ENZO BIOCHEM INC Form DEF 14A November 27, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 14A

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

Filed by the Registrant S

Filed by a Party other than the Registrant \pounds

Check the appropriate box:

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

Enzo Biochem, Inc.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant Payment of Filing Fee (Check the appropriate box):

- S No fee required
- \pounds Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

- (4) Proposed maximum aggregate value of transaction:
- (5) Total fee paid:
- £ Fee paid previously with preliminary materials.
- \pounds Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount previously paid:
 - (2) Form, Schedule or Registration Statement No.:
 - (3) Filing Party:
 - (4) Date Filed:

ENZO BIOCHEM, INC. 527 Madison Avenue New York, New York 10022

NOTICE OF 2013 ANNUAL MEETING OF SHAREHOLDERS

To be held on January 17, 2014

To All Shareholders of Enzo Biochem, Inc.:

NOTICE IS HEREBY GIVEN that the 2013 Annual Meeting of Shareholders of Enzo Biochem, Inc., a New York corporation (the Company), will be held at The Yale Club, 50 Vanderbilt Avenue, New York, New York 10017, on January 17, 2014, at 9:00 a.m., New York City time (the Annual Meeting), for the following purposes:

1. to elect to the Company s Board of Directors (the Board) as Class II Directors, Mr. Barry W. Weiner and Bernard L. Kasten, M.D., each to hold office for a term of three (3) years or until their respective successors have been duly elected and qualified;

- 2. to approve, in a nonbinding advisory vote, the compensation of the Company s Named Executive Officers;
- 3. to ratify the Company s appointment of

EisnerAmper LLP to serve as the Company s independent registered public accounting firm for the Company s fiscal year ending July 31, 2014; and

4. to transact such other business as may properly come before the Annual Meeting or any adjournments or postponements thereof.

All shareholders are cordially invited to attend the Annual Meeting. Please note that you will be asked to present proof that you are a shareholder of the Company as well as valid picture identification, such as a driver s license or passport, in order to attend the Annual Meeting. The use of cameras, recording devices and other electronic devices will be prohibited at the Annual Meeting.

Whether or not you plan to attend the Annual Meeting, and regardless of the number of shares of common stock you own, you are requested to sign, date and return the enclosed proxy card promptly. Any shareholder of record who submits a proxy card retains the right to revoke such proxy card by: (i) submitting a written notice of such revocation to the President of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 16, 2014; (ii) submitting a duly signed proxy card bearing a later date than the previously signed and dated proxy card to the President of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 16, 2014; or (iii) attending the Annual Meeting and voting in person thereat the shares represented by such proxy card. Attendance at the Annual Meeting will not, in and of itself, constitute revocation of a completed, signed and dated proxy card previously returned. All such later-dated proxy cards or written notices revoking a proxy card should be sent to Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022, Attention: Barry W. Weiner, President. If you hold shares in street name, you must contact the firm that holds your shares to change or revoke any prior voting instructions.

Please read carefully the enclosed Proxy Statement, which explains the proposals to be considered by you and acted upon at the Annual Meeting.

Your Board has fixed the close of business on November 21, 2013 as the record date for the determination of holders of record of the Company s common stock entitled to notice of, and to vote at, the Annual Meeting. A list of shareholders of record of the Company as of the record date will remain open for inspection during the Annual Meeting until the closing of the polls thereat.

We have elected to provide access to our proxy materials over the Internet under the Securities and Exchange Commission s notice and access rules. We believe that providing our proxy materials over the Internet allows us to provide our stockholders with the information they need, while reducing our printing and mailing costs and the environmental impact of our Annual Meeting. The Notice of Internet Availability of Proxy Materials (the Notice) that you received in the mail contains instructions on how to access this proxy statement and the 2013 annual report and vote online. The Notice also includes instructions on how you can request a paper copy of the annual meeting materials. If you want more information, please see the Questions and Answers section of

this proxy statement or visit the Annual Stockholders Meeting section of our Investor Relations web site. Your vote is important. Whether or not you plan to attend the Annual Meeting, we hope you will vote as soon as possible. You may vote over the Internet, as well as by telephone or, if you requested to receive printed proxy materials, by mailing a proxy or voting instruction card. Please review the instructions on each of your voting options described in this proxy statement as well as in the Notice you received in the mail.

If you have any questions about the procedures for admission to the Annual Meeting, please contact Investor Relations at (212) 583-0100.

