ENZO BIOCHEM INC
Form DEFC14A
November 16, 2010

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
(Amendment No.)

Filed by the Registrant x
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Check the appropriate box:

o Preliminary Proxy Statement
o Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
x Definitive Proxy Statement
o Definitive Additional Materials
o 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

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(1) Title of each class of securities to which transaction applies:

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(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 2010 ANNUAL MEETING OF SHAREHOLDERS

To be held on January 14, 2011

To All Shareholders of Enzo Biochem, Inc.:

NOTICE IS HEREBY GIVEN that the 2010 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 14, 2011, 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 Dr. Bernard L. Kasten, each to hold office for a term of three (3) years or until their respective successors have been duly elected and qualified;

2. to consider and vote upon a proposal to approve and adopt our 2011 Incentive Plan;

3. to ratify the Company s appointment of Ernst & Young LLP to serve as the Company s independent registered public accounting firm for the Company s fiscal year ending July 31, 2011; 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.

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 WHITE proxy card enclosed with the accompanying Proxy Statement. A return envelope, which requires no postage if mailed in the United States, is enclosed for that purpose. 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 Secretary of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 13, 2011; (ii) submitting a duly signed proxy card bearing a later date than the previously signed and dated proxy card to the Secretary of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 13, 2011; 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: Elazar Rabbani, Secretary. 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 19, 2010 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.

If you have any questions about the procedures for admission to the Annual Meeting, please contact our proxy solicitors, D.F. King & Co., Inc., toll free at (800) 967-5079 or collect at (212) 269-5550 or via e-mail at enzo@dfking.com.

By Order of the Board of Directors,

/s/ Elazar Rabbani

Elazar Rabbani
Chairman of the Board of Directors, Chief Executive Officer and Secretary

November 16, 2010

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 WHITE PROXY CARD ENCLOSED WITH THE ACCOMPANYING PROXY STATEMENT.

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ENZO BIOCHEM, INC.
PROXY STATEMENT
2010 ANNUAL MEETING OF SHAREHOLDERS

To be held on January 14, 2011

This Proxy Statement is being furnished to shareholders of record, as of November 19, 2010, of Enzo Biochem, Inc. (Enzo or the Company), in connection with the solicitation of proxies by the Board of Directors of the Company (the Board) for the 2010 Annual Meeting of Shareholders to be held at The Yale Club, 50 Vanderbilt Avenue, New York, New York 10017, on January 14, 2011, 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 2010 Annual Meeting of Shareholders.

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 2010 Annual Meeting of Shareholders, this Proxy Statement, the enclosed WHITE proxy card and the Company s 2010 Annual Report to Shareholders is November 26, 2010.

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 investor relations department at (212) 583-0100 or at the Company s principal corporate office at 527 Madison Avenue, New York, New York 10022 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 in the future only a single copy of the Proxy Statement and other proxy materials for a shareholder s household, 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 WHITE proxy card, our 2010 Annual Report to Shareholders and our Annual Report on Form 10-K for our fiscal year ended July 31, 2010, are available to you on our website at www.enzo.com. Shareholders may also obtain a copy of these materials by writing to Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022, Attention: Elazar Rabbani, Secretary. 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, 2010.

THE 2010 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 19, 2010 (the Record Date) are entitled to notice of, and to vote at, the Annual Meeting. On the Record Date there were issued and outstanding 38,946,388 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 for the Board s Class II Director-nominees, Mr. Barry W. Weiner and Dr. Bernard L. Kasten, by completing, signing, dating and returning the enclosed WHITE proxy card by mail. To vote by using the enclosed WHITE proxy card, mark your selections on the enclosed WHITE proxy card, date the WHITE proxy card and sign your name exactly as it appears on your WHITE proxy card, and return your WHITE proxy card by mail in the pre-addressed, postage-paid envelope enclosed with this Proxy Statement for such purpose. 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 WHITE 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 WHITE 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 our proxy solicitor, D.F. King & Co., Inc., so that they 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.

Mr. Shahram K. Rabbani (Shahram Rabbani) has submitted a letter to the Company (the Rabbani Letter) stating that he intends to nominate at the Annual Meeting a competing slate of two insurgent Class II Director-candidates not nominated by the Board and to solicit votes from shareholders of the Company to elect such insurgent Class II Director-candidates to the Board in opposition to the Board s two Class II Director-nominees -- Mr. Barry W. Weiner and Dr. Bernard L. Kasten. The Company has not yet determined whether the Rabbani Letter complies with the advance notice requirements set forth in the Company s Bylaws. Even if the Rabbani Letter is determined to be compliant with the advance notice requirements of our Bylaws, the Company does not know whether Shahram Rabbani will, in fact, properly nominate any individuals for election as Directors at the Annual Meeting or solicit proxies from shareholders of the Company for that purpose.

The Board recommends that you DO NOT sign or return any proxy card that may be sent to you by Shahram Rabbani, even as a protest. A withhold authority to vote with respect to Shahram Rabbani s insurgent Director-candidates on a proxy card that Shahram Rabbani sends you is not the same as voting for the Board s Class II Director-nominees, because a withhold authority to vote with respect to Shahram Rabbani s insurgent Director-candidates on his proxy card will revoke any previous proxy submitted by you. The only way to vote for the Board s two Class II Director-nominees is to sign, date and return a WHITE proxy card. If you have previously submitted a proxy card sent by Sharham Rabbani, we urge you to revoke that proxy by voting in favor of the Board s two Class II Director-nominees, Mr. Barry W. Weiner and Dr. Bernard L. Kasten, by using the enclosed WHITE proxy card. Only the latest validly executed proxy that you submit will be counted.

If you have any questions about the procedures for admission to the Annual Meeting, please contact our proxy solicitors, D.F. King & Co., Inc., toll free at (800) 967-5079 or collect at (212) 269-5550 or via e-mail at enzo@dfking.com. 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 two candidates receiving the most affirmative votes for their election will be elected to serve as Class II Directors 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. If Shahram Rabbani does, in fact, properly nominate his own slate of insurgent Director-candidates at the Annual Meeting, in which case the number of nominees for election as Class II Directors at the Annual Meeting would exceed the number of Class II Directors to be elected at the Annual Meeting (since there are only two Class II Director seats on the Board), proxy cards marked withhold authority and broker non-votes with respect to a Director-nominee would have the effect of reducing the likelihood that such Director-nominee would be elected, because only the two Director-nominees that receive the most affirmative votes cast for their election will be elected to serve as Class II Directors of the Company. If Shahram Rabbani does not otherwise properly nominate any insurgent Director-candidates at the Annual Meeting, proxy cards marked withhold authority and broker non-votes will have no practical effect on the election of Directors at the Annual Meeting, since only the Board s two Class II Director-nominees will be up for election at the Annual Meeting.

The approval of Proposal 2 will require the affirmative vote of a majority of the votes cast by holders of shares of Common Stock at the Annual Meeting and entitled to vote on such proposal, provided that the total votes cast on Proposal 2 represent over 50% of all shares entitled to vote. Shareholders may either vote for, against or abstain with respect to Proposal 2. Thus, a shareholder who does not vote will not affect the outcome of the vote on Proposal 2, so long as over 50% of the outstanding shares of Common Stock as of the Record Date are voted on Proposal 2. However, under the rules of The New York Stock Exchange, Inc. (NYSE), abstentions will be counted as votes cast for the purpose of determining whether more than 50% of the outstanding shares of Common Stock have been voted on Proposal 2 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 count as votes cast on Proposal 2 for purposes of determining whether 50% of the outstanding shares have been voted on Proposal 2, but otherwise will not affect the outcome of the vote on 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 th 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 recently changed.** Under the applicable new rules of the NYSE, at the Annual Meeting, Proposal 1 relating to the election of Directors (whether or not the election of Directors is contested) and Proposal 2 relating to the approval and adoption of the 2011 Incentive Plan 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, 2011 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) (whether or not contested) and the approval and adoption of the 2011 Incentive Plan (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 with respect to the approval and adoption of the 2011 Incentive Plan (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 with respect to the approval and adoption of the 2011 Incentive Plan. 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 Secretary of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 13, 2011;

submitting a duly signed proxy card bearing a later date than the previously signed and dated proxy card to the Secretary of the Company so that it is received no later than 5:00 p.m. (New York City time) on January 13, 2011; 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: Elazar Rabbani, Secretary. 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 WHITE 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 WHITE proxy card is signed, dated and returned to the Company but no voting indications are marked thereon, all shares represented by such WHITE proxy card will be voted by the proxies named therein **FOR the election of both of the Board s two Class II Director-nominees, Mr. Barry W. Weiner and Dr. Bernard L. Kasten (Proposal 1), FOR the approval and adoption of the 2011 Incentive Plan (Proposal 2) and FOR the ratification of the Company s appointment of Ernst & Young LLP to serve as the Company s independent registered public accounting firm for its fiscal year ending July 31, 2011 (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 with the Securities and Exchange Commission (the SEC) 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 19, 2010, the Record Date.

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, Ph.D.	2,139,568 (3)	5.4%
Barry W. Weiner	1,340,860 (4)	3.4%
Carl W. Balezentis, Ph.D.	20,007 (5)	*
Dr. Kevin Krenitsky	7,850	*
Andrew R. Crescenzo, CPA	19,873 (6)	*
Gregory M. Bortz		*
Irwin C. Gerson	93,344 (7)	*
Stephen B.H. Kent, Ph.D.	9,654	*
Bernard L. Kasten, M.D.	26,654	*
Clearbridge Advisors, LLC	4,458,875 (8)	11.45%
J. Morton Davis	3,044,000 (9)	7.82%
Blackrock, Inc.	2,547,846 (10)	6.54%
All Directors and executive officers as a group (13 persons) (11)	3,968,068 (12)	9.98%

* 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 38,946,388 shares of Common Stock of the Company outstanding as of the close of business on November 19, 2010. 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 determining the amount and percentage of Common Stock owned by such individual.

(3) Includes (i) 325,842 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof, (ii) 3,469 shares of Common Stock held in the name of Dr. Rabbani as custodian for certain of his children, (iii) 2,168 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 Stock held in the name of Dr. Rabbani s children and (v) 9,793 shares of Common Stock held in the Company s 401(k) plan.

(4) Includes (i) 325,842 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof, (ii) 3,642 shares of Common Stock that Mr. Weiner holds as custodian for certain of his children and (iii) 9,800 shares of Common Stock held in the Company s 401(k) plan.

(5) Includes (i) 4,783 shares of Common Stock held in the Company s 401(k) plan and (ii) 2,500 shares of Common Stock that vests within 60 days from the date hereof.

(6) Includes (i) 4,873 shares of Common Stock held in the Company s 401(k) plan and (ii) 2,000 shares of Common Stock that vests within 60 days from the date hereof.

(7) Includes (i) 54,690 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof.

(8) The address of each entity in the group is 620 8th Ave, New York, New York 10022. This information is based solely on a Schedule 13G filed on February 11, 2010.

(9) Mr. Davis address is D.H. Blair Investment Banking Corp., 44 Wall Street, New York, New York 10005. Includes (i) 33,425 shares owned directly by Mr. Davis, (ii) 1,024,345 shares owned directly by Blair Investment, (iii) 698,596 shares owned by Engex, Inc., (iv) 12,733 shares owned by an investment advisor whose principal is Mr. Davis and (v) 1,274,931 shares owned by Rosalind Davidowitz, Mr. Davis wife. This information is based solely on a Schedule 13G filed on February 3, 2010.

(10) Blackrock, Inc. acquired Barclays Global Investors from Barclays Bank PLC. The address of this entity is 40 East 52nd Street, New York, New York 10022. This information is based solely on a Schedule 13G filed on January 20, 2010.

(11) The total number of directors and executive officers includes four (4) executive officers or key employees who were not named under Security Ownership of Certain Beneficial Owners and Management.

(12) Includes 791,498 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof and 6,000 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 WHITE proxy cards will be voted for the election of each 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 any of the below-listed Board nominees should become unable or unwilling to serve as a Class II Director, the WHITE proxy cards will be voted for the election of such alternate person as shall be designated by the Class I and Class III Directors currently on the Board. If any alternate persons are designated by the Class I and Class III Directors currently on the Board to serve as Class II Director-nominees, the Company will publicly notify shareholders by press release and will promptly distribute to shareholders revised proxy materials (including a revised WHITE 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.

Shahram Rabbani has submitted the Rabbani Letter stating that he intends to nominate at the Annual Meeting a competing slate of two insurgent Class II Director-candidates not nominated by the Board and to solicit votes from shareholders of the Company to elect such insurgent Class II Director-candidates to the Board in opposition to the Board s two Class II Director-nominees listed below. If Shahram Rabbani does, in fact, properly nominate his own slate of insurgent Director-candidates at the Annual Meeting, the number of nominees for election as Class II Directors at the Annual Meeting would exceed the number of Class II Directors to be elected at the Annual Meeting (since there are only two Class II Director seats on the Board). The two nominees standing for election who receive the most affirmative votes cast for their election at the Annual Meeting will be elected to serve as Class II Directors of the Company.

The Board recommends that you DO NOT sign or return any proxy card that may be sent to you by Shahram Rabbani, even as a protest. A withhold authority to vote with respect to Shahram Rabbani s insurgent Director-candidates on a proxy card that Shahram Rabbani sends you is not the same as voting for the Board s Class II Director-nominees, because a withhold authority to vote with respect to Shahram Rabbani s insurgent Director-candidates on his proxy card will revoke any previous proxy submitted by you. The only way to vote for the Board s two Class II Director-nominees is to sign, date and return a WHITE proxy card. If you have previously submitted a proxy card sent by Shahram Rabbani, we urge you to revoke that proxy by voting in favor of the Board s two Class II Director-nominees named below by using the enclosed WHITE proxy card. Only the latest validly executed proxy that you submit will be counted.

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.

CLASS II DIRECTOR NOMINEES TO SERVE UNTIL
THE 2014 ANNUAL MEETING, IF ELECTED:

Class II: Term to Expire In 2014

Name	Age	Year First Became a Director
Barry W. Weiner	60	1977
Bernard L. Kasten, M.D.	64	2008

BARRY W. WEINER (age 60) President, Chief Financial Officer and Director, is 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 Director 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, particularly relating to the identification of acquisition targets and raising capital.

BERNARD L. KASTEN, M.D. (age 64) Dr. Kasten has been a Director of the Company since January 2008 and serves on the Audit and the Compensation Committees. He has been serving as Chairman of the Board of Cleveland Biolabs, Inc. (CBLI: NASDAQ) since August 2006. 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 has served as a director and Executive Chairman of GeneLink Inc. since 2007 (GNLK.OTCBB). 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 and NCI, Bethesda, Maryland. He is a diplomat of the Board of Pathology with certification in Anatomic and Clinical Pathology with sub-specialty certification in Medical Microbiology.

We believe that Dr. Kasten s professional background, experience in the healthcare field, including his senior leadership positions at Quest Diagnostics and other medical and biotech related companies, and current and past board positions, make him well qualified as a member of our Board.

THE BOARD OF DIRECTORS OF THE COMPANY UNANIMOUSLY RECOMMENDS THAT YOU USE THE ENCLOSED WHITE PROXY CARD TO VOTE FOR THE ELECTION OF EACH OF THE ABOVE-NAMED BOARD NOMINEES TO SERVE AS CLASS II DIRECTORS OF THE COMPANY.

DIRECTORS WHO ARE CONTINUING IN OFFICE:

Class III: Term to Expire In 2012

Name	Age	Year First Became a Director
Elazar Rabbani, Ph.D.	67	1976

Class I: Term to Expire In 2013

Name	Age	Year First Became a Director
Irwin Gerson	80	2001
Stephen B. H. Kent, Ph.D.	65	2007
Gregory M. Bortz	41	2010

DIRECTORS, EXECUTIVE OFFICERS AND KEY EMPLOYEES

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.	67	1976	Chairman of the Board, Chief Executive Officer and Secretary
Barry W. Weiner	60	1977(1)	President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director
Carl W. Balezentis, Ph.D.	53	2006	President, Enzo Life Sciences, Inc.
Kevin Krenitsky, M.D.	44	2009	President, Clinical Labs, Inc.
Andrew R. Crescenzo, CPA	54	2006	Senior Vice President of Finance
Herbert B. Bass	62	1989	Vice President of Finance
David C. Goldberg	53	1995	Vice President, Corporate Development
Andrew P. Whiteley	52	2008	Vice President, Business Development and Chief Operating Officer, Enzo Life Sciences, Inc.
Paul O Brien	48	2009	Vice President, Global Human Resources
Gregory M. Bortz	41	2010	Director
Irwin C. Gerson	80	2001	Director
Bernard L. Kasten, M.D.	64	2008(1)	Director
Stephen B. H. Kent, Ph.D.	65	2007	Director

(1) Director term expires January 14, 2011.

