 2024.

MULTIPLE STOCKHOLDERS SHARING THE SAME ADDRESS

Owners of Common Stock in street name may receive a notice from their broker or bank stating that only one notice of internet availability of proxy materials, annual report or proxy statement will be delivered to multiple stockholders sharing an address. This practice, known as “householding,” is designed to reduce printing and postage costs. However, if any stockholder residing at such an address wishes to receive a separate notice of internet availability of proxy materials, annual report or proxy statement, we will promptly deliver a separate copy to any stockholder upon written or oral request to our investor relations department at Harvard Bioscience, Inc., 84 October Hill Road, Holliston, Massachusetts 01746-1371 or by telephone at (508) 893-3120 or by e-mail at investors@harvardbioscience.com. In addition, any stockholder who receives multiple copies at the same address can request delivery of a single copy by notifying our investor relations department pursuant to the contact information provided above.

OTHER MATTERS

The Board of Directors does not know of any matters, other than those described in this proxy statement that will be presented for action at the Annual Meeting. If other matters are duly presented, proxies will be voted in accordance with the best judgment of the proxy holders.

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING VIRTUALLY, PLEASE CAST YOUR VOTE ONLINE, BY TELEPHONE OR BY COMPLETING, DATING, SIGNING AND PROMPTLY RETURNING YOUR PROXY CARD OR VOTING INSTRUCTIONS CARD IN THE POSTAGE-PAID ENVELOPE (WHICH WILL BE PROVIDED TO THOSE STOCKHOLDERS WHO REQUEST PAPER COPIES OF THESE MATERIALS BY MAIL) BEFORE THE ANNUAL MEETING SO THAT YOUR SHARES ARE REPRESENTED AT THE ANNUAL MEETING.

THIS PROXY STATEMENT IS ACCOMPANIED BY THE COMPANY’S ANNUAL REPORT. THE COMPANY WILL FURNISH, WITHOUT CHARGE, A COPY OF ITS ANNUAL REPORT AND ANY EXHIBITS THERETO TO ANY STOCKHOLDER, UPON WRITTEN REQUEST TO HARVARD BIOSCIENCE, INC., 84 OCTOBER HILL ROAD, HOLLISTON, MASSACHUSETTS 01746-1371. A LIST OF STOCKHOLDERS ENTITLED TO VOTE AT THE ANNUAL MEETING WILL BE AVAILABLE FOR INSPECTION BY STOCKHOLDERS DURING REGULAR BUSINESS HOURS AT OUR OFFICES AND THE OFFICES OF OUR TRANSFER AGENT DURING THE TEN DAYS PRIOR TO THE ANNUAL MEETING AS WELL AS AT THE ANNUAL MEETING.

HARVARD BIOSCIENCE, INC.
84 OCTOBER HILL ROAD
ROLLISTON, MA 01746-1371

Investor Address Line 1
Investor Address Line 2
Investor Address Line 3
Investor Address Line 4
Investor Address Line 5
John Sample
1234 ANYWHERE STREET
ANY CITY, ON A1A 1A1



SCAN TO
VIEW MATERIALS & VOTE



VOTE BY INTERNET - www.proxyvote.com or scan the QR Barcode above
Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/HBIO2023
You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-890-8903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

NAME
THE COMPANY NAME INC. - COMMON
THE COMPANY NAME INC. - CLASS A
THE COMPANY NAME INC. - CLASS B
THE COMPANY NAME INC. - CLASS C
THE COMPANY NAME INC. - CLASS D
THE COMPANY NAME INC. - CLASS E
THE COMPANY NAME INC. - CLASS F
THE COMPANY NAME INC. - 401 K

CONTROL # → 0000000000000000

SHARES
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345
123,456,789,012.12345

PAGE 1 OF 2

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

KEEP THIS PORTION FOR YOUR RECORDS AND RETURN THIS PORTION ONLY

The Board of Directors recommends you vote FOR the following:

	For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.	<input type="checkbox"/>
	0	0	0		<input type="checkbox"/>

1. Election of Directors

Nominees

01) Katherine A. Eade 02) Thomas W. Loewald

The Board of Directors recommends you vote FOR proposals 2 and 3:

	For	Against	Abstain
2. To ratify the appointment of Grant Thornton LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2023.	0	0	0
3. Approval, by a non-binding advisory vote, of the compensation of the Company's named executive officers.	0	0	0

The Board of Directors recommends you vote 1 YEAR on the following proposal:

	1 year	2 years	3 years	Abstain
4. Recommendation by a non-binding advisory vote, of the frequency of the shareholder vote to approve the compensation of the Company's named executive officers.	0	0	0	0

NOTE: Such other business as may properly come before the Annual Meeting and any adjournments or postponements thereof.

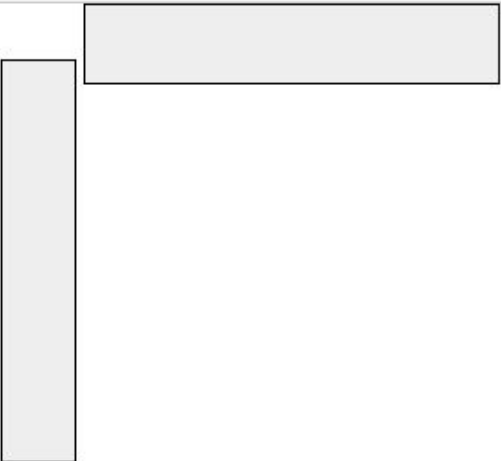
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Investor Address Line 1
Investor Address Line 2
Investor Address Line 3
Investor Address Line 4
Investor Address Line 5
John Sample
1234 ANYWHERE STREET
ANY CITY, ON A1A 1A1

Signature [PLEASE SIGN WITHIN BOX] Date JOB # Signature (Joint Owners) Date SHARES CUSIP # SEQUENCE #

0000601642_1_R1.00.6

02 0000000000



Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice & Proxy Statement and Annual Report are available at www.proxyvote.com

	<p>HARVARD BIOSCIENCE, INC. Annual Meeting of Stockholders May 15, 2023 at 11:00 AM, EDT This proxy is solicited by the Board of Directors</p>
<p>The stockholder(s) hereby appoint(s) James Green, Jennifer Cote and John Fry, or any of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of Harvard Bioscience, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 11:00 AM, EDT on May 15, 2023. The Annual Meeting will be held by virtual meeting only. You will not be able to attend the Annual Meeting in person. To be admitted to the Annual Meeting at www.virtualshareholdermeeting.com/HBIO2023, you must enter the control number found on your proxy card, voting instruction form or notice you previously received. You may vote during the Annual Meeting by following the instructions available on the meeting website during the meeting.</p> <p>This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.</p> <p>Continued and to be signed on reverse side</p>	

000001540_3 RT 006