By Order of the Board of Directors, /s/ Barry W. Weiner

Barry W. Weiner President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director November 27, 2013

ALL HOLDERS OF RECORD OF THE COMPANY S COMMON STOCK (WHETHER THEY INTEND TO ATTEND THE ANNUAL MEETING OR NOT) ARE STRONGLY ENCOURAGED TO COMPLETE, SIGN, DATE AND RETURN PROMPTLY THE PROXY CARD ENCLOSED WITH THE ACCOMPANYING PROXY STATEMENT.

TABLE OF CONTENTS

	Page
THE 2013 ANNUAL MEETING	3
Who is Entitled to Vote at the Annual Meeting	3
How You May Vote	3
Quorum; Vote Required	4
Revocation of Proxies	5
Voting	5
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	6
PROPOSAL 1 ELECTION OF DIRECTORS	7
CLASS II DIRECTOR NOMINEES TO SERVE UNTIL THE 2016 ANNUAL MEETING, IF ELECTED:	8
DIRECTORS WHO ARE CONTINUING IN OFFICE:	8
DIRECTORS, EXECUTIVE OFFICERS AND KEY EMPLOYEES	9
CORPORATE GOVERNANCE	12
AUDIT COMMITTEE REPORT	17
SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE	17
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS	18
CODE OF ETHICS	18
COMPENSATION OF DIRECTORS	18
COMPENSATION OF EXECUTIVE OFFICERS	19
COMPENSATION COMMITTEE REPORT	32
COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION	32
SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS	32
INSURANCE FOR INDEMNIFICATION OF DIRECTORS AND OFFICERS	32
PROPOSAL 2 ADVISORY VOTE ON THE COMPANY S NAMED EXECUTIVE OFFICER COMPENSATION	33
PROPOSAL 3 RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	34
OTHER MATTERS	36
METHOD AND COST OF SOLICITATION OF PROXIES	36
ANNUAL REPORT	36
ENZO WEBSITE	36
SHAREHOLDER PROPOSALS	36
i	

ENZO BIOCHEM, INC. PROXY STATEMENT 2013 ANNUAL MEETING OF SHAREHOLDERS

To be held on January 17, 2014

This Proxy Statement is being furnished to shareholders of record, as of November 21, 2013, of Enzo Biochem, Inc. (Enzo, Enzo Biochem, or the Company), in connection with the solicitation of proxies by the Board of Directors of the Company (the Board) for the 2013 Annual Meeting of Shareholders to be held at The Yale Club, 50 Vanderbilt Avenue, New York, New York 10017, on January 17, 2014, at 9:00 a.m., New York City time (the Annual Meeting), and at any adjournments or postponements of the Annual Meeting, for the purposes stated in the accompanying Notice of 2013 Annual Meeting of Shareholders.

Pursuant to the notice and access rules adopted by the Securities and Exchange Commission (the SEC), the Company has elected to provide stockholders access to its proxy materials over the Internet. Accordingly, the Company will be sending a Notice of Internet Availability of Proxy Materials (the Notice) to most stockholders (other than those who previously requested electronic or paper delivery of proxy materials). The Notice will include instructions on how to access the proxy materials over the Internet and how to request a printed copy of these materials. In addition, by following the instructions in the Notice, stockholders may request to receive proxy materials in printed form by mail or electronically by email on an ongoing basis.

If you properly submit your proxy over the Internet, by telephone or by mail (if you request printed copies of the proxy materials) and do not revoke it, the persons named in the enclosed form of proxy will vote the shares for which they are appointed in accordance with the directions of the shareholders appointing them. In the absence of such directions, such shares will be voted FOR Proposals 1, 2 and 3 listed in the preceding Notice of Annual Meeting of Shareholders and, in the best judgment of the persons named as proxies, will be voted on any other matters as may come before the Annual Meeting. Any shareholder giving a proxy has the power to revoke the same at any time before it is voted by timely filing written notice of such revocation with the President of the Company, by timely submission of a duly executed proxy bearing a later date or by voting in person at the Annual Meeting. To attend the Annual Meeting will not in and of itself constitute revocation of a proxy. Any written notice revoking a proxy should be sent to Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022, Attention: Barry W. Weiner.

Choosing to receive your future proxy materials by email will save the Company the cost of printing and mailing documents to you and will reduce the impact of the Company s annual meetings on the environment. If you choose to receive future proxy materials by email, you will receive an email next year with instructions containing a link to those materials and a link to the proxy voting site. Your election to receive proxy materials by email will remain in effect until you terminate it.

The principal corporate office of the Company is located at 527 Madison Avenue, New York, New York 10022.

The approximate date of mailing to shareholders of the Notice of the 2013 Annual Meeting of Shareholders, this Proxy Statement, the enclosed proxy card and the Company s 2013 Annual Report to Shareholders is December 4, 2013.