Biographical Information Regarding Directors, Executive Officers and Key Employees

ELAZAR RABBANI, Ph.D. (age 67) is Enzo Biochem s founder and has served as the Company s Chairman of the Board of Directors and Chief Executive Officer since its inception in 1976. 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 34 years, including building our Intellectual Property estate and the commercialization of technology which has generated significant revenues for the Company.

CARL W. BALEZENTIS, Ph.D. (age 53) President, Enzo Life Sciences, Inc. has held this position since June 2006. In August 2010, Dr. Balezentis went on medical leave from the Company. Before his employment with Enzo Biochem, he was CEO of Lark Technologies, Inc. from 2000 to 2004, prior to its acquisition by Genaissance Pharmaceuticals, Inc. Subsequent to the acquisition Dr. Balezentis held the positions of President of Lark Technologies, Inc., and Senior Vice President of Genaissance. From 1988 to 2000 he has held numerous executive positions in the life sciences industry at Sigma-Aldrich, Perceptive Scientific Instruments, Inc., Applied Biosystems, Inc. (now Applera) and Promega Corporation. Dr. Balezentis holds a Ph.D. in Genetics from the University of Arizona and completed a Post Doctoral Fellowship at M.D. Anderson Cancer Center in Houston, TX.

KEVIN KRENITSKY, M.D. (age 44) was appointed President of Enzo Clinical Labs in March 2009. Before his employment at Enzo Biochem he was the CEO of Bio Serve Biotechnologies, a global biotechnology company specializing in processing genetic diagnostic tests from 2007 to February 2009. From 2006 to 2007 he was the Interim CEO of Parkway Clinical Laboratories, a clinical diagnostic lab providing comprehensive routine and esoteric testing. Prior to his employment at Parkway Clinical, from 1999 to 2006 he served as Senior Vice President and Division Head at SeraCare Life Sciences Genomics Collaborative Division (GCI) where he managed all worldwide pharmaceutical R&D collaborations. Before GCI was acquired by SeraCare Life Sciences, he held the position of Medical Director. Dr Krenitsky received his M.D. from Jefferson Medical College.

ANDREW R. CRESCENZO, CPA (age 54) Senior Vice President of Finance for the Company has held this position 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 J. 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.

HERBERT B. BASS (age 62) Vice President of Finance for the Company and has held this position 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.

DAVID C. GOLDBERG (age 53) Vice President of Corporate Development for Enzo Biochem 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.

ANDREW P. WHITELEY (age 52) Chief Operating Officer, Enzo Life Sciences and Vice President of Business Development, Enzo Biochem since May 2008. Before his employment at Enzo, Mr. Whiteley previously held the position of CEO at Vitra Biosciences (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.

PAUL C. O BRIEN (age 48) Vice President of Global Human Resources for the Company has held this position 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.

GREGORY M. BORTZ (age 41) has been a Director of the Company since January 2010 and serves on the Audit Committee and Chairman of the Nominating/Governance Committee and since November 2, 2010 has served as the Chairman of the Audit Committee and as a member of the Compensation Committee. Mr. Bortz is the founder and 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. 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 international investment bank, from January 1998 to October 2000. Mr. Bortz held the position of Manager at the accounting firm of Ernst and Young (1994-1997) and Senior at the public accounting firm of Arthur Andersen (1993-1994), both in their respective audit groups. Mr. Bortz was qualified as a chartered accountant in England and Wales, and South Africa, and graduated from the University of Cape Town with a Bachelors of Business Science with Honors in Finance and Postgraduate Diploma in Accounting.

We believe that Mr. Bortz is well qualified as a member of our Board because he has more than 17 years of financial and investment banking experience and experience serving as a board member of portfolio companies.

IRWIN C. GERSON (age 80) has been a Director of the Company since May 2001 and is Chairman of the Compensation Committee and serves on the Nominating/Governance Committees. From 1995 until December 1998, Mr. Gerson served as Chairman of Lowe McAdams Healthcare and prior thereto had been, since 1986, Chairman and Chief Executive Officer of William Douglas McAdams, Inc., one of the largest advertising agencies in the U.S. specializing in pharmaceutical marketing and communications to healthcare professionals. In February 2000, he was inducted into the Medical Advertising Hall of Fame. He was a director of Andrx Corporation, a NASDAQ listed company which specializes in proprietary drug delivery technologies until November 2006. From 1990-1999, he was Chairman of the Council of Overseers of the Arnold and Marie Schwartz College of Pharmacy and had served as a trustee of The Albany College of Pharmacy and Long Island University. He was elected President of the Advisory Board of Florida Atlantic University Lifelong Learning Society in October 2006. Mr. Gerson has a Bachelor of Science in Pharmacy from Fordham University and an MBA from the NYU Graduate School of Business Administration.

We believe that Mr. Gerson s experience in senior leadership positions at marketing, advertising and distribution companies serving the healthcare industry makes him well qualified as a member of our Board.

STEPHEN B. H. KENT, Ph.D. (age 65) has been a Director of the Company since January 2007 and Lead Independent Director since January 2008 and serves on the Nominating/Governance Committee and since November 2, 2010 as a member of the Audit Committee. Dr. Kent is or has been a Professor of Biochemistry & Molecular Biology (2001-present), Professor of Chemistry (2002-present), and Director of the Institute for Biophysical Dynamics (2003-2009) at the University of Chicago. Dr. Kent was the business founder and served as a director of Ciphergen Biosystems (1994-1997) and Gryphon Sciences (1994-2002). At Gryphon Sciences, Dr. Kent served as President (1997- 2000), CEO (1999-2000), and Chief Scientist (1997-2001). Dr. Kent has served on the Scientific Advisory Board at Amylin Pharmaceuticals, the Board of the Center for Functional Genomics, Victoria University, New Zealand, the Scientific Advisory Board, Institute for Molecular Bioscience, The University of Queensland, Australia, , and the Scientific Advisory Board, New York Blood Center & Kimball Research Institute from 1991 1997. Dr. Kent received Bachelor of Science and Master of Science degrees in his native New Zealand, and his Ph.D. from the University of California, Berkeley.

We believe that Dr. Kent s background as a Professor in the Biochemistry and Molecular Biology area, expertise in the field of science and serving either as leader or director of various biotech companies makes him well qualified as a member of our Board.

Family Relationships

Dr. Elazar Rabbani and Barry W. Weiner are brothers-in-law.

Director Independence

Messrs. Gregory M. Bortz and Irwin C. Gerson and Drs. Bernard L. Kasten and Stephen B. H. Kent qualify as independent directors under the criteria established by the New York Stock Exchange (NYSE).

THE BOARD OF DIRECTORS OF THE COMPANY UNANIMOUSLY RECOMMENDS THAT YOU USE THE ENCLOSED WHITE PROXY CARD TO VOTE FOR THE ELECTION OF EACH OF THE ABOVE-NAMED BOARD NOMINEES TO SERVE AS CLASS II DIRECTORS OF THE COMPANY.

CORPORATE GOVERNANCE

Our Board and management are committed to responsible corporate governance to ensure that the Company is managed for the long-term benefit of its shareholders. To that end, during the past year, as in prior years, the Board and management have periodically reviewed and updated, as appropriate, the Company s corporate governance policies and practices. During the past year, the Board has also continued to evaluate and, when appropriate, update the Company s corporate governance policies and practices in accordance with the requirements of the Sarbanes-Oxley Act of 2002 and the rules and listing standards issued by the Securities and Exchange Commission and the NYSE.

Corporate Governance Policies and Practices

The Company has a variety of policies and practices to foster and maintain responsible corporate governance, including the following:

Corporate Governance Guidelines The Board adopted Corporate Governance Guidelines, which collect in one document many of the corporate governance practices and procedures that had evolved over the years. These guidelines address the duties of the Board, Director qualifications and selection process, Board operations, Board committee matters and continuing education. The guidelines also provide for annual self-evaluations by the Board and its committees. The Board reviews these guidelines on an annual basis. The guidelines are available on the Company s website at www.enzo.com, and in print to any interested party that requests them.

Corporate Code of Ethics The Company has a Code of Ethics that applies to all of the Company s employees, officers and members of the Board. The Code of Ethics is available on the Company s website at www.enzo.com, and in print to any interested party that requests it.

Board Committee Charters Each of the Company s Audit, Compensation and Nominating/Governance Committees has a written charter adopted by the Company s Board that establishes practices and procedures for such committee in accordance with applicable corporate governance rules and regulations. The charters are available on the Company s website at www.enzo.com, and in print to any interested party that requests them.

Lead Independent Director Charter The duties of the Lead Independent Director, as set forth in the Lead Independent Director Charter, among other things, are to develop the agendas for and serve as chairman of the executive sessions of the independent Directors of the Company; serve as principal liaison between the independent Directors of the Company and the Chairman of the Board and between the independent Directors and senior management; provide the Chairman of the Board with input as to the preparation of the agendas for Board meetings; advise the Chairman of the Board as to the quality, quantity and timeliness of the information submitted by the Company s management that is necessary or appropriate for the independent Directors to effectively and responsibly perform their duties; ensure that independent Directors have adequate opportunities to meet and discuss issues in executive sessions without management present; if the Chairman of the Board is unable to attend a Board meeting, act as chairman of such Board meeting; and perform such other duties as the Board shall from time to time delegate.

Dr. Stephen B. H. Kent has served as Lead Independent Director since January 24, 2008.

The Lead Independent Director Charter is available on the Company s website at www.enzo.com, and in print to any interested party that requests it.

Director Independence

Requirements The Board believes that a substantial majority of its members should be independent, non-employee Directors. The Board adopted the following Director Independence Standards, which are consistent with criteria established by the NYSE, to assist the Board in making these independence determinations:

No Director can qualify as independent if he or she has a material relationship with the Company outside of his or her service as a Director of the Company. A Director is not independent if, within the preceding three years:

The Director was an employee of the Company.
An immediate family member of the Director was an executive officer of the Company.
A Director was affiliated with or employed by a present or former internal or external auditor of the Company.
An immediate family member of a Director was affiliated with or employed in a professional capacity by a present or former internal or external auditor of the Company.
A Director, or an immediate family member of the Director, received more than $120,000 per year in direct

compensation from the Company, other than Director and committee fees and pension or other forms of deferred compensation for prior services (provided such compensation is not contingent in any way on continued service).

The Director, or an immediate family member of the Director, was employed as an executive officer of another company where any of the Company s executives served on that company s compensation committee of the board of Directors.

The Director was an executive officer or employee, or an immediate family member of the Director was an executive officer, of another company that made payments to, or received payments from, the Company for property or services in an amount which, in any single fiscal year, exceeded the greater of $1 million or two percent (2%) of such other company s consolidated gross revenues.

The Director, or an immediate family member of the Director, was an executive officer of another company that was indebted to the company, or to which the Company was indebted, where the total amount of either company s indebtedness to the other was five percent (5%) or more of the total consolidated assets of the company he or she served as an executive officer.

The Director, or an immediate family member of the Director, was an officer, Director or trustee of a charitable organization where the Company s annual discretionary charitable contributions to the charitable organization exceeded the greater of $1 million or two percent (2%) of that organization s consolidated gross revenues.

The Board has reviewed all material transactions and relationships between each Director, or any member of his or her immediate family, and the Company, its senior management and its independent auditors. Based on this review and in accordance with its independence standards outlined above, the Board has affirmatively determined that all of the non-employee Directors are independent.

Board Nomination Policies and Procedure

Nomination Procedure The Nominating/Governance Committee is responsible for identifying, evaluating and recommending candidates for election to the Board, with due consideration for recommendations made by other Board members, the CEO and other sources. In addition to the above criteria, the Nominating/Governance Committee also considers the appropriate balance of experience, skills, and characteristics desirable among the members of the Board to maintain a diverse Board of Directors. The independent members of the Board review the Nominating/Governance Committee candidates and nominate candidates for election by the Company shareholders. The Nominating/Governance Committee will consider candidates for election to the Board recommended by shareholders of the Company. The procedures for submitting shareholder recommendations are explained below under Shareholder Proposals on page 33.

Directors must also possess the highest personal and professional ethics, integrity and values and be committed to representing the long-term interests of all shareholders. Board members are expected to diligently prepare for, attend and participate in all Board and applicable Committee meetings. Each Board member is expected to ensure that other existing and future commitments do not materially interfere with the member s service as a Director.

The Nominating/Governance Committee also reviews whether a potential candidate will meet the Company s independence standards and any other Director or committee membership requirements imposed by law, regulation or stock exchange rules.

Director candidates recommended to the Committee are subject to full Board approval and subsequent election by the shareholders. The Board is also responsible for electing Directors to fill vacancies on the Board that occur due to retirement, resignation, expansion of the Board or other reasons between the Shareholders annual meetings. The Nominating/Governance Committee may retain a recruitment firm, from time to time, to assist in identifying and evaluating Director candidates. When a firm is used, the Committee provides specified criteria for Director candidates, tailored to the needs of the Board at that time, and pays the firm a fee for these services. Suggestions for Director candidates are also received from Board members and management and may be solicited from professional associations as well.

Board Committees

All members of each of the Company s three standing committees the Audit, Compensation, and Nominating/Governance are required to be independent in accordance with NYSE criteria. See below for a description of the responsibilities of the Board s standing committees.

Executive Sessions of Non-Management Directors

The Board and the Audit, Compensation and Nominating/Governance Committees periodically hold meetings of only the independent Directors or Committee members without management present.

Board Access to Independent Advisors

The Board as a whole, and each of the Board committees separately, has authority to retain and terminate such independent consultants, counselors or advisors to the Board as each shall deem necessary or appropriate.

Communications with Board of Directors

Direct Communications Any interested party desiring to communicate with the Board or with any Director regarding the Company may write to the Board or the Secretary c/o Elazar Rabbani, Office of the Secretary, Enzo Biochem, Inc., 527 Madison Avenue, New York New York 10022. The Office of the Secretary will forward all such communications to the Director(s). Interested parties may also submit an email by filling out the email form on the Company s website at www.enzo.com. Moreover, any interested party may contact the non-management Directors of the Board and/or the presiding (or lead) Director.

Annual Meeting The Company encourages its outside Directors to attend the annual meeting of shareholders each year. Messrs. Bortz and Gerson and Dr. Kent, and Dr. Kasten attended the Annual Meeting of Shareholders held in January 2010.

Meetings of the Board of Directors and its Committees

During the fiscal year ended July 31, 2010, there were nine formal meetings of the Board of Directors, several actions by unanimous consent and several informal meetings. None of the Directors attended less than 75% of the meetings. Currently, the Board of Directors has a Nominating/Governance Committee, an Audit Committee and a Compensation Committee. The Nominating/Governance Committee had two formal meeting, the Audit Committee had six formal meetings and the Compensation Committee had two formal meetings.

The Audit Committee was established by and among the Board for the purpose of overseeing the accounting and financial reporting processes of the Company and audits of the financial statements of the Company in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934 (the Exchange Act), as amended. The Audit Committee is authorized to review proposals of the Company s auditors regarding the annual audit, recommend the engagement or discharge of the auditors, review recommendations of such auditors concerning accounting principles and the adequacy of internal controls and accounting procedures and practices, review the scope of the annual audit, approve or disapprove each professional service or type of service other than standard auditing services to be provided by the auditors, and review and discuss the audited financial statements with the auditors. The current members of the Audit Committee are Mr. Bortz and Drs. Kent and Kasten. Mr. Bortz has been the Chairman since November 2, 2010 and succeeded Mr. Melvin F. Lazar, who retired from the Board and as the Audit Committee Chairman on October 15, 2010. The Board has determined that each of the Audit Committee members is independent, as defined in the NYSE s listing standards. The Board has further determined that Mr. Bortz is an audit committee financial expert as such term is defined under Item 407(d)(5)(ii) of Regulation S-K.

The Compensation Committee has the power and authority to (i) establish a general compensation policy for the officers and employees of the Company, including to establish and at least annually review executive officers salaries and levels of officers participation in the benefit plans of the Company, (ii) prepare any reports that may be required by the regulations of the Securities and Exchange Commission or otherwise relating to officer compensation, (iii) approve any increases in Directors fees, (iv) grant stock options and/or other equity instruments authorized by senior executives for non-executive officers, and (v) exercise all other powers of the Board with respect to matters involving the compensation of employees and the employee benefits of the Company as shall be delegated by the Board to the Compensation Committee. The current members of the Compensation Committee are Messrs. Bortz and Gerson and Dr. Kasten. Mr. Gerson is the Chairman.