Householding of Annual Meeting Materials

Some brokers and other nominee record holders may be participating in the practice of householding this Proxy Statement and other proxy materials. This means that only one copy of this Proxy Statement and other proxy materials may have been sent to multiple shareholders in a shareholder s household. The Company will promptly deliver additional copies of the Proxy Statement and other proxy materials to any shareholder who contacts the Company s principal corporate office at 527 Madison Avenue, New York, New York 10022, Attention: Investor Relations at (212) 583-0100 requesting such additional copies. If a shareholder is receiving multiple

copies of the Proxy Statement and other proxy materials at the shareholder s household and would like to receive only a single copy of the Proxy Statement and other proxy materials for a shareholder s household in the future such shareholders should contact their broker, other nominee record holder, or the Company s investor relations department to request the future mailing of only a single copy of the Company s Proxy Statement and other proxy materials.

IMPORTANT NOTICE REGARDING AVAILABILITY OF PROXY MATERIALS

This Proxy Statement, the form of proxy card, our 2013 Annual Report to Shareholders and our Annual Report on Form 10-K for our fiscal year ended July 31, 2013, are available to you on our website at <u>www.enzo.com</u>. Shareholders may also obtain a copy of these materials by writing to Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022, Attention: Barry W. Weiner, President. Upon payment of a reasonable fee, shareholders may also obtain a copy of the exhibits to our Annual Report on Form 10-K for our fiscal year ended July 31, 2013.

2

THE 2013 ANNUAL MEETING

Who is Entitled to Vote at the Annual Meeting

Only holders of record of the Company s common stock, par value \$.01 per share (the Common Stock), as of the close of business on November 21, 2013 (the Record Date) are entitled to notice of, and to vote at, the Annual Meeting. On the Record Date there were issued and outstanding 41,348,573 shares of Common Stock. Each outstanding share of Common Stock is entitled to one (1) vote upon all matters to be acted upon at the Annual Meeting.

How You May Vote

If you are a holder of record of Common Stock as of the Record Date, you may vote by completing, signing, dating and returning the enclosed proxy card by mail. To vote by using the enclosed proxy card, mark your selections on the enclosed proxy card, date the proxy card and sign your name exactly as it appears on your proxy card, and return your proxy card by mail to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, New York 11717.

If you are a holder of record of Common Stock as of the Record Date, you may also vote via the Internet or via telephone. The website for Internet voting is www.proxyvote.com. As with telephone voting, you can confirm that your instructions have been properly recorded. If you vote via the Internet, you also can request electronic delivery of future proxy materials. If you vote via the Internet, please note that there may be costs associated with electronic access, such as usage charges from Internet access providers and telephone companies, for which you will be responsible. You can vote by calling the toll-free telephone number on your proxy card. Easy-to-follow voice prompts allow you to vote your shares and confirm that your instructions have been properly recorded.

If you are a holder of record of Common Stock as of the Record Date, you may also vote by attending the Annual Meeting and voting thereat in person. Votes at the Annual Meeting will be taken by written ballot. At the commencement of the Annual Meeting, we will distribute a written ballot to any shareholder of record who attends the Annual Meeting and wishes to vote thereat in person.

If your shares are held in street name, whether through a broker, bank or other nominee, only they can sign a proxy card with respect to your shares. You are therefore urged to contact the person responsible for your account and give them instructions for how to complete a proxy card representing your shares so that it can be timely returned on your behalf. You also should confirm in writing your instructions to the person responsible for your account and provide a copy of those instructions to us so that we can attempt to ensure that your instructions are followed. If you wish instead to vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank or other nominee.

If you are a holder of record of Common Stock as of the Record Date and plan to attend the Annual Meeting, please be sure to bring with you valid government-issued personal identification with a picture (such as a driver s license or passport) in order to gain admission to the meeting. If your shares are held in street name through a bank, broker or other nominee, you will have to bring evidence of your beneficial ownership of Common Stock as of the Record Date, in addition to valid government-issued personal identification, if you wish to attend the meeting. Examples of proof of Common Stock ownership include: a signed letter from your bank or broker stating that you owned your shares as of the Record Date; a brokerage account statement indicating that you owned your shares as of the Record Date; or a copy of the voting instruction card provided by your broker indicating that you owned your shares as of the Record Date. If you are a proxy holder for a holder of record of Common Stock as of the Record Date, then you must also bring the validly executed proxy naming you as the proxy holder, signed by the shareholder of record who owned such shares of Common Stock as of the Record Date.

If you have any questions about the procedures for admission to the Annual Meeting, please contact Investor Relations at (212) 583-0100. Please see Revocation of Proxies below for a discussion of how to revoke your proxy.

Quorum; Vote Required

The holders of a majority of the outstanding shares of Common Stock as of the Record Date must be present, in person or represented by proxy, at the Annual Meeting to constitute a quorum for the transaction of business at the Annual Meeting. Abstentions and broker non-votes (described below) will be counted for purposes of determining whether there is a quorum for the transaction of business at the Annual Meeting.

The election of a nominee for Director (Proposal 1) requires a plurality of votes cast. This means that so long as a quorum is present, in person or represented by proxy, at the Annual Meeting for the transaction of business, the candidates receiving the most affirmative votes FOR his or her election will be elected to serve as a Class II Director of the Company. Shareholders may either vote FOR or WITHHOLD AUTHORITY to vote for the Director-nominees. A properly executed proxy card marked WITHHOLD AUTHORITY and broker non-votes with respect to a Director-nominee will not be voted with respect to the election of that Director-nominee, although they will be counted for purposes of determining whether there is a quorum present at the Annual Meeting for the transaction of business. As a result, such votes will have no effect on the Director election since only votes FOR a nominee will be counted.

The approval of Proposal 2 will require the affirmative vote of a majority of the votes cast by holders of shares of Common Stock present, in person or represented by proxy, at the Annual Meeting and entitled to vote on such proposal. Shareholders may either vote FOR AGAINST or ABSTAIN with respect to Proposal 2. While our Board intends to carefully consider the stockholder vote resulting from Proposal 2, the vote is not binding on us and is advisory in nature. Under the rules of the New York Stock Exchange (NYSE), abstentions will be counted as votes cast and will have the same effect as a vote AGAINST for the purpose of determining whether a majority of the votes cast have been voted FOR Proposal 2. Broker non-votes will not be counted as votes cast on Proposal 2 and will have no effect on the outcome of the vote with respect to Proposal 2.

The ratification and approval of Proposal 3 will require the affirmative vote of a majority of the votes cast by holders of shares of Common Stock present, in person or represented by proxy, at the Annual Meeting and entitled to vote on such proposal. Shareholders may either vote FOR, AGAINST or ABSTAIN with respect to Proposal 3. Under the rules of the NYSE, abstentions will be counted as votes cast and will have the same effect as a vote AGAINST for the purpose of determining whether a majority of the votes cast have been voted FOR Proposal 3. Broker non- votes will not be counted as votes cast on Proposal 3 and will have no effect on the outcome of the vote with respect to Proposal 3.

If you hold your shares (i.e., they are registered) through a bank, broker or other nominee in street name but you do not provide the firm that holds your shares with your specific voting instructions, it will only be allowed to vote your shares on your behalf in its discretion on routine matters, but it cannot vote your shares in its discretion on your behalf on any non-routine matters. **Please note that the applicable rules of the NYSE that prescribe how brokers may vote your shares have changed.** Under the applicable rules of the NYSE, at the Annual Meeting, Proposal 1 relating to the election of Directors and Proposal 2 relating to the nonbinding advisory vote on the Company s executive compensation are considered non-routine matters, and Proposal 3 relating to the appointment of the Company s independent registered public accounting firm for our fiscal year ending July 31, 2014 is considered a routine matter. Therefore, you must give specific instructions to your broker for your shares to be voted on the election of Directors (Proposal 1) and the nonbinding advisory vote on the Company s executive compensation (Proposal 2) at the Annual Meeting.

If you do not give specific instructions to your broker how to vote your shares on your behalf with respect to the election of Directors at the Annual Meeting (Proposal 1) or the nonbinding advisory vote on the Company s executive compensation (Proposal 2) prior to the 10th day prior to the Annual Meeting, your broker will have no discretionary authority to vote your shares on your behalf with respect to the election of Directors at the Annual Meeting or the nonbinding advisory vote on the Company s executive compensation. Such uninstructed shares are commonly referred

to as broker non-votes . With respect to Proposal 3, your broker will have discretionary authority to vote your uninstructed shares FOR, or AGAINST, or to ABSTAIN from voting, on the ratification of the appointment of the Company s independent registered public accounting firm.

Proxy ballots will be received, tabulated and certified at the Annual Meeting by the inspector of election appointed by the Board. The inspector will also determine whether a quorum is present at the Annual Meeting.

Revocation of Proxies

If you are a shareholder of record on the Record Date and have signed, dated and returned a proxy card, you may revoke such proxy card in your discretion by:

submitting a written notice of such revocation to the President of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 16, 2014; submitting a duly signed proxy card bearing a later date than the previously signed and dated proxy card to the President of the Company so that it is received no later than 5:00 p.m. (New York City time)

on January 16, 2014; or

attending the Annual Meeting and voting in person thereat the shares represented by such proxy card (but attendance at the Annual Meeting will not, in and of itself. constitute revocation of a completed, signed and dated proxy card previously returned).