The Nominating/Governance Committee has the power to recommend to the Board prior to each annual meeting of the shareholders of the Company: (i) the appropriate size and composition of the Board; and (ii) nominees: (1) for election to the Board for whom the Company should solicit proxies; (2) to serve as proxies in connection with the annual shareholders meeting; and (3) for election to all committees of the Board other than the Nominating/Governance Committee. The Nominating/Governance Committee will consider nominations from the shareholders, provided that they are made in accordance with the Company s By-laws. When evaluating prospective Director candidates, the Nominating/Governance Committee conducts individual evaluations against the criteria stated in the committee s charter. All Director candidates, regardless of the source of their nomination, are evaluated using the same criteria. The current members of the Nominating/Governance Committee are Dr. Kent and Messrs. Bortz and Gerson. Mr. Bortz is the Chairman.

AUDIT COMMITTEE REPORT

In connection with the preparation and filing of the Company s Annual Report on Form 10-K for its fiscal year ended July 31, 2010:

(1) The Audit Committee reviewed and discussed the audited financial statements and related footnotes with management and the independent registered public accounting firm. Management represented to the Audit Committee that the Company s financial statements were prepared in accordance with U.S. generally accepted accounting principles;

(2) The Audit Committee discussed with the independent registered public accountants matters required to be discussed under Statement on Auditing Standards No. 61, as amended and adopted by the Public Company Accounting Oversight Board in Rule 3200T14;

(3) The Audit Committee reviewed the written disclosures and the letter from the independent registered public accountants required by the applicable requirements of the Public Company Accounting Oversight Board, as may be modified or supplemented, regarding the independent registered public accounting firm s communication with the Audit Committee concerning independence and discussed with Ernst and Young their independence;

(4) The Audit Committee discussed with the Company s independent registered public accountants the overall scope and plans for its audit. The Audit Committee met with the independent registered public accountants, with and without management present, to discuss the results of their examinations, their evaluations of the Company s internal controls, and the overall quality (and not merely the acceptability) of the Company s accounting principles and financial reporting, the reasonableness of significant estimates and judgments, and the disclosures in the Company s financial statements, including the disclosures relating to critical accounting policies. The Audit Committee held six formal meetings during the fiscal year ended July 31, 2010; and

(5) Based on the review and discussions referred to above, the Audit Committee recommended to the Board that the audited financial statements be included in the Company s Annual Report on Form 10-K for the fiscal year ended July 31, 2010 for filing with the SEC. We also selected Ernst and Young LLP as the independent registered public accounting firm for fiscal 2011. The Board is recommending that shareholders ratify that selection at the Annual Meeting.

Submitted by the members of the Audit Committee on October 7, 2010:

Melvin Lazar, Chairman *
Gregory M. Bortz *
Bernard L. Kasten, MD.
Stephen B. H. Kent, Ph.D.*

* On October 15, 2010, Mr. Lazar retired from the Board of Directors and as Chairman of the Audit Committee. On November 2, 2010, Mr. Bortz was appointed the Chairman of the Audit Committee and Dr. Kent joined the Audit Committee.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires the Company s executive officers, Directors and persons who beneficially own more than 10% of a registered class of the Company s equity securities (collectively, Reporting Persons) to file with the Securities and Exchange Commission initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Such executive officers, Directors and greater than 10% beneficial owners are required by Securities and Exchange Commission regulation to furnish the Company with copies of all Section 16(a) forms filed by such Reporting Persons.

Based solely on the Company s review of such forms furnished to the Company and written representations from certain Reporting Persons, the Company believes that the Reporting Persons have complied with all applicable filing requirements during the fiscal year ended July 31, 2010.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Enzo Clinical Labs, Inc. (Enzo Lab), a subsidiary of the Company, leases a facility located in Farmingdale, New York from Pari Management Corporation (Pari). Pari is owned equally by Elazar Rabbani, Ph.D., Shahram K. Rabbani, a former officer and Director of the Board, and Barry Weiner and his wife, who are the officers and Directors of Pari. The lease originally commenced on December 20, 1989, but was amended and extended in March 2005 and now terminates on March 31, 2017. During fiscal year ended July 31, 2010, Enzo Lab paid approximately $1,470,000 (including approximately $150,000 in real estate taxes) to Pari with respect to such facility and future payments are subject to cost of living adjustments.

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The non-interested members of the Board of Directors, at the time of the lease signing, reviewed and approved this transaction in accordance with the Company s procedures for reviewed related party transactions. The Company, which has guaranteed Enzo Lab s obligations to Pari under the lease, believes that the existing lease terms are as favorable to the Company as would be available from an unaffiliated party.

CODE OF ETHICS

The Company has adopted a Code of Ethics (as such term is defined in Item 406 of Regulation S-K). The Code of Ethics is available on the Company s website at www.enzo.com, and in print to any shareholder that requests it. The Code of Ethics applies to the Company s employees, officers and members of the Board. The Code of Ethics has been designed to deter wrongdoing and to promote:

(1) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;

(2) Full, fair, accurate, timely, and understandable disclosure in reports and documents that the Company files with, or submits to, the Securities and Exchange Commission and in other public communications made by the Company;

(3) Compliance with applicable governmental laws, rules and regulations;

(4) The prompt internal reporting or violations of the Code of Ethics to an appropriate person or persons identified in the Code of Ethics; and

(5) Accountability for adherence to the Code of Ethics.

COMPENSATION OF DIRECTORS

The Lead Independent Director receives an annual director s fee of $25,000 and each person who serves as a Director and who is not otherwise an officer or an employee (such Director being classified as an Outside Director) of the Company receives an annual Director s fee of $30,000. In addition, each Outside Director who serves on a committee of the Board receives an annual fee of $7,500. In addition to the annual Director fee, the Chairman of the Audit Committee receives an additional annual fee of $20,000 and the Chairman of the Compensation Committee and the Chairman of the Nominating/Governance Committee each receives an additional annual fee of $10,000. Each of the other Outside Directors will receive either restricted stock units or restricted stock awards immediately following the Annual Meeting, provided such person is a Director of the Company at such time. Effective January 1, 2011, the number of restricted stock units that the Outside Directors will be granted will be equal to 25,000 restricted stock units, not to exceed a fair market value of $100,000 per year (which was reduced in January 2010 from $125,000 with respect to the prior year s awards). Each of the restricted stock units referred to above shall be subject to a two-year vesting period; provided that at the time any non-employee Director ceases to be a Director of the Company (other than due to such Director s resignation), such non-employee Director s restricted stock units shall become fully vested at such time. The Company reimburses Directors for their travel and related expenses in connection with attending meetings of the Board and Board-related activities.

Director Compensation Table

The following table sets forth the information concerning compensation earned during our fiscal year ended July 31, 2010 by all non-employee directors:

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($) (1)	Option Awards ($)	Change in Pension Value and Non-Qualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Gregory M. Bortz (2) *Director*	$ 27,500	$ 100,000				$ 127,500
Irwin C. Gerson *Director*	$ 58,750	$ 100,000				$ 158,750
Barnard Kasten, MD. *Director*	$ 45,000	$ 100,000				$ 145,000
Stephen P. H. Kent, Ph.D	$ 67,500	$ 100,000				$ 167,500

Director			
Melvin F. Lazar, CPA (3)	$ 65,000	$ 100,000	$ 165,000
Director			

1) Represents the grant fair value on the respective grant dates for the fiscal year ended July 31, 2010, 2009 and 2008, in accordance with accounting authoritative guidance. The assumptions used in calculating these amounts are set forth in Notes 1 and 11 to the Company s financial statements for the fiscal year ended July 31, 2010, included in the Company s Form 10-K filed with the SEC on October 14, 2010.

2) Represents partial year as director.

3) Director retired as of October 15, 2010

COMPENSATION OF EXECUTIVE OFFICERS

Compensation Discussion and Analysis

The Compensation Committee of our Board oversees our executive compensation program. In this role, the Compensation Committee reviews and approves all compensation decisions relating to our Named Executive Officers. The Compensation Committee also reviews and approves all equity awards for all employees.

The Company strives to apply a uniform philosophy to compensation for all of its employees. This philosophy is based on the premise that the achievements of the Company result from the combined and coordinated efforts of all employees working toward common objectives.

Objectives and Philosophy of Our Executive Compensation Program

The primary objectives of the Compensation Committee with respect to executive compensation are to:

- align executive compensation with comparable companies in our industry sectors to attract, retain and motivate the best possible executive talent;
- ensure that executive compensation is aligned with our corporate business objectives and performance;
- promote the achievement of key strategic and financial performance objectives by linking cash and equity incentives; and
- align executives incentives with the creation of long-term stockholder value.

To achieve these objectives, the Compensation Committee evaluates senior management with input from our CEO, with the goal of setting compensation at levels the Compensation Committee believes are competitive with those of other companies in our industry that compete with us for executive talent. The Compensation Committee also conducts an annual evaluation of the CEO in addition to senior management evaluations. As part of these evaluations, our Compensation Committee considers key strategic, financial and operational objectives, including but not limited to: award of new patents, intellectual property protection, advancement of strategic alliances, collaborations, M&A activity, licensing, clinical trial progress, new product introductions, provider contracts, investor relations, corporate governance, and our financial and operational performance, as measured by the respective value drivers in each of the operating segments.

We may also award long term incentive compensation in the form of restricted stock awards that vest over time. We believe this practice helps to retain our executives and aligns their interests with those of our stockholders by allowing them to participate in the longer term success of our Company as reflected in stock price appreciation. We believe the use of time-vested restricted stock minimizes the likelihood of risky behavior and risky decision making that would be influenced by opportunities for short-term gains.

In making compensation decisions, the Compensation Committee compares our executive compensation against a peer group of publicly traded companies which they believe have business life cycles, revenues, market capitalizations, products, research and development investment levels and/or number/capabilities of employees that are roughly comparable to ours and against which the Compensation Committee believes we compete for executive talent. The Compensation Committee has retained James F. Reda & Associates LLC, (Consultant) an independent compensation consultant. The Company s senior management, with the assistance of the Consultant, compiled a list of peer companies. Since 2005, the Consultant has analyzed the executive compensation programs of these companies and issued reports to the Compensation Committee, the latest being in 2009. The Consultant, with recommendations from senior management has modified the peer company list to better reflect changes at the Company, with respect to operating segment significance, changes within the industries that the Company operates and changes among companies included in the peer group.

The companies included in the peer group, as updated, surveyed by the Consultants in 2009:

- Affymetrix, Inc.
- Alkermes, Inc
- Amylin Pharmaceuticals
- Bio-Reference Laboratories, Inc.
- Cryolife, Inc.
- Gen Probe, Inc,
- Genomic Health, Inc.
- Intermune, Inc.
- Incyte Corp.
- Isis Pharmaceuticals, Inc.

Lexicon Pharmaceuticals, Inc.
Myraid Genetics, Inc.

PDL Bio Pharma, Inc.
Progenics Pharmaceuticals
United Therapeutics Corp.
Vertex Pharmaceuticals

We compete with many other companies for executive personnel. The Compensation Committee generally targets total compensation for executives at no higher than the 50th percentile of total compensation paid to similarly situated executives of the companies in the peer group.

The Compensation Committee may adjust compensation levels, upon consideration of the relevant drivers relating to the life sciences, clinical diagnostics or therapeutics industries we operate in, with respect to an executive s individual experience and performance level, and the overall performance of the Company.

The Compensation Committee met two times in fiscal 2010 in order to review and approve our compensation for named executives and non-employee Directors, review candidates presented by senior management for key positions, approve equity awards for all employees and review with our Consultant the peer group information. The results of the Compensation Committee activities were reported to the Board.

For 2010, executive pay was significantly below the median of its peer group. Also, equity grants, which are all time-vested restricted shares, represent a small percentage of pay. For the past three years, the award value of equity for the CEO was just 15% of total pay. The other executive officers had grant levels ranging from 9% to 16% of total pay. As a result, our burn rate and shareholder dilution is among the lowest in the industry.

Although salaries paid in 2010 were slightly higher than 2009 due to the timing of an increase in early 2009, salary levels were flat in 2010.

Executive bonuses are discretionary but they will be primarily non-discretionary and performance-based in 2011 and beyond, using financial-based goals going forward. The Named Executive Officers and other key executives and managers will participate in the new pay for performance plan approved by the Board for 2011.

We continue to grant primarily time-vested restricted shares to limit dilution. For now there are no plans to grant performance shares, but grant levels will remain relatively low to limit shareholder dilution.

Components of our Executive Compensation Program

The primary elements of our executive compensation program are:

base salary;
cash bonus;
equity awards;
benefits and other compensation; and
severance and change-of-control benefits.

Base Salary

Base salary levels recognize the experience, skills, knowledge and responsibilities of each executive s position within the Company.

Exclusive of the base salaries that are contractual, base salaries are reviewed annually by the Compensation Committee, and may be adjusted from time to time to realign salaries with market levels and among our peer group after taking into account individual responsibilities, performance, and experience and for cost of living. Base salaries also may be increased for merit reasons, based on the executive s success in meeting or exceeding individual performance objectives, promoting our core values and demonstrating leadership abilities.

The base salaries of the two founders - Dr. Elazar Rabbani, our Chairman of the Board, Chief Executive Officer, Secretary and Director and Mr. Barry Weiner, our President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director - are set in accordance with the terms of executed employment agreements with each individual. Pursuant to the terms of their respective employment agreements, Dr. Rabbani and Mr. Weiner are currently compensated for the calendar year 2010 at a base annual salary of $546,192 and $484,472, respectively. Base salaries in calendar year 2010 have remained at the same levels as in 2009.

The base salaries for Dr. Carl W. Balezentis and Andrew R. Crescenzo were based on their initial one year employment agreements in fiscal 2006. Dr. Balezentis and Mr. Crescenzo are currently compensated for the calendar year 2010 at the base salary of $245,000 and $235,000, respectively. Their base salaries have remained at the same levels as in 2009.

The base salary for Kevin Krenitsky, M.D., appointed President of Enzo Clinical Labs on March 2, 2009 was $240,000 as set forth in his initial one year employment agreement. During the 2010 calendar year Dr. Krenitsky s base salary was increased to $285,000.

Annual Cash Bonus

The Compensation Committee approves discretionary cash bonuses for certain employees, including our Named Executive Officers. All bonus eligible employees receive bonuses based on management assessment of performance against individual goals and are considered discretionary. Discretionary bonuses limit excessive risk-taking by employees as bonus payments are not formulaic.

The Compensation Committee awarded Dr. Rabbani a $465,000 cash bonus in March 2010, which represented 85% of his base salary at such date. Commencing in calendar 2009, the bonus includes the cost of life insurance previously provided by the Company. The Compensation Committee recognized Dr. Rabbani s broad contributions in the areas of his role as Chairman of the Board, oversight of and increases to our technology platform and scientific product development, recruitment of new members of the

executive and scientific management and strategy for business development, including negotiating licensing and collaboration arrangements and M&A activities.

The Compensation Committee awarded Mr. Weiner a $340,000 cash bonus in March 2010, which represented 70% of his base salary at such date. Commencing in calendar 2009, the bonus includes the cost of life insurance previously provided by the Company. The Compensation Committee recognized Mr. Weiner s contributions in, strategic planning, financial management, including our Company s financial position and liquidity, M&A activity, corporate governance, communication efforts with our stockholders, investors and outside analysts, oversight of the finance group and compliance with the Company s Section 404 Sarbanes Oxley requirements, role in recruitment of new management personnel and divisional management and leadership role among the divisional executives.

The discretionary cash bonuses for Drs. Balezentis and Krenitsky and Mr. Crescenzo were $75,000, $80,000 and $60,000 paid in March and April 2010, respectively, as recommended by our CEO to the Compensation Committee, based on various objectives, described below, specific to their positions.

The Compensation Committee reviewed the recommendation from our CEO with respect to Dr. Balezentis s performance in meeting objectives set forth to grow Enzo Life Sciences globally through organic and acquisition growth, integrate acquired entities, implement a world-wide brand awareness for Enzo Life Sciences, expand product offerings through either internal development or third party sourcing, increase the management team to meet the requirements of the subsidiary and his leadership role among the division s management.

The Compensation Committee reviewed the recommendation from our CEO with respect to Dr. Krenitsky s performance in meeting objectives set forth to grow Enzo Clinical Labs through organic expansion, expansion of payer networks, increase of esoteric and molecular test offerings through partnerships and internal development, increase the management team and sales force to meet the requirements of the short-term and long-term requirements and his role in leadership among the division s management.