All such later-dated proxy cards or written notices of revocation of a proxy card should be sent to Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022, Attention: Barry W. Weiner, President. If you hold shares in street name, you must contact the firm that holds your shares to change or revoke any prior voting instructions.

Voting

The persons named as proxies in the enclosed proxy card will vote the shares for which such persons were thereby appointed in accordance with the voting indications marked thereon by the shareholders who signed, dated and returned such card. If, however, such proxy card is signed, dated and returned to the Company but no voting indications are marked thereon, all shares represented by such proxy card will be voted by the proxies named therein

FOR the election of the Board s Class II Director-nominees, Mr. Barry W. Weiner and Bernard L. Kasten, M.D. (Proposal 1), FOR the approval of the compensation of our Named Executive Officers, as disclosed in this Proxy Statement (Proposal 2), and FOR the ratification of the Company s appointment of EisnerAmper LLP to serve as the Company s independent registered public accounting firm for its fiscal year ending July 31, 2014 (Proposal 3), and will be voted on any other matters as may come before the Annual Meeting in the best judgment and discretion of the persons named as proxies.

You can find the official results of voting at the Annual Meeting in our Current Report on Form 8-K to be filed within four business days after the Annual Meeting. If the official results are not available at that time, we will provide preliminary voting results in the Form 8-K and will provide the final results in an amendment to the Form 8-K as soon as they become available.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Set forth below is information concerning stock ownership of all persons known by the Company to own beneficially 5% or more of the shares of Common Stock of the Company, the executive officers named in the Summary Compensation Table as Named Executive Officers, all current Directors and the Board's Class II Director-nominees, and all current Directors and executive officers of the Company as a group, based upon the number of outstanding shares of Common Stock as of the close of business on November 21, 2013.

The percentages in the Percent of Class column are calculated in accordance with the rules of the SEC, under which a person may be deemed to be the beneficial owner of shares if that person has or shares the power to vote or dispose of those shares or has the right to acquire beneficial ownership of those shares within 60 days (for example, through the exercise of an option or warrant). Accordingly, the shares shown in the table as beneficially owned by certain individuals may include shares owned by certain members of their respective families. Because of these rules, more than one person may be deemed to be the beneficial owner of the same shares. The inclusion of the shares shown in the table is not necessarily an admission of beneficial ownership of those shares by the person indicated. Except as otherwise indicated, each of the persons named has sole voting and investment power with respect to the shares shown.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership (1)	Percent of Class (2)
Elazar Rabbani, PhD	2,058,394 (3)	5.0 %
Barry W. Weiner	1,242,618 (4)	3.0 %
Andrew P. Whiteley	29,012 (5)	*
Andrew R. Crescenzo, CPA	60,452 (6)	*
David C. Goldberg	109,384 (7)	*
Gregory M. Bortz	54,566	*
Bernard L. Kasten, M.D.	95,545	*
Dov Perlysky	620,790 (8)	1.5 %
RA Capital Management LLC	3,348,029 (9)	8.1 %
Rosalind Davidowitz	3,677,718 (10)	8.9 %
All Directors and executive officers as a group (10 persons) (11)	4,798,059 (12)	10.77 %

 Represents beneficial ownership of less than 1%.

(1) Except as otherwise noted, all shares of

Common Stock are beneficially owned and the sole investment and voting power is held by the persons named, and such persons address is c/o Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022. (2) Based upon 41,348,573 shares of Common Stock of the Company outstanding as of the close of business on the Record Date.

Common Stock not outstanding but deemed beneficially owned by virtue of the right of an individual to acquire shares within 60 days from the date is treated as outstanding only when

and percentage of Common Stock owned by such individual. (3) Includes (i) 128,750 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof, (ii) 5,457 shares of Common Stock held in the name of Dr. Rabbani as custodian for certain of his children, (iii) 22,115 shares of Common Stock held in the name of Dr. Rabbani s wife as custodian for certain of their children, (iv) an aggregate of 5,100 shares of Common

determining the amount

Stock held in the name of Dr. Rabbani s children and (v) 20,379 shares of Common Stock held in the Company s 401(k) plan. (4) Includes (i) 128,750 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof, (ii) 3,638 shares of Common Stock that Mr. Weiner holds as custodian for certain of his children and (iii) 20,387 shares of Common Stock held in the Company s 401(k) plan.

(5) Includes 9,010 shares of Common Stock held in the Company s 401(k) plan.

(6) Includes 15,452 shares of Common Stock held in the Company s 401(k) plan. (7) Includes (i) 25,750 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof and (ii) 15,545 shares of Common Stock held in the Company s 401(k) plan. (8) Includes 30,000 shares owned by Laya Perlysky IRA. Laya Perlysky is Mr. Perlysky s wife. Mr. Perlysky disclaims beneficial ownership of such shares. Also includes (i) 525,826 shares owned directly by **RSD 2012** GRAT, of which Mr. Perlysky is the trustee and (ii) 45,000 shares owned by Sky Ventures LLC, of which Mr. Perlysky is the

manager. Does not include shares owned by Mrs. Davidowitz, who is Mr. Perlysky s mother-in-law. (9) The address of **RA** Capital Management LLP is 20 Park Plaza, Suite 1200, Boston, MA 02116. This information is based solely on a Schedule 13G filed on August 9, 2013. (10) Mrs. Davidowitz s address is 7 Sutton Place, Lawrence, New York, 11559. Includes (i) 1,943,338 shares owned by Rosalind Davidowitz, (ii) 381,713 shares owned directly by Mr. J. Morton Davis, Mrs. Davidowitz s husband, (iii) 1,216,196 shares owned by Engex, Inc, (iv) 124,738 shares owned by the Morton Foundation and (v) 12,733

shares owned by an investment advisor whose principal is Mr. Davis. This information is based solely on a Schedule 13G filed on February 4, 2013. Does not include shares owned by Mr. Perlysky, who is Mrs. Davidowitz s son-in-law or shares owned by Laya Perlysky IRA. Laya Perlysky is Mrs. Davidowitz s daughter. (11) The total number of Directors and executive officers

> includes two (2) executive officers or key employees who were not named under Security Ownership of Certain Beneficial Owners and Management .

(12) Includes 309,000 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof and 500 shares of restricted stock vesting within 60 days from the date hereof.

PROPOSAL 1 ELECTION OF DIRECTORS

The Company s Board has three staggered classes of Directors, each of which serves for a term of three years. At the Annual Meeting, the Board s Class II Directors will be elected to hold office for a term of three years or until their respective successors are elected and qualified. Unless otherwise instructed, the shares represented by validly submitted proxy cards will be voted FOR the election of the below-listed Board nominees to serve as Class II Directors of the Company. Management has no reason to believe that the below-listed Board nominees will not be candidates or will be unable to serve as Class II Directors. However, in the event that the below-listed Board nominees should become unable or unwilling to serve as Class II Directors, the proxy cards will be voted for the election of such alternate persons as shall be designated by the Class I and Class III Directors currently on the Board. If any alternate person(s) is/are designated by the Class I and Class III Directors currently on the Board to serve as Class II Director-nominee(s), the Company will publicly notify shareholders by press release and will promptly distribute to shareholders revised proxy materials (including a revised proxy card) that (i) identify each such substitute nominee, (ii) disclose whether such substitute nominee has consented to being named in the revised proxy statement and to serve if elected and (iii) include certain other disclosure required by applicable federal proxy rules and regulations with respect to each such substitute nominee.

The total cumulative length of time that any Outside Director (a member of the Board who is not an officer or employee of the Company) may serve on the Board is limited to a maximum of three three-year terms, whether consecutively or in total, plus any portion of an earlier three-year term that such Outside Director may have been appointed to serve.

7

CLASS II DIRECTOR NOMINEES TO SERVE UNTIL THE 2016 ANNUAL MEETING, IF ELECTED:

Class II: Term to Expire In 2017

		Year First
		Became a
Name	Age	Director
Barry W. Weiner	63	1977
Bernard L. Kasten, M.D.	67	2008

BARRY W. WEINER is the President, Chief Financial Officer, Principal Accounting Officer and Director and a founder of Enzo Biochem. He has served as the Company s President since 1996, and previously held the position of Executive Vice President. Before his employment with Enzo Biochem, he worked in several managerial and marketing positions at the Colgate Palmolive Company. Mr. Weiner is a member of the New York Biotechnology Association. He received his Bachelor of Arts degree in Economics from New York University and a Master of Business Administration in Finance from Boston University.

We believe that Mr. Weiner s qualifications to serve on our Board are demonstrated by his knowledge of our businesses and the industries in which we are involved, along with his experience in finance, management and marketing, including the identification of acquisition targets and raising capital.