The Compensation Committee reviewed the recommendation from our CEO with respect to Mr. Crescenzo s performance in meeting objectives set forth to enhance financial reporting to the Board and the Audit Committee, manage financial aspects of M&A transactions, interact with analysts, assess and implement ERP systems, implement and monitor internal controls and Section 404 Sarbanes Oxley requirements and leadership role among our finance group.

On November 3, 2010, the Compensation Committee agreed to recommend to the Board that it adopt a pay for performance Plan for the Named Executive Officers and key management personnel to align incentive pay with performance as set forth with the individual based on their role with the Company. The performance goals for the Named Executive Officers and the annual performance awards will be determined and approved by the Compensation Committee from time to time.

Restricted Stock Awards

At its sole discretion, the Compensation Committee awards restricted stock as the primary vehicle for long-term incentives to our executives, including our Named Executive Officers. Since June 2005, we have not issued any stock options to any employees, including the named executives.

We believe that equity awards provide our executives with a strong link to our long-term performance, create an ownership culture, and help to align the interests of our Named Executive Officers and our shareholders. Equity awards are intended as both a reward for contributing to the long-term success of our Company and an incentive for future performance.

Restricted stock awards vest ratably over a two to four year period with 50% to 25% of the award vesting 12 months after the Named Executive Officer s start date or the annual anniversary of the award grant and the remainder of the awards vesting annually over the remaining period. The vesting feature of our equity grants is intended to further our goal of executive retention by providing an incentive to our Named Executive Officers to remain in our employ during the vesting period.

In determining the size of equity awards to our executives, our Compensation Committee considers comparable equity awards of executives in our compensation peer group, our Company-level performance, the applicable executive s performance, the amount of equity previously awarded to the executive, the vesting schedule of such previous awards and the recommendations of management and its independent Consultant to the Compensation Committee.

Equity awards of restricted stock are discretionary, and may be granted annually in conjunction with the review of an executive s individual performance. The Compensation Committee reviews all components of the executive s compensation, including the allocation between cash and equity, when determining annual equity awards to ensure that an executive s total compensation conforms to our overall philosophy and objectives.

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In January 2010, Dr. Balezentis and Mr. Crescenzo were each awarded 12,000 shares of restricted stock, respectively and Dr. Krenitsky was awarded 6,000 shares of restricted stock, as a component of their total compensation package.

In March 2010, Dr. Rabbani and Mr. Weiner were awarded 32,381 and 25,904 shares of restricted stock units, respectively, as a component of their total compensation package.

The Compensation Committee has a policy not to approve annual equity awards to any employees, including Named Executive Officers, at a time when our Company is in possession of material non-public information. We do not engage in timing of restricted stock awards to Named Executive Officers in coordination with the release of material non-public information.

Risk Considerations in Our Compensation Program

We do not believe our compensation policies and practices encourage or support excessive risk taking by our executive officers or key managers. We establish compensation practices that provide an appropriate level of incentive based compensation, in combination with non-incentive based compensation, to encourage our executive officers to act in the long-term best interests of the company and our stockholders. These practices include:

Awarding annual incentive bonuses based on discretionary assessment of short-term performance;

Benchmarking annual incentive bonuses against an appropriate peer group of companies;

Providing the Compensation Committee with full discretion in awarding annual bonus payments, regardless of bonus goal achievement, which affords the committee the opportunity to reduce payments if it determines excessive risk was taken to achieve bonus targets; and

Granting time-vested equity that generally vest over a two to four year period which provides incentives for our executive officers to act in the long-term best interests of the company.

Summary Compensation Table

The following table sets forth summary information concerning compensation awarded to, paid to or earned by each of the following persons: (i) our Chairman of the Board, Chief Executive Officer and Secretary, (ii) our President, Chief Financial Officer, Principal Accounting Officer and Treasurer, and (iii) each of our three most highly compensated executive officers, other than the foregoing two individuals (the Named Executive Officers), for all services rendered to the Company during each of the fiscal years ended July 31, 2010, 2009 and 2008.

Name and Principal Position	Year	Salary (1)($)	Bonus (2)($)	Stock Awards (3) ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation (4) ($)	Total ($)
Elazar Rabbani, Ph.D	2010	$ 546,192	$ 465,000	$ 189,750				$ 108,262	$ 1,309,204
Chairman of the Board of Directors,	2009	$ 534,582	$ 465,000	$ 189,750				$ 115,123	$ 1,304,455
Chief Executive Officer and Secretary	2008	$ 510,817	$ 375,000	$ 189,750				$ 115,856	$ 1,191,423
Barry W. Weiner	2010	$ 484,472	$ 340,000	$ 151,800				$ 99,095	$ 1,075,367
President, Chief Financial Officer,	2009	$ 474,174	$ 340,000	$ 151,800				$ 113,446	$ 1,079,420
Treasurer and Director	2008	$ 453,094	$ 250,000	$ 151,800				$ 107,481	$ 962,375
Carl W. Balezentis, Ph.D	2010	$ 245,000	$ 75,000	$ 56,880				$ 19,167	$ 396,047
President, Enzo Life Sciences	2009	$ 240,769	$ 70,000	$ 44,100				$ 18,700	$ 373,569
	2008	$ 226,537	$ 65,000	$ 94,875				$ 13,790	$ 400,202
Kevin Krenitsky, MD. (5)	2010	$ 252,115	$ 80,000	$ 28,440				$ 7,200	$ 367,755
	2009	$ 92,308		$ 17,100				$ 2,900	$ 112,308

President of Enzo Clinical Labs							
Andrew R. Crescenzo	2010	$ 235,000	$ 60,000	$ 56,880	$ 18,938	$	370,818
Senior Vice President of Finance	2009	$ 230,769	$ 55,000	$ 39,690	$ 18,700	$	344,159
	2008	$ 216,538	$ 50,000	$ 75,900	$ 14,125	$	356,563

1) Base salaries are set at January 1, each year which results in the salary amount including a portion of the prior year base salary. In 2010, the base salary were set at the 2009 level, except for Dr. Krenitsky.

2) Represents the discretionary cash bonus awards paid or accrued in fiscal 2010, 2009 and 2008- see Compensation Discussion & Analysis.

3) Represents the grant fair value on the respective grant dates for the fiscal year ended July 31, 2010, 2009 and 2008, in accordance with accounting authoritative guidance. The assumptions used in calculating these amounts are set forth in Notes 1 and 11 to the Company s Financial Statements for the fiscal year ended July 31, 2010, included in the Company s Form 10-K filed with the SEC on October 14, 2010.

4) See the All Other Compensation Table for additional information. The amounts for Elazar Rabbani and Barry Weiner in 2010 include increases relating to the expiration of prior auto leases and the replacement with new leases for comparable autos.

5) Employment commenced on March 2, 2009.

Grants of Equity Awards in Fiscal 2010

During the fiscal year ended July 31, 2010, the Compensation Committee approved the following equity awards to the Named Executive Officers:

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards
Name	**Grant Date**	**Threshold ($)**	**Target ($)**	**Maximum ($)**	**Threshold (#)**	**Target (#)**	**Maximum (#)**				
Elazar Rabbani, Ph.D	3/4/2010							32,381			$ 189,750
Barry W. Weiner	3/4/2010							25,904			$ 151,800
Carl W. Balezentis , Ph.D	1/29/2010							12,000			$ 56,880
Kevin Krenitsky, MD.	1/29/2010							6,000			$ 28,440
Andrew R. Crescenzo, CPA	1/29/2010							12,000			$ 56,880

Outstanding Equity Awards at Fiscal Year End July 31, 2010

The following table sets forth summary information regarding the outstanding equity awards made to the Named Executive Officers at July 31, 2010.

Name	**Number of Securities Underlying Unexercised Option (#)**	**Number of Securities Underlying Unexercised Option (#)**	**Equity Incentive Plan Awards: Number of**	**Option Exercise Price ($)**	**Option Expiration Date**	**Number of Shares or Units of**	**Market Value of Shares or Units**	**Equity Incentive Plan Awards: Number of**	**Equity Incentive Plan Awards: Market or**

	Exercisable	Unexerciseable	Securities Underlying Unexercised Unearned Options (#)			Stock That Have Not Vested (#)	of Stock That Have Not Vested	Unearned Shares, Units or Other Rights That Have Not Vested (#)	Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Elazar Rabbani, Ph.D	86,822			$ 12.05	3/22/2011	61,044	$ 280,802		
	110,250			$ 12.24	1/25/2013				
	78,750			$ 17.45	3/8/2014				
	50,000			$ 17.66	1/21/2015				
Barry W. Weiner	86,822			$ 12.05	3/22/2011	48,835	$ 224,639		
	110,250			$ 12.24	1/25/2013				
	78,750			$ 17.45	3/8/2014				
	50,000			$ 17.66	1/21/2015				
Carl W. Balezentis, Ph.D.						21,167	$ 97,367		
Kevin Krenitsky, MD.						9,750	$ 44,850		
Andrew R. Crescenzo, CPA						17,000	$ 78,200		

Options Exercised and Stock Vested

The following table sets forth the options exercised by and stock vested for the Named Executive Officers during the fiscal year ended July 31, 2010.

	Option Awards		Stock Awards	
Name	Number of Shares Acquired On Exercise	Value Realized On Exercise	Number Of Shares Acquired On Vesting	Value Realized On Vesting (1)
Elazar Rabbani. Ph.D			36,163	$ 212,065
Barry W. Weiner			28,931	$ 169,653
Dr. Carl W. Balezentis, Ph.D			7,084	$ 37,220
Kevin Krenitsky, MD.			1,250	$ 7,675
Andrew R. Crescenzo, CPA			5,000	$ 27,030

(1) The value realized is the closing market price on the day the stock awards vest, multiplied by the total number of shares vesting.

Employment Agreements

Each of Mr. Barry Weiner and Dr. Elazar Rabbani (the Executives) are parties to employment agreements with the Company, effective May 4, 1994, as amended as of December 4, 2008 (the Employment Agreements). Each Executive also receives an annual bonus, the amount of which shall be determined by the Compensation Committee and or the Board of Directors in their discretion. Each Employment Agreement provides that, in the event of termination of employment by the Executive for good reason, or a termination of employment by the Company without cause , change in control or non renewal, as such terms are defined in the Employment Agreement, each Executive shall be entitled to receive: (a) a lump sum in an amount equal to three years of the Executive s base annual salary; (b) a lump sum in an amount equal to the annual bonus paid by the Company to the Executive for the last fiscal year of the Company ending prior to the date of termination multiplied by three; (c) insurance coverage for the Executive and his dependents, at the same level and at the same charges to the Executive as immediately prior to his termination, for a period of three (3) years following his termination from the Company; (d) all accrued obligations, as defined therein; and (e) with respect to each incentive pay plan (other than stock option or other equity plans) of the Company in which the Executive participated at the time of termination, an amount equal to the amount the Executive would have earned if he had continued employment for three additional years. If the Executive is terminated by reason of his disability, he shall be entitled to receive, for three years after such termination, his base annual salary less any amounts received under a long term disability plan. If the Executive s employment with the Company is terminated by reason of his death, his legal representatives shall receive the balance of any remuneration due him under the terms of his Employment Agreement. The Employment Agreements currently expire on September 30, 2011, but will automatically renew for successive two year periods unless notice is given to the Company within 180 days of the end of such successive term.

On April 16, 2006, May 1, 2006 and March 2, 2009, Mr. Crescenzo, Dr. Balezentis and Dr. Krenitsky, respectively entered into one year employment agreements in connection with their initial employment. These agreements have since expired and were not renewed by the Company but the executives have continued their employment with the Company at will . Currently, Mr. Crescenzo, Dr. Balezentis and Dr. Krenitsky are parties to certain severance arrangements and change in control provisions with the Company which are deemed customary practice for their respective positions, as more fully discussed below. The severance arrangement and the change in control provisions survive the one year term.

Benefits and All Other Compensation

We maintain broad-based benefits that are provided to all employees, including health and dental insurance, group life insurance and a 401(K) plan. Named Executive Officers are eligible to participate in our employee benefit plans. The annual Company match for our Named Executive Officers is up to 11,000 or limited to 50% of the maximum contribution by the named executive.

Certain of our Named Executive Officers may be entitled to benefits that are not otherwise available to all of our employees, including health, life insurance and disability benefits. We do not provide pension arrangements, post-retirement health coverage to our Named Executive Officers or our employees. Our health and insurance plans are substantially the same among all management levels at the Company and sales personnel at the Company. On July 31, 2008, the Company terminated the Split Dollar life insurance arrangements with the two founders and their related trusts. In connection with the terminations of the Split Dollar life insurance arrangements, the executives will be provided the annual benefit attributed to the life insurance in their future total compensation arrangement.

In particular circumstances, we may provide relocation allowances when executives first join us. The purpose of this program is to attract talented executives outside our geographic area. Certain named executives are provided use of a Company owned vehicle for business and personal use or provided a car allowance.

All Other Compensation in Fiscal 2010, 2009 and 2008

The following table contains information regarding each component of All Other Compensation in the Summary Compensation Table to the Named Executive Officers for the fiscal years ended July 31, 2010, 2009 and 2008.

Name	Year	401(K) ($) (1)	Life Insurance ($) (2)	Medical and Disability Insurance ($) (3)	Personal Use of Auto ($) (4)	Relocation ($) (5)	Total All Other Compensation ($)
Elazar Rabbani, Ph.D	2010	$ 11,000	$ 36,808	$ 39,629	$ 20,825		$ 108,262
	2009	$ 10,250	$ 41,705	$ 54,368	$ 8,800		$ 115,123
	2008	$ 10,250	$ 47,806	$ 44,000	$ 13,800		$ 115,856
Barry W. Weiner	2010	$ 11,000	$ 29,132	$ 38,713	$ 20,250		$ 99,095
	2009	$ 10,250	$ 35,178	$ 53,668	$ 14,350		$ 113,446
	2008	$ 10,250	$ 39,131	$ 43,300	$ 14,800		$ 107,481
Carl W. Balezentis, Ph.D	2010	$ 10,588	$ 129		$ 8,450		$ 19,167
	2009	$ 10,250			$ 8,450		$ 18,700
	2008	$ 9,890			$ 3,900		$ 13,790
Kevin Krenitsky, MD. (6)	2010		$ 50		$ 7,150		$ 7,200
	2009					$ 2,900	$ 2,900
Andrew R. Crescenzo, CPA	2010	$ 11,000	$ 138		$ 7,800		$ 18,938
	2009	$ 10,250			$ 8,450		$ 18,700
	2008	$ 10,225			$ 3,900		$ 14,125

1) Represents our Company match under our 401(K) plan
2) Represents premiums of term policies of which the Named Executive Officers or other party is the beneficiary
3) Represents incremental medical and disability benefits costs
4) Represents the personal use of company provided auto or car allowance. The increases for Elazar Rabbani and Barry Weiner in 2010 represent the expiration of prior auto leases and the replacement with new leases for comparable autos
5) Represents relocation costs paid in connection with employment agreements
6) Employment commenced on March 2, 2009

Severance and Change-of-Control Benefits

Pursuant to Employment Agreements entered into with Drs. Rabbani, Balezentis and Krenitsky and Messrs. Weiner and Crescenzo, these executives are entitled to specified benefits in the event of the termination of their employment under specified circumstances, including termination following a change of ownership or control of our Company. We have provided more information about these benefits, along with estimates of their value under various circumstances within the below table.

Based on market trends, we believe these benefits help us compete for executive talent. We believe our severance and change of control benefits are in line with severance packages offered to executives by the companies identified in our peer group.

Our practice in the case of change of control benefits has been structured to trigger only in the event of a termination of the executive without cause or by the executive for good reason during a specified period before or after the change of control.

Potential Payments Upon Termination or Change of Control

The following table contains information regarding each component of Potential Payments Upon Termination or Change in Control Compensation Table to the Named Executive Officers as of July 31, 2010.