BERNARD L. KASTEN M.D. has been a Director of the Company since September 2008 and serves on the Audit, Nominating/Governance and the Compensation Committees and since January 2011 serves as the Lead Independent Director and Chairman of the Compensation Committee. Dr. Kasten has served as a director and Executive Chairman of GeneLink Inc. since 2007 and CEO since December 2010 (GNLK: OTCBB). He served as Chairman of the Board of Cleveland Biolabs, Inc. (CBLI: NASDAQ) from 2006 to 2013. From 1996 to 2004, Dr. Kasten worked at Quest Diagnostics Incorporated (DGX: NYSE) where he was Chief Laboratory Officer, Vice President of Business Development for Science and Medicine and most recently as Vice President of Medical Affairs of its MedPlus Inc. subsidiary. Dr. Kasten served as a Director of SIGA Technologies (SIGA: NASDAQ) from May 2003 to December 2006, and was employed as SIGA s Chief Executive Officer from July 2004 through April 2006. Dr. Kasten is a graduate of the Ohio State University College of Medicine. His residency was served at the University of Miami, Florida and he was awarded fellowships at the National Institutes of Health Clinical Center (NIH), Bethesda, Maryland. He is a diplomat of the American Board of Pathology with certification in Anatomic and Clinical Pathology and sub-specialty certification in Medical Microbiology.

We believe that Dr. Kasten s qualifications to serve on our Board are demonstrated by his professional background, experience in the healthcare field, including his prior senior leadership positions at Quest Diagnostics and other medical and biotech related companies, and current and past public company board positions.

THE BOARD OF DIRECTORS OF THE COMPANY UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE ELECTION OF THE ABOVE-NAMED BOARD NOMINEES TO SERVE AS CLASS II DIRECTORS OF THE COMPANY.

DIRECTORS WHO ARE CONTINUING IN OFFICE:

Class I: Term to Expire In 2016

		Year First Became a
Name	Age	Director
Gregory M. Bortz	44	2010
Dov Perlysky	51	2012

Class III: Term to Expire In 2015

		Year First Became a
Name	Age	Director
Elazar Rabbani, Ph.D	70	1976
	DIRECTORS	5, EXECUTIV

The current Directors, executive officers and key employees of the Company and its subsidiaries are identified in the table below.

Name	Age	Year Became a Director or Executive Officer		Position
Elazar Rabbani, Ph.D.	70	1976		Chairman of the Board, Chief Executive Officer and Secretary
Barry W. Weiner	63	1977	(1)	President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director
Andrew P. Whiteley	55	2008		Chief Operating Officer, Enzo Life Sciences, Inc.
Andrew R. Crescenzo, CPA	57	2006		Senior Vice President of Finance
David C. Goldberg	56	1995		Vice President, Corporate Development and Interim General Manager of Enzo Clinical Labs
Herbert B. Bass	65	1989		Vice President of Finance
Paul O Brien	51	2009		Vice President, Global Human Resources
Gregory M. Bortz	44	2010		Director
Bernard L. Kasten, M.D.	67	2008	(1)	Director
Dov Perlysky	51	2012		Director

(1) Director

term expires January 17, 2014.

Biographical Information Regarding Directors, Executive Officers and Key Employees

ELAZAR RABBANI, Ph.D. is an Enzo Biochem s founder and has served as the Company s Chairman of the Board and Chief Executive Officer since its inception in 1976 and Secretary since November 25, 2009. Dr. Rabbani has authored numerous scientific publications in the field of molecular biology, in particular, nucleic acid labeling and

detection. He is also the lead inventor of many of the Company s pioneering patents covering a wide range of technologies and products. Dr. Rabbani received his Bachelor of Arts degree from New York University in Chemistry and his Ph.D. in Biochemistry from Columbia University. He is a member of the American Society for Microbiology.

We believe that Dr. Rabbani s qualifications to serve on our Board are demonstrated by his extensive knowledge of our industry, accomplishments over the last 36 years, including building our Intellectual Property estate and the commercialization of technology which has generated significant revenues for the Company.

BARRY W. WEINER, President, Chief Financial Officer, Principal Accounting Officer and Director and a founder of Enzo Biochem. He has served as the Company s President since 1996, and previously held the position of Executive Vice President. Before his employment with Enzo Biochem, he worked in several managerial and marketing positions at the Colgate Palmolive Company. Mr. Weiner is a member of the New York Biotechnology Association. He received his

9

Bachelor of Arts degree in Economics from New York University and a Master of Business Administration in Finance from Boston University.

We believe that Mr. Weiner s qualifications to serve on our Board are demonstrated by his knowledge of our businesses and the industries in which we are involved, along with his experience in finance, management and marketing, including the identification of acquisition targets and raising capital.

ANDREW P. WHITELEY, Chief Operating Officer for Enzo Life Sciences since June 2008. Before his employment at Enzo, Mr. Whiteley previously held the position of CEO at Vitra Biosciences from 2003 to 2005 and CEO of InforMax from 2002 to 2003 which was acquired by Invitrogen. Prior to that Mr. Whiteley held various positions at Amersham Pharmacia Biotech (now part of GE Healthcare) including, VP Bioinformatics and VP Sequencing Business. Mr. Whiteley graduated from Nottingham University, England with a joint honors degree in Biochemistry and Chemistry.