Name and Principal Position	Acceleration of Vesting	Severance Pay (1)	Continuation of Benefits	Tax Gross-Up	Total
Elazar Rabbani, Ph.D					
Termination without cause or by Executive for Good Reason	$ 280,802	$ 3,033,575	$ 312,351		$ 3,626,729
Change in control transaction without termination					
Change in control transaction with termination	$ 280,802	$ 3,033,575	$ 312,351	$ 1,402,808	$ 5,029,537
Barry W. Weiner					
Termination without cause or by Executive for Good Reason	$ 224,641	$ 2,473,417	$ 292,623		$ 2,990,681
Change in control transaction without termination					
Change in control transaction with termination	$ 224,641	$ 2,473,417	$ 292,623	$ 1,149,531	$ 4,140,212
Carl W. Balezentis, Ph.D					
Termination without cause or by Executive for Good Reason		$ 122,500			$ 122,500
Change in control transaction without termination					
Change in control transaction with termination	$ 97,368	$ 122,500			$ 219,868
Kevin Krenitsky, MD.					
Termination without cause or by Executive for Good Reason		$ 71,250			$ 71,250
Change in control transaction without termination					
Change in control transaction with termination	$ 44,850	$ 71,250			$ 116,100
Andrew R. Crescenzo, CPA					
Termination without cause or by Executive for Good Reason		$ 78,333			$ 78,333
Change in control transaction without termination					
Change in control transaction with termination	$ 92,000	$ 78,333			$ 170,333

1) The amount listed in this column do not include accrued amounts such as accured salary or vacation

Tax and Accounting Considerations

The federal tax laws impose requirements in order for compensation payable to the CEO and certain executive officers to be fully deductible. The Company believes it has taken appropriate actions to maximize its income tax deduction. IRC Section 162(m) generally precludes a public corporation from taking a deduction for compensation in excess of $1,000,000 for its CEO or any of its three other highest-paid executive officers (other than the CEO or Chief Financial Officer), unless certain specific and detailed criteria are satisfied.

Annually, the Company reviews all compensation programs and payments to determine the tax impact on the Company as well as on the executive officers. In addition, the Company reviews the impact of its programs against other considerations, such as accounting impact, stockholder alignment, market competitiveness, effectiveness and perceived value to employees. Because many different factors influence a well-rounded, comprehensive executive compensation program, some compensation may not be deductible under IRC Section 162(m). The Company will continue to monitor developments and assess alternatives for preserving the deductibility of compensation payments and benefits to the extent reasonably practicable, consistent with its compensation policies and as determined to be in the best interests of the Company and its stockholders.

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis in this proxy report with management. Based on its review and discussion with management, the Compensation Committee recommended to our Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement and also be incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended July 31, 2010.

Submitted by members of the Compensation Committee on October 7, 2010:

Irwin C. Gerson, Chairman
Dr. Bernard L. Kasten

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The current members of the Compensation Committee are Messrs. Bortz, Gerson and Dr. Kasten. No member of the Compensation Committee has a relationship that would constitute an interlocking relationship with the Company s executive officers or other Directors.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table sets forth information regarding our existing equity compensation plans as of July 31, 2010:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c) (2)
Equity compensation plans approved by security holders	1,132,450(1)	$ 14.30	20,994
Equity compensation plans not approved by security holders			
Total	1,132,450		20,994

(1) Shares to be issued upon exercise of options under the 1999 and 2005 plans

(2) Shares available for grant under the 2005 plan.

INSURANCE FOR INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company has in effect with Illinois National Insurance Company and Allied World Insurance Company, under a policy effective February 22, 2010 and expiring on February 21, 2011, insurance covering all of its directors and officers and certain other employees of the Company against certain liabilities and reimbursing the Company for obligations which it incurs as a result of its indemnification of such directors, officers and employees. Such insurance has been obtained in accordance with the provisions of Section 726 of the Business Corporation Law of the State of New York. The annual premium is $236,000.

This report has been provided by the Board of Directors of the Company.

Elazar Rabbani, Ph.D.

Barry W. Weiner
Gregory M. Bortz
Irwin C. Gerson
Dr. Bernard L. Kasten
Stephen B.H. Kent, Ph.D.

PROPOSAL 2
APPROVAL AND ADOPTION OF THE 2011 INCENTIVE PLAN

Background and Purpose

On November 2, 2010, the Company s Board of Directors adopted the Enzo Biochem, Inc. 2011 Incentive Plan, which we refer to as the 2011 Plan, and recommended that it be submitted to the Company s shareholders for their approval at the next annual meeting.

The purpose of the 2011 Plan is to assist Enzo Biochem, Inc., a New York corporation (the Company) and its subsidiaries and other designated affiliates, which we refer to as Related Entities , in attracting, motivating, retaining and rewarding high-quality executives and other employees, officers, directors, consultants and other persons who provide services to the Company or its Related Entities, by enabling such persons to acquire or increase a proprietary interest in the Company in order to strengthen the mutuality of interests between such persons and the Company s stockholders, and providing such persons with annual and long term performance incentives to expend their maximum efforts in the creation of shareholder value. An additional primary purpose of the 2011 Plan is to help facilitate pay for performance incentives that the Compensation Committee and the Board may determine to initiate from time to time.

The effective date of the 2011 Plan is November 2, 2010. As of the date of this proxy statement, no awards have been granted under the 2011 Plan.

Shareholder approval of the 2011 Plan is required (i) to comply with certain exclusions from the limitations of Section 162(m) of the Internal Revenue Code of 1986, which we refer to as the Code, as described below, (ii) for the 2011 Plan to be eligible under the plan lender exemption from the margin requirements of Regulation U promulgated under the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act, (iii) to comply with the incentive stock options rules under Section 422 of the Code, and (iv) for purposes of complying with the shareholder approval requirements for the listing of shares on the New York Stock Exchange.

The following is a summary of certain principal features of the 2011 Plan. This summary is qualified in its entirety by reference to the complete text of the 2011 Plan. Shareholders are urged to read the actual text of the 2011 Plan in its entirety which is set forth as Appendix B to this proxy statement.

Shares Available for Awards; Annual Per Person Limitations

Under the 2011 Plan, the total number of shares of common stock of the Company (the Common Stock) reserved and available for delivery under the 2011 Plan (Awards) at any time during the term of the Plan shall be equal to Three Million (3,000,000). The foregoing limit shall be increased by the number of shares of Common Stock with respect to which Awards previously granted under the 2011 Plan that are forfeited, expire or otherwise terminate without issuance of shares, or that are settled for cash or otherwise do not result in the issuance of shares, and the number of shares that are tendered (either actually or by attestation) or withheld upon exercise of an Award to pay the exercise price or any tax withholding requirements. Awards issued in substitution for awards previously granted by a company acquired by the Company or a Related Entity, or with which the Company or any Related Entity combines, do not reduce the limit on grants of Awards under the Plan.

No awards may be made under the Prior Plan after the date on which the shareholders of the Company approve the 2011 Plan.

The 2011 Plan imposes individual limitations on the amount of certain Awards in part to comply with Code Section 162(m). Under these limitations, during any 12-month period, no participant may be granted (i) stock options or stock appreciation rights with respect to more than 500,000 shares of Common Stock, or (ii) shares of restricted stock, restricted stock units, performance shares and other stock based-awards with respect to more than 500,000 shares of Common Stock, in each case, subject to adjustment in certain circumstances. The maximum amount that may be paid out as performance units with respect to any 12-month performance period is $2,500,000 (pro-rated for any 12-month performance period that is less than 12 months), and with respect to any performance period that is more than 12 months, $2,000,000 multiplied by the number of full 12 month periods that are in the performance period.

The Committee is authorized to adjust the limitations described in the three preceding paragraphs and is authorized to adjust outstanding Awards (including adjustments to exercise prices of options and other affected terms of Awards) in the event that a dividend or other distribution (whether in cash, shares of Common Stock or other property), recapitalization, forward or reverse split, reorganization, merger, consolidation, spin-off, combination, repurchase, share exchange or other similar corporate transaction or event affects the Common Stock so that an adjustment is appropriate. The Committee is also authorized to adjust performance conditions and other terms of Awards in response to these kinds of events or in response to changes in applicable laws, regulations or accounting principles.

Eligibility

The persons eligible to receive Awards under the 2011 Plan are the officers, directors, employees, consultants and other persons who provide services to the Company or any Related Entity on a full-time basis. The foregoing notwithstanding, only full-time employees of the Company, or any parent corporation or subsidiary corporation of the Company (as those terms are defined in Sections 424(e) and (f) of the Code, respectively), shall be eligible for purposes of receiving any incentive stock options (ISOs). An employee on leave of absence may be considered as still in the employ of the Company or a Related Entity for purposes of eligibility for participation in the 2011 Plan.

As of November 2, 2010, there were approximately 530 officers, directors, employees, consultants and other persons eligible to participate in the 2011 Plan. Because the 2011 Plan provides for broad discretion in selecting participants and in making awards, the total number of persons who will participate in the 2011 Plan and the benefits that will be provided to the participants cannot be determined at this time.

Administration

The 2011 Plan is to be administered by a committee designated by the Board of Directors consisting of not less than two directors (the Committee), provided, however, that except as otherwise expressly provided in the Plan, the Board may exercise any power or authority granted to the Committee under the 2011 Plan. Subject to the terms of the 2011 Plan, the Committee is authorized to select eligible persons to receive Awards, determine the type, number and other terms and conditions of, and all other matters relating to, Awards, prescribe Award agreements (which need not be identical for each Participant), and the rules and regulations for the administration of the Plan, construe and interpret the Plan and Award agreements, correct defects, supply omissions or reconcile inconsistencies therein, and make all other decisions and determinations as the Committee may deem necessary or advisable for the administration of the 2011 Plan.

Stock Options and Stock Appreciation Rights

The Committee is authorized to grant stock options, including both ISOs, which can result in potentially favorable tax treatment to the participant, and non qualified stock options, and stock appreciation rights entitling the participant to receive the amount by which the fair market value of a share of Common Stock on the date of exercise exceeds the grant price of the stock appreciation right. The exercise price per share subject to an option and the grant price of a stock appreciation right are determined by the Committee, provided that such exercise or grant price shall not be less than 100% of the fair market value of a share on the date of grant. In the case of an ISO, the exercise price per share (to the extent required by the Code at the time of grant) shall be no less than 110% of the fair market value of a share on the date such ISO is granted. For purposes of the 2011 Plan, the term fair market value means the fair market value of Common Stock, Awards or other property as determined by the Committee or under procedures established by the Committee. Unless otherwise determined by the Committee, the fair market value of Common Stock as of any given date shall be the closing sales price per share of Common Stock as reported on the principal stock exchange or market on which Common Stock is traded on the date as of which such value is being determined or, if there is no sale on that date, then on the last previous day on which a sale was reported. The maximum term of each option or stock appreciation right, the times at which each option or stock appreciation right will be exercisable, and provisions requiring forfeiture of unexercised options or stock appreciation rights at or following termination of employment generally are fixed by the Committee, except that no option or stock appreciation right may have a term exceeding ten years. Methods of exercise and settlement and other terms of the options and stock appreciation right are determined by the Committee. The Committee, thus, may permit the exercise price of options awarded under the Plan to be paid in cash, shares, other Awards or other property (including loans to participants).

Restricted Stock and Restricted Stock Units

The Committee is authorized to grant restricted stock and restricted stock units. Restricted stock is a grant of shares of Common Stock which may not be sold or disposed of, and which shall be subject to such risks of forfeiture and other restrictions as the Committee may impose. A participant granted restricted stock generally has all of the rights of a stockholder of the Company, unless otherwise determined by the Committee. An Award of restricted stock units confers upon a participant the right to receive shares of Common Stock or cash equal to the fair market value of the specified number of shares of Common Stock covered by the restricted stock units at the end of a specified deferral period, subject to such risks of forfeiture and other restrictions as the Committee may impose. Prior to settlement, an Award of restricted stock units carries no voting or dividend rights or other rights associated with share ownership, although dividend equivalents may be granted, as discussed below.

Dividend Equivalents

The Committee is authorized to grant dividend equivalents conferring on participants the right to receive, currently or on a deferred basis, cash, shares of Common Stock, other Awards or other property equal in value to dividends paid on a specific number of shares of Common Stock or other periodic payments. Dividend equivalents may be granted alone or in connection with another

Award, may be paid currently or on a deferred basis and, if deferred, may be deemed to have been reinvested in additional shares of Common Stock, Awards or otherwise as specified by the Committee.

Bonus Stock and Awards in Lieu of Cash Obligations

The Committee is authorized to grant shares of Common Stock as a bonus free of restrictions, or to grant shares of Common Stock or other Awards in lieu of Company obligations to pay cash under the 2011 Plan or other plans or compensatory arrangements, subject to such terms as the Committee may specify.

Other Stock Based Awards

The Committee or the Board is authorized to grant Awards that are denominated or payable in, valued by reference to, or otherwise based on or related to shares of Common Stock. The Committee determines the terms and conditions of such Awards.

Performance Awards

The Committee is authorized to grant performance awards to participants on terms and conditions established by the Committee. The performance criteria to be achieved during any performance period and the length of the performance period are determined by the Committee upon the grant of the performance award. Performance awards may be valued by reference to a designated number of Shares (in which case they are referred to as performance shares) or by reference to a designated amount of property including cash (in which case they are referred to as performance units). Performance Awards may be settled by delivery of cash, shares or other property, or any combination thereof, as determined by the Committee. Performance awards granted to persons whom the Committee expects will, for the year in which a deduction arises, be covered employees (as defined below) will, if and to the extent intended by the Committee, be subject to provisions that should qualify such Awards as performance based compensation not subject to the limitation on tax deductibility by the Company under Code Section 162(m). For purposes of Section 162(m), the term covered employee means the Company s chief executive officer and each other person whose compensation is required to be disclosed in the Company s filings with the SEC by reason of that person being among the four highest compensated officers of the Company as of the end of a taxable year. If and to the extent required under Section 162(m) of the Code, any power or authority relating to a performance award intended to qualify under Section 162(m) of the Code is to be exercised by the Committee and not the Board.

If and to the extent that the Committee determines that these provisions of the 2011 Plan are to be applicable to any Award, one or more of the following business criteria for the Company, on a consolidated basis, and/or for Related Entities, or for business or geographical units of the Company and/or a Related Entity (except with respect to the total shareholder return and earnings per share criteria), shall be used by the Committee in establishing performance goals for awards under the 2011 Plan: (1) earnings per share; (2) revenues or margins; (3) cash flow; (4) operating margin; (5) direct contribution; (6) net income; pretax earnings; earnings before interest and taxes; earnings before interest, taxes, depreciation and amortization; earnings after interest expense and before extraordinary or special items; operating income or income from operations; income before interest income or expense, unusual items and income taxes, local, state or federal and excluding budgeted and actual bonuses which might be paid under any ongoing bonus plans of the Company; (7) return on net assets, investment, capital, or equity; (8) economic value added; (9) working capital; (10) management of fixed costs or variable costs; (11) identification or consummation of investment opportunities or completion of specified projects in accordance with corporate business plans, including strategic mergers, acquisitions or divestitures; (12) total shareholder return; (13) debt reduction; (14) market share; (15) entry into new markets, either geographically or by business unit; (16) customer retention and satisfaction; (17) strategic plan development and implementation, including turnaround plans; and/or (18) the fair market value of a share of Common Stock. Any of the above goals may be determined on an absolute or relative basis (e.g. growth in earnings per share) or as compared to the performance of a published or special index deemed applicable by the Committee including, but not limited to, the Standard & Poor s 500 Stock Index or a group of companies that are comparable to the Company. The Committee may exclude the impact of an event or occurrence which the Committee determines should appropriately be excluded, including without limitation (i) restructurings, discontinued operations, extraordinary items (as defined pursuant to generally accepted accounting principles), and other unusual or non-recurring charges; (ii) change in accounting standards required by generally accepted accounting principles; or (iii) such other exclusions or adjustments as the Committee specifies at the time the Award is granted.

The Committee may, in its discretion, determine that the amount payable as a performance award will be reduced from the amount of any potential Award.

Other Terms of Awards

Awards may be settled in the form of cash, shares of Common Stock, other Awards or other property, in the discretion of the Committee. The Committee may require or permit participants to defer the settlement of all or part of an Award in accordance with such terms and conditions as the Committee may establish, including payment or crediting of interest or dividend equivalents on deferred amounts, and the crediting of earnings, gains and losses based on deemed investment of deferred amounts in specified investment vehicles. The Committee is authorized to place cash, shares of Common Stock or other property in trusts or make other

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arrangements to provide for payment of the Company s obligations under the 2011 Plan. The Committee may condition any payment relating to an Award on the withholding of taxes and may provide that a portion of any shares of Common Stock or other property to be distributed will be withheld (or previously acquired shares of Common Stock or other property be surrendered by the participant) to satisfy withholding and other tax obligations. Awards granted under the 2011 Plan generally may not be pledged or otherwise encumbered and are not transferable except by will or by the laws of descent and distribution, or to a designated beneficiary upon the participant s death, except that the Committee may, in its discretion, permit transfers for estate planning or other purposes subject to any applicable restrictions under Rule 16b-3.