ANDREW R. CRESCENZO, CPA, Senior Vice President of Finance for the Enzo Biochem since May 2006. Before joining the Company, Mr. Crescenzo was an Executive Director from 2002 to 2006 and a Senior Manager from 1997 to 2002 at Grant Thornton LLP. From 1993 to 1997 he served as Vice President and Chief Financial Officer of D Addario & Co, Inc. and was employed at Ernst and Young LLP from 1984 to 1993. Mr. Crescenzo is a Certified Public Accountant and received his Bachelors of Business Administration from Adelphi University.

DAVID C. GOLDBERG, Vice President of Corporate Development for Enzo Biochem and Interim General Manager of Enzo Clinical Labs, has been employed with the Company since 1985. He has held several managerial positions within Enzo Biochem. Mr. Goldberg also held management and marketing positions with DuPont-NEN and Gallard Schlesinger Industries before joining the Company. He received a Master of Science degree in Microbiology from Rutgers University and a Master of Business Administration in Finance from New York University.

HERBERT B. BASS, Vice President of Finance for Enzo Biochem since May 1989. Prior to 1989, Mr. Bass served as the Corporate Controller of the Company. Mr. Bass has been with the Company since 1986. From 1977 to 1986, Mr. Bass held various positions at Danziger and Friedman, Certified Public Accountants, the latest of which was audit manager. Mr. Bass received a Bachelor of Business Administration degree in Accounting from Bernard M. Baruch College.

PAUL C. O BRIEN, Vice President of Global Human Resources for Enzo Biochem since November 2009. Before joining the Company, Mr. O Brien was Vice President of Global Human Resources at Black & Decker for their Fastening and Assembly Systems Group from 2005 to 2009. From 2003 to 2004, Mr. O Brien was Director of Global Human Resources for Stryker Spine and from 1991 to 2002 Mr. O Brien held various roles in Human Resources with Tyco Healthcare, the latest of which was Senior Director, Divisional Human Resources. Mr. O Brien received a Bachelor of Arts degree in General Studies from Providence College.

BERNARD L. KASTEN M.D. has been a Director of the Company since September 2008 and serves on the Audit, Nominating/Governance and the Compensation Committees and since January 2011 serves as the Lead Independent Director and Chairman of the Compensation Committee. Dr. Kasten has served as a director and Executive Chairman of GeneLink Inc. since 2007 and CEO since December 2010 (GNLK: OTCBB). He served as Chairman of the Board of Cleveland Biolabs, Inc. (CBLI: NASDAQ) from 2006 to 2013. From 1996 to 2004, Dr. Kasten served at Quest Diagnostics Incorporated (DGX: NYSE) where he was Chief Laboratory Officer, Vice President of Business Development for Science and Medicine and most recently as Vice President of Medical Affairs of its MedPlus Inc. subsidiary. Dr. Kasten served as a Director of SIGA Technologies (SIGA: NASDAQ) from May 2003 to December 2006, and as SIGA s Chief Executive Officer from July 2004 through April 2006. Dr. Kasten is a graduate of the Ohio State University College of Medicine. His residency was served at the University of Miami, Florida and he was awarded fellowships at the National Institutes of Health Clinical Center (NIH), Bethesda, Maryland. He is a diplomat of the American Board of Pathology with certification in Anatomic and Clinical Pathology and sub-specialty

certification in Medical Microbiology.

We believe that Dr. Kasten s qualifications to serve on our Board are demonstrated by his professional background, experience in the healthcare field, including his prior senior leadership positions at Quest Diagnostics and other medical and biotech related companies, and current and past public company board positions.

GREGORY M. BORTZ, has been a Director of the Company since January 2010 and currently serves on the Audit, Compensation and Nominating/Governance Committees and since November 2, 2010 has served as the Chairman of the Audit Committee. Mr. Bortz is the founder of and has been the managing partner of Creo Capital Partners, LLC (CREO), a private equity firm that provides capital to middle-market companies, since February 2005. CREO holds investments in companies certain of which Mr. Bortz serves as a board member. In addition, Mr. Bortz serves as the Chief Investment Officer of the CREO Select Opportunities Fund, a hedge fund that invests in public fixed income and equity securities. From October 2000 to February 2005, Mr. Bortz was Senior Vice President, Investment Banking Division of the international investment bank Lehman Brothers, Inc. Prior to such position he was a Vice President of Investment Banking at Credit Suisse First Boston, an inter