Awards under the 2011 Plan are generally granted without a requirement that the participant pay consideration in the form of cash or property for the grant (as distinguished from the exercise), except to the extent required by law. The Committee may, however, grant Awards in exchange for other Awards under the 2011 Plan, awards under other Company plans, or other rights to payment from the Company, and may grant Awards in addition to and in tandem with such other Awards, rights or other awards.

Acceleration of Vesting; Change in Control

The Committee may, in its discretion, accelerate the exercisability, the lapsing of restrictions or the expiration of deferral or vesting periods of any Award, and such accelerated exercisability, lapse, expiration and if so provided in the Award agreement or otherwise determined by the Committee, vesting shall occur automatically in the case of a change in control of the Company, as defined in the 2011 Plan (including the cash settlement of stock appreciation rights which may be exercisable in the event of a change in control). In addition, the Committee may provide in an Award agreement that the performance goals relating to any performance award will be deemed to have been met upon the occurrence of any change in control.

Amendment and Termination

The Board of Directors may amend, alter, suspend, discontinue or terminate the 2011 Plan or the Committee s authority to grant Awards without further stockholder approval, except that stockholder approval must be obtained for any amendment or alteration if such approval is required by law or regulation or under the rules of any stock exchange or quotation system on which shares of Common Stock are then listed or quoted. Thus, stockholder approval may not necessarily be required for every amendment to the 2011 Plan which might increase the cost of the 2011 Plan or alter the eligibility of persons to receive Awards. Stockholder approval will not be deemed to be required under laws or regulations, such as those relating to ISOs, that condition favorable treatment of participants on such approval, although the Board may, in its discretion, seek stockholder approval in any circumstance in which it deems such approval advisable. Unless earlier terminated by the Board, the 2011 Plan will terminate at the earliest of (a) such time as no shares of Common Stock remain available for issuance under the 2011 Plan, (b) termination of the 2011 Plan by the Board of Directors, or (c) the tenth anniversary of the effective date of the Plan. Awards outstanding upon expiration of the 2011 Plan shall remain in effect until they have been exercised or terminated, or have expired.

Federal Income Tax Consequences of Awards

The 2011 Plan is not qualified under the provisions of section 401(a) of the Code and is not subject to any of the provisions of the Employee Retirement Income Security Act of 1974.

Nonqualified Stock Options

On exercise of a nonqualified stock option granted under the 2011 Plan an optionee will recognize ordinary income equal to the excess, if any, of the fair market value on the date of exercise of the shares of stock acquired on exercise of the option over the exercise price. If the optionee is an employee of the Company or a Related Entity, that income will be subject to the withholding of Federal income tax. The optionee s tax basis in those shares will be equal to their fair market value on the date of exercise of the option, and his holding period for those shares will begin on that date.

If an optionee pays for shares of stock on exercise of an option by delivering shares of the Company s stock, the optionee will not recognize gain or loss on the shares delivered, even if their fair market value at the time of exercise differs from the optionee s tax basis in them. The optionee, however, otherwise will be taxed on the exercise of the option in the manner described above as if he had paid the exercise price in cash. If a separate identifiable stock certificate is issued for that number of shares equal to the number of shares delivered on exercise of the option, the optionee s tax basis in the shares represented by that certificate will be equal to his tax basis in the shares delivered, and his holding period for those shares will include his holding period for the shares delivered. The optionee s tax basis and holding period for the additional shares received on exercise of the option will be the same as if the optionee had exercised the option solely in exchange for cash.

The Company will be entitled to a deduction for Federal income tax purposes equal to the amount of ordinary income taxable to the optionee, provided that amount constitutes an ordinary and necessary business expense for the Company and is reasonable in amount, and either

the employee includes that amount in income or the Company timely satisfies its reporting requirements with respect to that amount.

Incentive Stock Options

The 2011 Plan provides for the grant of stock options that qualify as incentive stock options as defined in section 422 of the Code, which we refer to as ISOs. Under the Code, an optionee generally is not subject to tax upon the grant or exercise of an ISO. In addition, if the optionee holds a share received on exercise of an ISO for at least two years from the date the option was granted and at least one year from the date the option was exercised, which we refer to as the Required Holding Period, the difference, if any, between the amount realized on a sale or other taxable disposition of that share and the holder s tax basis in that share will be long-term capital gain or loss.

If, however, an optionee disposes of a share acquired on exercise of an ISO before the end of the Required Holding Period, which we refer to as a Disqualifying Disposition, the optionee generally will recognize ordinary income in the year of the Disqualifying Disposition equal to the excess, if any, of the fair market value of the share on the date the ISO was exercised over the exercise price. If, however, the Disqualifying Disposition is a sale or exchange on which a loss, if realized, would be recognized for Federal income tax purposes, and if the sales proceeds are less than the fair market value of the share on the date of exercise of the option, the amount of ordinary income recognized by the optionee will not exceed the gain, if any, realized on the sale. If the amount realized on a Disqualifying Disposition exceeds the fair market value of the share on the date of exercise of the option, that excess will be short-term or long-term capital gain, depending on whether the holding period for the share exceeds one year.

An optionee who exercises an ISO by delivering shares of stock acquired previously pursuant to the exercise of an ISO before the expiration of the Required Holding Period for those shares is treated as making a Disqualifying Disposition of those shares. This rule prevents pyramiding or the exercise of an ISO (that is, exercising an ISO for one share and using that share, and others so acquired, to exercise successive ISOs) without the imposition of current income tax.

For purposes of the alternative minimum tax, the amount by which the fair market value of a share of stock acquired on exercise of an ISO exceeds the exercise price of that option generally will be an adjustment included in the optionee s alternative minimum taxable income for the year in which the option is exercised. If, however, there is a Disqualifying Disposition of the share in the year in which the option is exercised, there will be no adjustment with respect to that share. If there is a Disqualifying Disposition in a later year, no income with respect to the Disqualifying Disposition is included in the optionee s alternative minimum taxable income for that year. In computing alternative minimum taxable income, the tax basis of a share acquired on exercise of an ISO is increased by the amount of the adjustment taken into account with respect to that share for alternative minimum tax purposes in the year the option is exercised.

The Company is not allowed an income tax deduction with respect to the grant or exercise of an incentive stock option or the disposition of a share acquired on exercise of an incentive stock option after the Required Holding Period. However, if there is a Disqualifying Disposition of a share, the Company is allowed a deduction in an amount equal to the ordinary income includible in income by the optionee, provided that amount constitutes an ordinary and necessary business expense for the Company and is reasonable in amount, and either the employee includes that amount in income or the Company timely satisfies its reporting requirements with respect to that amount.

Stock Awards

Generally, the recipient of a stock award will recognize ordinary compensation income at the time the stock is received equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. If, however, the stock is non-vested when it is received under the 2011 Plan (for example, if the employee is required to work for a period of time in order to have the right to sell the stock), the recipient generally will not recognize income until the stock becomes vested, at which time the recipient will recognize ordinary compensation income equal to the excess, if any, of the fair market value of the stock on the date it becomes vested over any amount paid by the recipient in exchange for the stock. A recipient may, however, file an election with the Internal Revenue Service, within 30 days of his or her receipt of the stock award, to recognize ordinary compensation income, as of the date the recipient receives the award, equal to the excess, if any, of the fair market value of the stock on the date the award is granted over any amount paid by the recipient in exchange for the stock.

The recipient s basis for the determination of gain or loss upon the subsequent disposition of shares acquired as stock awards will be the amount paid for such shares plus any ordinary income recognized either when the stock is received or when the stock becomes vested. Upon the disposition of any stock received as a stock award under the 2011 Plan the difference between the sale price and the recipient s basis in the shares will be treated as a capital gain or loss and generally will be characterized as long-term capital gain or loss if the shares have been held for more the one year from the date as of which he or she would be required to recognize any compensation income.

Stock Appreciation Rights

The Company may grant SARs separate from any other award, which we refer to as Stand-Alone SARs, or in tandem with options, which we refer to as Tandem SARs, under the 2011 Plan. Generally, the recipient of a Stand-Alone SAR will not recognize any taxable income at the time the Stand-Alone SAR is granted.

With respect to Stand-Alone SARs, if the recipient receives the appreciation inherent in the SARs in cash, the cash will be taxable as ordinary compensation income to the recipient at the time that the cash is received. If the recipient receives the appreciation inherent in the SARs in shares of stock, the recipient will recognize ordinary compensation income equal to the excess of the fair market value of the stock on the day it is received over any amounts paid by the recipient for the stock.

With respect to Tandem SARs, if the recipient elects to surrender the underlying option in exchange for cash or shares of stock equal to the appreciation inherent in the underlying option, the tax consequences to the recipient will be the same as discussed above relating to the Stand-Alone SARs. If the recipient elects to exercise the underlying option, the holder will be taxed at the time of exercise as if he or she had exercised a nonqualified stock option (discussed above), i.e., the recipient will recognize ordinary income for federal tax purposes measured by the excess of the then fair market value of the shares of stock over the exercise price.

In general, there will be no federal income tax deduction allowed to the Company upon the grant or termination of Stand-Alone SARs or Tandem SARs. Upon the exercise of either a Stand-Alone SAR or a Tandem SAR, however, the Company will be entitled to a deduction for federal income tax purposes equal to the amount of ordinary income that the employee is required to recognize as a result of the exercise, provided that the deduction is not otherwise disallowed under the Code.

Dividend Equivalents

Generally, the recipient of a dividend equivalent award will recognize ordinary compensation income at the time the dividend equivalent award is received equal to the fair market value dividend equivalent award received. The Company generally will be entitled to a deduction for federal income tax purposes equal to the amount of ordinary income that the employee is required to recognize as a result of the dividend equivalent award, provided that the deduction is not otherwise disallowed under the Code.

Section 162 Limitations

Section 162(m) to the Code, generally disallows a public company s tax deduction for compensation to covered employees in excess of $1 million in any tax year beginning on or after January 1, 1994. Compensation that qualifies as performance based compensation is excluded from the $1 million deductibility cap, and therefore remains fully deductible by the company that pays it. We intend that awards granted to employees under the Plan whom the Committee expects to be covered employees at the time a deduction arises in connection with such options, may, if and to the extent so intended by the Committee, be granted in a manner that will qualify as such performance-based compensation, so that such awards would not be subject to the Section 162(m) deductibility cap of $1 million. Future changes in Section 162(m) or the regulations thereunder may adversely affect our ability to ensure that awards under the 2006 Plan will qualify as performance-based compensation that are fully deductible by us under Section 162(m).

Importance of Consulting Tax Adviser

The information set forth above is a summary only and does not purport to be complete. In addition, the information is based upon current Federal income tax rules and therefore is subject to change when those rules change. Moreover, because the tax consequences to any recipient may depend on his particular situation, each recipient should consult his tax adviser as to the Federal, state, local and other tax consequences of the grant or exercise of an award or the disposition of stock acquired as a result of an award.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE FOR PROPOSAL 2 RELATING TO THE APPROVAL AND ADOPTION OF THE ENZO BIOCHEM 2011 INCENTIVE PLAN.

PROPOSAL 3
RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board has appointed Ernst & Young LLP, as its independent registered public accounting firm, to audit the accounts of the Company for the fiscal year ending July 31, 2011. The Board approved the reappointment of Ernst & Young LLP (which has been engaged as the Company s independent registered public accounting firm since 1983). Ernst & Young LLP has advised the Company that neither the firm nor any of its members or associates has any direct financial interest in the Company or any of its affiliates other than as auditors. Although the selection and appointment of independent auditors is not required to be submitted to a vote of shareholders, the Board deems it desirable to obtain the shareholders ratification and approval of this appointment.

The following table sets forth the aggregate fees billed by Ernst & Young LLP for the years ended July 31, 2010 and 2009 for audit and non-audit services and are categorized as Audit Fees, Audit-Related Fees, Tax Fees and All Other Fees, which have all been pre-approved by the Audit Committee. The nature of the services provided in each such category is described following the table.

	2010	2009
Audit Fees	$ 860,000	$ 1,272,000
Audit-Related Fees		88,000
Tax Fees	40,000	104,000
All Other Fees		
Total Fees	**$ 900,000**	**$ 1,464,000**

Audit Fees Consists of fees for professional services necessary to perform an audit or review in accordance with the Public Company Accounting Oversight Board, including services rendered for the audit of our annual financial statements (including services incurred with rendering an opinion under Section 404 of the Sarbanes-Oxley Act of 2002) and quarterly reviews of the Company s interim financial statements. Audit fees also include fees for services performed by Ernst & Young LLP that are closely related to the audit and in many cases could only be provided by the Company s independent registered public accountants. Such services include the issuance of consents related to the Company s registration statements and capital raising activities, assistance with and review of other documents filed with the Commission and accounting advice on completed transactions.

Audit-Related Fees Audit-related fees in fiscal 2009 related to Merger & Acquisition due diligence performed in connection with an acquisition in 2009.

Tax Fees During fiscal 2010 and 2009, Ernst & Young LLP performed certain tax compliance services.

All Other Fees There were no professional services rendered by Ernst & Young LLP that would be classified as other fees during the years ended July 31, 2010 and 2009.

Pre-Approval Policies and Procedures The Audit Committee has adopted a policy that requires advance approval of all audit, audit-related, tax services, and other services performed by the independent auditor. The policy provides for pre-approval by the Audit Committee of specifically defined audit and non-audit services. Unless the specific service has been previously pre-approved with respect to that year, the Audit Committee must approve the permitted service before the independent auditor is engaged to perform it. The Audit Committee has delegated to the Chair of the Audit Committee authority to approve permitted services provided that the Chair reports any decisions to the Audit Committee at its next scheduled meeting.

In making its recommendations to ratify the appointment of Ernst & Young LLP as the Company s independent registered public accountants for the fiscal year ending July 31, 2011, the Audit Committee has considered whether the services provided by Ernst & Young LLP are compatible with maintaining the independence of Ernst & Young LLP.

Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting with the opportunity to make a statement if they desire to do so and are expected to be available to respond to appropriate questions.

THE BOARD OF DIRECTORS OF THE COMPANY UNANIMOUSLY RECOMMENDS A VOTE FOR PROPOSAL 3 RELATING TO THE RATIFICATION OF THE COMPANY S APPOINTMENT OF ERNST & YOUNG LLP TO SERVE AS THE COMPANY S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING JULY 31, 2011.

OTHER MATTERS

Except as discussed in this Proxy Statement, the Board does not know of any matters that are to be properly presented at the Annual Meeting other than those stated in the Notice of 2010 Annual Meeting of Shareholders and referred to in this Proxy Statement.

Shahram Rabbani has submitted the Rabbani Letter stating that he intends to nominate at the Annual Meeting a competing slate of two insurgent Class II Director-candidates not nominated by the Board and to solicit votes from shareholders of the Company to elect such insurgent Class II Director-candidates to the Board in opposition to the Board s two Class II Director-nominees Mr. Barry W. Weiner and Dr. Bernard L. Kasten. The Company does not know whether Shahram Rabbani will, in fact, properly nominate any individuals for election as Directors at the Annual Meeting or solicit proxies from shareholders of the Company for that purpose. Nominations by Shahram Rabbani have NOT been endorsed by the Board, and we urge you NOT to sign or return any proxy card that you may receive from Shahram Rabbani. **The Board unanimously recommends a vote For each of the Board s two Class II Director-nominees, Mr. Barry W. Weiner and Dr. Bernard L. Kasten.**

If other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed WHITE proxy card to vote thereon in accordance with their best judgment. Moreover, the Board reserves the right to adjourn or postpone the Annual Meeting for failure to obtain a quorum, for legitimate scheduling purposes or based on other circumstances that, in the Board s belief, would cause such adjournments or postponements to be in the best interests of all Enzo shareholders.

METHOD AND COST OF SOLICITATION OF PROXIES

The cost of solicitation of proxies for the Annual Meeting on behalf of the Board will be borne by the Company, including expenses in connection with preparing and mailing the Proxy Statement, the enclosed WHITE proxy card and any other communications that we will be sending to you in advance of the Annual Meeting, regarding the Company and your Board s two Class II Director-nominees, Mr. Barry W. Weiner and Dr. Bernard L. Kasten. The Company has engaged the firm of D.F. King & Co., Inc., as its proxy solicitor, at a fee estimated to be up to $100,000 for the initial solicitation services, plus reimbursement of out-of-pocket expenses. It is estimated that approximately 50 employees of D.F. King & Co., Inc. will solicit Enzo shareholders in connection with the Annual Meeting.

In addition to solicitation of proxies by mail, directors, director-nominees, officers and employees of the Company named in Appendix A (who will receive no additional compensation therefor) may solicit the return of proxies by telephone, telegram or personal contact. Arrangements have also been made with brokerage houses and other custodians, nominees and fiduciaries for the forwarding of solicitation material to the beneficial owners of Common Stock held of record by such persons, and the Company will reimburse those firms for the reasonable out-of-pocket expenses incurred by them in connection therewith in accordance with the rules of the SEC.

Expenses related to the solicitation of proxies for the Annual Meeting on behalf of the Board, which are anticipated to be in excess of those normally spent for an annual meeting, are expected to aggregate approximately $500,000, of which approximately $15,000 has been spent to date.

Additional information about persons who are participants in this proxy solicitation is set forth in Appendix A.

ANNUAL REPORT

The Company s 2010 Annual Report to Shareholders, which includes the Company s Annual Report on Form 10-K for its fiscal year ended July 31, 2010 is being mailed to shareholders together with this Proxy Statement.

The Company will provide, without charge to each person being solicited by this Proxy Statement, upon request, a copy of its 2010 Annual Report to Shareholders, which includes the Company s Annual Report on Form 10-K for its fiscal year ended July 31, 2010. 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, 2010. All such requests should be directed to Elazar Rabbani, Secretary, Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022.

ENZO WEBSITE

In addition to the information about the Company and its subsidiaries contained in this Proxy Statement, additional information about the Company can be found on our website located at www.enzo.com, including information about our management team, products and services and our corporate governance practices.

The corporate governance information on our website includes the Company s Corporate Governance Guidelines, the Code of Conduct and the charters of each of the committees of the Board. These documents can be accessed at www.enzo.com. Printed versions of our Corporate Governance Guidelines, our Code of Conduct and the charters for our Board committees can be obtained, free of charge, by writing to the Company at: 527 Madison Avenue, New York, New York 10022, Attn: President.

This information about Enzo s website and its content, together with other references to the website made in this Proxy Statement, is for information only and the content of the Company s website is not deemed to be incorporated by reference in this Proxy Statement or otherwise filed with the Securities and Exchange Commission.

SHAREHOLDER PROPOSALS

Shareholder Proposals

Proposals of shareholders intended to be included in the Company s Proxy Statement and form of proxy for use in connection with the Company s 2011 Annual Shareholder Meeting must be received by the Company s Secretary at the Company s principal executive offices at 527 Madison Avenue, New York, New York 10022, no later than July 29, 2011 (120 calendar days preceding the one-year anniversary of the date this Proxy Statement was first mailed to our shareholders for the 2010 Annual Shareholder Meeting), and must otherwise satisfy the procedures prescribed by Rule 14a-8 under the Exchange Act. It is suggested that any such proposals be submitted by certified mail, return receipt requested.

Pursuant to Rule 14a-4 under the Exchange Act, shareholder proxies obtained by our Board in connection with our 2011 Annual Shareholder Meeting will confer on the proxies and attorneys-in-fact named therein discretionary authority to vote on any matters presented at the annual meeting which were not included in the Company s Proxy Statement in connection with such annual meeting, unless notice of the matter to be presented at the annual meeting is provided to the Company s Secretary before October 12, 2011 (the 45th day preceding the one-year anniversary of the date this Proxy Statement was first mailed to our shareholders for the 2010 Annual Shareholder Meeting).

Director Nominations

Under our Bylaws, shareholders intending to nominate one or more candidates for election to our Board at our 2011 Annual Shareholder Meeting may do so only if written notice of the intent to make such nomination(s) has been given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Company, at the Company s principal executive offices at 527 Madison Avenue, New York, New York 10022, not less than ninety (90) days nor more than one hundred twenty (120) days prior to the earlier of the date of such annual meeting or January 14, 2012. Such notice must contain all of the information required by our Bylaws, including, without limitation, all information that would be required in connection with such nomination(s) under the Securities and Exchange Commission s proxy rules if such nomination were the subject of a proxy solicitation and the written consent of each nominee for election to our Board named therein to serve if elected. The chairman of the meeting may refuse to acknowledge the nomination of any person not made in compliance with our Bylaws.

If you have any questions or require any assistance with voting your shares, please contact the Company s proxy solicitor:

D.F. King & Co., Inc.
Shareholders May Call Toll-Free: (800) 967-5079
Banks and Brokers May Call Collect: (212) 269-5550

By Order of the Board of Directors

Elazar Rabbani,
Chairman of the Board, Chief Executive Officer and Secretary
Dated: November 16, 2010

Appendix A

SUPPLEMENTAL INFORMATION CONCERNING PERSONS WHO ARE PARTICIPANTS IN THE BOARD S SOLICITATION OF PROXIES

Directors and Nominees

The following table sets forth the name and principal business address of the Company s directors and your Board s Class II Director-nominees who, under SEC rules, are participants in the Board s solicitation of proxies from Enzo s shareholders in connection with the Annual Meeting. The present principal occupation or employment, and the name and principal business of any corporation or other organization in which their employment is carried on, is set forth in the sections entitled Proposal 1: Election of Directors and Directors, Executive Officers and Key Employees of the Proxy Statement.

Name	Address
Elazar Rabbani, Ph.D.	*
Barry W. Weiner	*
Irwin C. Gerson	*
Bernard L. Kasten, M.D.	c/o Cleveland Biolabs, Inc. 73 High Street Buffalo, New York 14203
Stephen B. H. Kent, Ph.D.	c/o University of Chicago 929 E. 57th Street, GCIS W 204 Chicago, Illinois 60637
Gregory M. Bortz	c/o Creo Capital Partners, LLC 17383 Sunset Boulevard, Suite A210 Pacific Palisades, California 90272

* c/o Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022

Officers and Employees

In addition to the Enzo directors and your Board s Class II Director-nominees set forth above, Dr. Kevin Krenitsky and Messrs. Andrew R. Crescenzo, Herbert B. Bass and David C. Goldberg are each participants in the Board s solicitation of proxies in connection with the Annual Meeting. The principal occupations of these individuals are set forth in the sections entitled Compensation of Directors , Compensation of Executive Officers and Directors, Executive Officers and Key Employees of the Proxy Statement. The business address of each such person is c/o Enzo Biochem, Inc., 527 Madison Avenue, New York, New York 10022.

Information Regarding Ownership of the Company s Securities by Participants

None of the persons listed above under Directors and Nominees and Officers and Employees owns any of the Company s securities of record but not beneficially. Information regarding the beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act), as of November 19, 2010 (the Record Date), of shares of Common Stock by Enzo s incumbent directors, your Board s Class II Director-nominees Mr. Barry W. Weiner and Dr. Bernard L. Kasten and Drs. Elazar Rabbani, Kevin Krenitsky and Stephen B. H. Kent and Messrs. Irwin C. Gerson, Gregory M. Bortz and Andrew R. Crescenzo, each of whom is a participant in the Board s solicitation of proxies in connection with the Annual Meeting, is set forth in the section entitled Security Ownership of Certain Beneficial Owners and Management of the Proxy Statement (see page 5 of the Proxy Statement). Information regarding the beneficial ownership, as of the Record Date, of shares of Common Stock by Messrs. Herbert B. Bass and David C. Goldberg, each of whom is a participant in the Board s solicitation of proxies in connection with the Annual Meeting, is set forth in the table below.

Participant	Amount and Nature of Beneficial Ownership (1)	Percent of Class (2)

Herbert B. Bass	204,436(3)	0.51%
David C. Goldberg	101,155(4)	0.25%

(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.

(2) Based upon 38,946,388 shares of Common Stock of the Company outstanding as of the close of business on November 19, 2010. 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 determining the amount and percentage of Common Stock owned by such individual.

(3) Includes (i) 42,562 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof, (ii) 1,000 shares of restricted Common Stock vesting within 60 days from the date hereof, and (iii) 9,632 shares of Common Stock held in the Company s 401(k) plan.

(4) Includes (i) 979 shares of Common Stock indirectly beneficially owned through the UGMA accounts of Mr. Goldberg s children, (ii) 42,562 shares of Common Stock issuable upon the exercise of options which are exercisable within 60 days from the date hereof, (iii) 2,000 shares of restricted Common Stock vesting 60 days from the date hereof and (iv) 7,073 shares of Common Stock held in the Company s 401(k) plan.

Information Regarding Transactions in the Company s Securities by Participants

The following table sets forth purchases and sales during the past two years of securities of the Company by the persons listed above under Directors and Nominees and Officers and Employees who are participants in the Board s solicitation of proxies in connection with the Annual Meeting. Unless otherwise indicated, all transactions were in the public market and none of the purchase price or market value of those shares is represented by funds borrowed or otherwise obtained for the purpose of acquiring or holding such securities. To the extent that any part of the purchase price or market value of any of those shares is represented by funds borrowed or otherwise obtained for the purpose of acquiring or holding such securities, the amount of the indebtedness as of the latest practicable date is set forth below. If those funds were borrowed or obtained otherwise than pursuant to a margin account or bank loan in the regular course of business of a bank, broker or dealer, a description of the transaction and the parties is set forth below.

Name	Date	Purchases (P) / Sales (S) of Securities (No. of Securities)	Type
Directors and Nominees			
Elazar Rabbani, Ph.D.	03/04/2009	57,326 (P)	Grant of Restricted Stock Units
	03/04/2010	32,381 (P)	Grant of Restricted Stock Units
Barry W. Weiner	03/04/2009	45,861 (P)	Grant of Restricted Stock Units
	03/04/2010	25,904 (P)	Grant of Restricted Stock Units
Stephen B. H. Kent, Ph.D.	01/22/2009	28,651 (P)	Grant of Restricted Stock Units
	03/04/2010	17,065 (P)	Grant of Restricted Stock Units
	03/15/2010	5,000 (S)	Sale on Open Market
	06/11/2010	5,000 (S)	Sale on Open Market
	08/05/2010	2,500 (S)	Sale on Open Market
	10/22/2010	8,000 (S)	Sale on Open Market
Irwin C. Gerson	01/22/2009	28,651 (P)	Grant of Restricted Stock Units
	03/04/2010	17,065 (P)	Grant of Restricted Stock Units
Bernard L. Kasten, M.D.	01/22/2009	28,651 (P)	Grant of Restricted Stock Units
	03/04/2010	17,065 (P)	Grant of Restricted Stock Units
Gregory M. Bortz	03/04/2010	17,065 (P)	Grant of Restricted Stock Units
Officers and Employees			
Kevin Krenitsky, M.D.	03/02/2009	5,000 (P)	Grant of Restricted Common Stock
	10/15/2009	6,600 (P)	Purchase on Open Market
	01/24/2010	6,000 (P)	Grant of Restricted Common Stock
Andrew R. Crescenzo, CPA	01/22/2009	9,000 (P)	Grant of Restricted Common Stock
	01/24/2010	12,000 (P)	

			Grant of Restricted Common Stock
Herbert B. Bass	01/22/2009	3,000 (P)	Grant of Restricted Common Stock
	01/24/2010	3,000 (P)	Grant of Restricted Common Stock
David C. Goldberg	01/22/2009	4,000 (P)	Grant of Restricted Common Stock
	01/24/2010	6,000 (P)	Grant of Restricted Common Stock

Miscellaneous Information Concerning Participants

Except as described in this Appendix A or otherwise disclosed in the Proxy Statement, to the best of the Company s knowledge, no person listed above under Directors and Nominees and Officers and Employees or any of his or her associates beneficially owns (within the meaning of Rule 13d-3 under the Exchange Act), directly or indirectly, any shares or other securities of the Company or any of its subsidiaries. Furthermore, except as described in this Appendix A or otherwise disclosed in the Proxy Statement, to the best of the Company s knowledge, no such person or any of his or her affiliates or associates is either a party to any transaction or series of similar transactions since July 31, 2008, or any currently proposed transaction or series of similar transactions, (i) to which the Company or any of its subsidiaries was or is to be a party, (ii) in which the amount involved exceeds $120,000 and (iii) in which such person, affiliate or associate had or will have a direct or indirect material interest.

To the best of the Company s knowledge, except as described in this Appendix A or otherwise disclosed in the Proxy Statement, no person listed above under Directors and Nominees and Officers and Employees or any of his or her associates has entered into any arrangement or understanding with any person with respect to (i) any future employment with the Company or its affiliates or (ii) any future transactions to which the Company or any of its affiliates will or may be a party. Except as described in this Appendix A or otherwise disclosed in the Proxy Statement, to the best of the Company s knowledge, there are no contracts, arrangements or understandings by any of the persons listed under Directors and Nominees and Officers and Employees within the past year with any person with respect to any of the Company s securities, including, but not limited to, joint ventures, loan or option arrangements, puts or calls, guarantees against loss or guarantees of profit, division of losses or profits, or the giving or withholding of proxies. Except as described in this Appendix A or otherwise disclosed in the Proxy Statement, to the best of the Company s knowledge, no persons listed under Directors and Nominees and Officers and Employees has any substantial interest, direct or indirect, by security holdings or otherwise, in any matter to be acted upon at the Annual Meeting (and no other person who is a party to an arrangement or understanding pursuant to which a nominee for election as Class II director is proposed to be elected, has any such interest).

Except as described in this Appendix A or otherwise disclosed in the Proxy Statement, to the best of the Company s knowledge, (a) no occupation carried on by any Director during the past five years was carried on with any corporation or organization that is a parent, subsidiary or other affiliate of the Company, (b) there are no family relationships among any of the Directors and any executive officers of the Company, nor is there any arrangement or understanding between any Director, executive officer and any other person pursuant to which that Director or executive officer was selected as a Director or executive officer of the Company, as the case may be, and (c) there are no material proceedings in which any Director or executive officer of the Company is a party adverse to the Company or any of its subsidiaries, or has a material interest adverse to the Company or any of its subsidiaries.

Appendix B

ENZO BIOCHEM, INC.
2011 INCENTIVE PLAN

ENZO BIOCHEM, INC.
2011 INCENTIVE PLAN

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ENZO BIOCHEM, INC.
2011 INCENTIVE PLAN

1. ***Purpose.*** The purpose of this 2011 INCENTIVE PLAN (the Plan) is to assist **ENZO BIOCHEM, INC.** (the Company) and its Related Entities (as hereinafter defined) in attracting, motivating, retaining and rewarding high-quality executives and other employees, officers, directors, consultants and other persons who provide services to the Company or its Related Entities by enabling such persons to acquire or increase a proprietary interest in the Company in order to strengthen the mutuality of interests between such persons and the Company s shareholders, and providing such persons with annual and long term performance incentives to expend their maximum efforts in the creation of shareholder value.

2. ***Definitions.*** For purposes of the Plan, the following terms shall be defined as set forth below, in addition to such terms defined in Section 1 hereof and elsewhere herein.

(a) ***Award*** means any Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit Award, Share granted as a bonus or in lieu of another Award, Dividend Equivalent, Other Stock-Based Award or Performance Award, together with any other right or interest, granted to a Participant under the Plan.

(b) ***Award Agreement*** means any written agreement, contract or other instrument or document evidencing any Award granted by the Committee hereunder.

(c) ***Beneficiary*** means the person, persons, trust or trusts that have been designated by a Participant in his or her most recent written beneficiary designation filed with the Committee to receive the benefits specified under the Plan upon such Participant s death or to which Awards or other rights are transferred if and to the extent permitted under Section 10(b) hereof. If, upon a Participant s death, there is no designated Beneficiary or surviving designated Beneficiary, then the term Beneficiary means the person, persons, trust or trusts entitled by will or the laws of descent and distribution to receive such benefits.

(d) ***Beneficial Owner and Beneficial Ownership*** shall have the meaning ascribed to such term in Rule 13d-3 under the Exchange Act and any successor to such Rule.

(e) ***Board*** means the Company s Board of Directors.

(f) ***Change in Control*** means a Change in Control as defined in Section 9(b) of the Plan.

(g) ***Code*** means the Internal Revenue Code of 1986, as amended from time to time, including regulations thereunder and successor provisions and regulations thereto.

(h) ***Committee*** means a committee designated by the Board to administer the Plan; provided, however, that if the Board fails to designate a committee or if there are no longer any members on the committee so designated by the Board, or for any other reason determined by the Board, then the Board shall serve as the Committee.

(i) ***Consultant*** means any Person (other than an Employee or a Director, solely with respect to rendering services in such Person s capacity as a director) who is engaged by the Company or any Related Entity to render consulting or advisory services to the Company or such Related Entity on a full-time basis.

(j) ***Continuous Service*** means the uninterrupted provision of services to the Company or any Related Entity in any capacity of Employee, Director, Consultant or other service provider. Continuous Service shall not be considered to be interrupted in the case of (i) any approved leave of absence, (ii) transfers among the Company, any Related Entities, or any successor entities, in any capacity of Employee, Director, Consultant or other service provider, or (iii) any change in status as long as the individual remains in the service of the Company or a Related Entity in any capacity of Employee, Director, Consultant or other service provider (except as otherwise provided in the Award Agreement). An approved leave of absence shall include sick leave, military leave, or any other authorized personal leave.

(k) ***Covered Employee*** means the Person who, as of the end of the taxable year, either is the principal executive officer of the Company or is serving as the acting principal executive officer of the Company, and each other Person whose compensation is required to be disclosed in the Company s filings with the Securities and Exchange Commission by reason of that person being among the three highest compensated officers of the Company as of the end of a taxable year, or such other person as shall be considered a covered employee for purposes of Section 162(m) of the Code.

(l) ***Director*** means a member of the Board.

(m) ***Disability*** means a permanent and total disability (within the meaning of Section 22(e) of the Code), as determined by a medical doctor satisfactory to the Committee.

(n) ***Dividend Equivalent*** means a right, granted to a Participant under Section 6(g) hereof, to receive cash, Shares, other Awards or other property equal in value to dividends paid with respect to a specified number of Shares, or other periodic payments.

(o) ***Effective Date*** means the effective date of the Plan, which shall be November 2, 2010.

(p) ***Eligible Person*** means each officer, Director, Employee, Consultant and other person who provides services to the Company or any Related Entity. The foregoing notwithstanding, only Employees of the Company, or any parent corporation or subsidiary corporation of the Company (as those terms are defined in Sections 424(e) and (f) of the Code, respectively), shall be Eligible Persons for purposes of receiving any Incentive Stock Options. An Employee on leave of absence may, in the discretion of the Committee, be considered as still in the employ of the Company or a Related Entity for purposes of eligibility for participation in the Plan.

(q) ***Employee*** means any person, including an officer or Director, who is a full-time employee of the Company or any Related Entity. The payment of a director s fee by the Company or a Related Entity shall not be sufficient to constitute employment by the Company.

(r) ***Exchange Act*** means the Securities Exchange Act of 1934, as amended from time to time, including rules thereunder and successor provisions and rules thereto.

(s) ***Fair Market Value*** means the fair market value of Shares, Awards or other property as determined by the Committee, or under procedures established by the Committee. Unless otherwise determined by the Committee, the Fair Market Value of a Share as of any given date shall be the closing sale price per Share reported on a consolidated basis for stock listed on the principal stock exchange or market on which Shares are traded on the date as of which such value is being determined (or as of such later measurement date as determined by the Committee on the date the Award is authorized by the Committee), or, if there is no sale on that date, then on the last previous day on which a sale was reported.

(t) ***Incentive Stock Option*** means any Option intended to be designated as an incentive stock option within the meaning of Section 422 of the Code or any successor provision thereto.

(u) ***Independent ,*** when referring to either the Board or members of the Committee, shall have the same meaning as used in the rules of the Listing Market.

(v) ***Incumbent Board*** means the Incumbent Board as defined in Section 9(b)(ii) hereof.

(w) ***Listing Market*** means any national securities exchange on which any securities of the Company are listed for trading, and if not listed for trading, by the rules of the Nasdaq Market.

(x) ***Option*** means a right granted to a Participant under Section 6(b) hereof, to purchase Shares or other Awards at a specified price during specified time periods.

(y) ***Optionee*** means a person to whom an Option is granted under this Plan or any person who succeeds to the rights of such person under this Plan.

(z) ***Other Stock-Based Awards*** means Awards granted to a Participant under Section 6(i) hereof.

(aa) ***Participant*** means a person who has been granted an Award under the Plan which remains outstanding, including a person who is no longer an Eligible Person.

(bb) ***Performance Award*** means any Award of Performance Shares or Performance Units granted pursuant to Section 6(h) hereof.

(cc) ***Performance Period*** means that period established by the Committee at the time any Performance Award is granted or at any time thereafter during which any performance goals specified by the Committee with respect to such Award are to be measured.

(dd) ***Performance Share*** means any grant pursuant to Section 6(h) hereof of a unit valued by reference to a designated number of Shares, which value may be paid to the Participant by delivery of such property as the Committee shall determine, including cash, Shares, other property, or any combination thereof, upon achievement of such performance goals during the Performance Period as the Committee shall establish at the time of such grant or thereafter.

(ee) ***Performance Unit*** means any grant pursuant to Section 6(h) hereof of a unit valued by reference to a designated amount of property (including cash) other than Shares, which value may be paid to the Participant by delivery of such property as the Committee shall determine, including cash, Shares, other property, or any combination thereof, upon achievement of such performance goals during the Performance Period as the Committee shall establish at the time of such grant or thereafter.

(ff) ***Person*** shall have the meaning ascribed to such term in Section 3(a)(9) of the Exchange Act and used in Sections 13(d) and 14(d) thereof, and shall include a group as defined in Section 13(d) thereof.

(gg) ***Prior Plan*** means the Enzo Biochem, Inc. 2005 Equity Compensation Incentive Plan.

(hh) ***Related Entity*** means any Subsidiary, and any business, corporation, partnership, limited liability company or other entity designated by the Board, in which the Company or a Subsidiary holds a substantial ownership interest, directly or indirectly.

(ii) ***Restriction Period*** means the period of time specified by the Committee that Restricted Stock Awards shall be subject to such restrictions on transferability, risk of forfeiture and other restrictions, if any, as the Committee may impose.

(jj) ***Restricted Stock*** means any Share issued with the restriction that the holder may not sell, transfer, pledge or assign such Share and with such risks of forfeiture and other restrictions as the Committee, in its sole discretion, may impose (including any restriction on the right to vote such Share and the right to receive any dividends), which restrictions may lapse separately or in combination at such time or times, in installments or otherwise, as the Committee may deem appropriate.

(kk) ***Restricted Stock Award*** means an Award granted to a Participant under Section 6(d) hereof.

(ll) ***Restricted Stock Units*** means a right to receive Shares, including Restricted Stock, cash measured based upon the value of Shares or a combination thereof, at the end of a specified deferral period.

(mm) ***Restricted Stock Unit Award*** means an Award of Restricted Stock Units granted to a Participant under Section 6(e) hereof.

(nn) ***Rule 16b-3*** means Rule 16b-3, as from time to time in effect and applicable to the Plan and Participants, promulgated by the Securities and Exchange Commission under Section 16 of the Exchange Act.

(oo) ***Shareholder Approval Date*** means the date on which this Plan is approved by the shareholders of the Company eligible to vote in the election of directors, by a vote sufficient to meet the requirements of Sections 162(m) (if applicable) and 422 of the Code, Rule 16b-3 under the Exchange Act (if applicable), applicable requirements under the rules of any stock exchange or automated quotation system on which the Shares may be listed on quoted, and other laws, regulations and obligations of the Company applicable to the Plan.

(pp) ***Shares*** means the shares of common stock of the Company, par value $0.01 per share, and such other securities as may be substituted (or resubstituted) for Shares pursuant to Section 10(c) hereof.

(qq) ***Stock Appreciation Right*** means a right granted to a Participant under Section 6(c) hereof.

(rr) ***Subsidiary*** means any corporation or other entity in which the Company has a direct or indirect ownership interest of 50% or more of the total combined voting power of the then outstanding securities or interests of such corporation or other entity entitled to vote generally in the election of directors or in which the Company has the right to receive 50% or more of the distribution of profits or 50% or more of the assets on liquidation or dissolution.

(ss) ***Substitute Awards*** means Awards granted or Shares issued by the Company in assumption of, or in substitution or exchange for, Awards previously granted, or the right or obligation to make future Awards, by a company (i) acquired by the Company or any Related Entity, (ii) which becomes a Related Entity after the date hereof, or (iii) with which the Company or any Related Entity combines.

3. ***Administration.***

(a) ***Authority of the Committee.*** The Plan shall be administered by the Committee, except to the extent (and subject to the limitations imposed by Section 3(b) hereof) the Board elects to administer the Plan, in which case the Plan shall be administered by only those members of the Board who are Independent members of the Board, in which case references herein to the Committee shall be deemed to include references to the Independent members of the Board. The Committee shall have full and final authority, subject to and consistent with the provisions of the Plan, to select Eligible Persons to become Participants, grant Awards, determine the type, number and other terms and conditions of, and all other matters relating to, Awards, prescribe Award Agreements (which need not be identical for each Participant) and rules and regulations for the administration of the Plan, construe and interpret the Plan and Award Agreements and correct defects, supply omissions or reconcile inconsistencies therein, and to make all other decisions and determinations as the Committee may deem necessary or advisable for the administration of the Plan. In exercising any discretion granted to the Committee under the Plan or pursuant to any Award, the Committee shall not be required to follow past practices, act in a manner consistent with past practices, or treat any Eligible Person or Participant in a manner consistent with the treatment of any other Eligible Persons or Participants.

(b) ***Manner of Exercise of Committee Authority***. The Committee, and not the Board, shall exercise sole and exclusive discretion (i) on any matter relating to a Participant then subject to Section 16 of the Exchange Act with respect to the Company to the extent necessary in order that transactions by such Participant shall be exempt under Rule 16b-3 under the Exchange Act, (ii) with respect to any Award that is intended to qualify as performance-based compensation under Section 162(m), to the extent necessary in order for such Award to so qualify; and (iii) with respect to any Award to an Independent Director. Any action of the Committee shall be final, conclusive and binding on all persons, including the Company, its Related Entities, Eligible Persons, Participants, Beneficiaries, transferees under Section 10(b) hereof or other persons claiming rights from or through a Participant, and shareholders. The express grant of any specific power to the Committee, and the taking of any action by the Committee, shall not be construed as limiting any power or authority of the Committee. The Committee may delegate to officers or managers of the Company or any Related Entity, or committees thereof, the authority, subject to such terms and limitations as the Committee shall determine, to perform such functions, including administrative functions as the Committee may determine to the extent that such delegation will not result in the loss of an exemption under Rule 16b-3(d)(1) for Awards granted to Participants subject to Section 16 of the Exchange Act in respect of the Company and will not cause Awards intended to qualify as performance-based compensation under Code Section 162(m) to fail to so qualify. The Committee may appoint agents to assist it in administering the Plan.

(c) ***Limitation of Liability***. The Committee and the Board, and each member thereof, shall be entitled to, in good faith, rely or act upon any report or other information furnished to him or her by any officer or Employee, the Company s independent auditors, Consultants or any other agents assisting in the administration of the Plan. Members of the Committee and the Board, and any officer or Employee acting at the direction or on behalf of the Committee or the Board, shall not be personally liable for any action or determination taken or made in good faith with respect to the Plan, and shall, to the extent permitted by law, be fully indemnified and protected by the Company with respect to any such action or determination.

4. ***Shares Subject to Plan.***

(a) ***Limitation on Overall Number of Shares Available for Delivery Under Plan***. Subject to adjustment as provided in Section 10(c) hereof, the total number of Shares reserved and available for delivery under the Plan shall be Three Million (3,000,000). Any Shares that are subject to Awards shall be counted against this limit as one (1) Share for every one (1) Share granted. Any Shares delivered under the Plan may consist, in whole or in part, of authorized and unissued shares or treasury shares.

(b) ***Application of Limitation to Grants of Awards***. No Award may be granted if the number of Shares to be delivered in connection with such an Award exceeds the number of Shares remaining available for delivery under the Plan, minus the number of Shares deliverable in settlement of or relating to then outstanding Awards. The Committee may adopt reasonable counting procedures to ensure appropriate counting, avoid double counting (as, for example, in the case of tandem or substitute awards) and make adjustments if the number of Shares actually delivered differs from the number of Shares previously counted in connection with an Award.

(c) ***Availability of Shares Not Delivered under Awards and Adjustments to Limits.***

(i) If any Awards are forfeited, expire or otherwise terminate without issuance of such Shares, or any Award is settled for cash or otherwise does not result in the issuance of all or a portion of the Shares subject to such Award, the Shares to which those Awards were subject, shall, to the extent of such forfeiture, expiration, termination, cash settlement or non-issuance, again be available for delivery with respect to Awards under the Plan.

(ii) In the event that any Option or other Award granted hereunder is exercised through the tendering of Shares (either actually or by attestation) or by the withholding of Shares by the Company, or withholding tax liabilities arising from such option or other award are satisfied by the tendering of Shares (either actually or by attestation) or by the withholding of Shares by the Company, then only the number of Shares issued net of the Shares tendered or withheld shall be counted for purposes of determining the maximum number of Shares available for grant under the Plan.

(iii) Substitute Awards shall not reduce the Shares authorized for delivery under the Plan or authorized for delivery to a Participant in any period. Additionally, in the event that a company acquired by the Company or any Related Entity or with which the Company or any Related Entity combines has shares available under a pre-existing plan approved by its shareholders, the shares available for delivery pursuant to the terms of such pre-existing plan (as adjusted, to the extent appropriate, using the exchange ratio or other adjustment or valuation ratio or formula used in such acquisition or combination to determine the consideration payable to the holders of common stock of the entities party to such acquisition or combination) may be used for Awards under the Plan and shall not reduce the Shares authorized for delivery under the Plan; if and to the extent that the use of such Shares would not require approval of the Company s shareholders under the rules of the Listing Market.

(iv) Any Share that again becomes available for delivery pursuant to this Section 4(c) shall be added back as one (1) Share.

(v) Notwithstanding anything in this Section 4(c) to the contrary but subject to adjustment as provided in Section 10(c) hereof, the maximum aggregate number of Shares that may be delivered under the Plan as a result of the exercise of the Incentive Stock Options shall be Three Million (3,000,000) Shares.

(d) ***No Further Awards Under Prior Plan***. In light of the adoption of this Plan, no further awards shall be made under the Prior Plan after the Shareholder Approval Date.

5. ***Eligibility; Per-Person Award Limitations***. Awards may be granted under the Plan only to Eligible Persons. Subject to adjustment as provided in Section 10(c), in any fiscal year of the Company during any part of which the Plan is in effect, no Participant may be granted (i) Options or Stock Appreciation Rights with respect to more than Five Hundred Thousand (500,000) Shares or (ii) Restricted Stock, Restricted Stock Units, Performance Shares and/or Other Stock-Based Awards with respect to more than Five Hundred Thousand (500,000) Shares. In addition, the maximum dollar value payable to any one Participant with respect to Performance Units is (x) Two Million Five Hundred Thousand Dollars ($2,500,000) with respect to any 12 month Performance Period (pro-rated for any Performance Period that is less than 12 months based upon the ratio of the number of days in the Performance Period as compared to 365), and (y) with respect to any Performance Period that is more than 12 months, Two Million Dollars ($2,000,000) multiplied by the number of full 12 month periods that are in the Performance Period.

6. ***Specific Terms of Awards***.

(a) ***General***. Awards may be granted on the terms and conditions set forth in this Section 6. In addition, the Committee may impose on any Award or the exercise thereof, at the date of grant or thereafter (subject to Section 10(e)), such additional terms and conditions, not inconsistent with the provisions of the Plan, as the Committee shall determine, including terms requiring forfeiture of Awards in the event of termination of the Participant s Continuous Service and terms permitting a Participant to make elections relating to his or her Award. Except as otherwise expressly provided herein, the Committee shall retain full power and discretion to accelerate, waive or modify, at any time, any term or condition of an Award that is not mandatory under the Plan. Except in cases in which the Committee is authorized to require other forms of consideration under the Plan, or to the extent other forms of consideration must be paid to satisfy the requirements of New York law, no consideration other than services may be required for the grant (as opposed to the exercise) of any Award.

(b) ***Options***. The Committee is authorized to grant Options to any Eligible Person on the following terms and conditions:

(i) ***Exercise Price***. Other than in connection with Substitute Awards, the exercise price per Share purchasable under an Option shall be determined by the Committee, provided that such exercise price shall not be less than 100% of the Fair Market Value of a Share on the date of grant of the Option and shall not, in any event, be less than the par value of a Share on the date of grant of the Option. If an Employee owns or is deemed to own (by reason of the attribution rules applicable under Section 424(d) of the Code) more than 10% of the combined voting power of all classes of stock of the Company (or any parent corporation or subsidiary corporation of the Company, as those terms are defined in Sections 424(e) and (f) of the Code, respectively) and an Incentive Stock Option is granted to such Employee, the exercise price of such Incentive Stock Option (to the extent required by the Code at the time of grant) shall be no less than 110% of the Fair Market Value of a Share on the date such Incentive Stock Option is granted. Other than pursuant to Section 10(c)(i) and (ii), the Committee shall not be permitted to (A)

lower the exercise price per Share of an Option after it is granted, (B) cancel an Option when the exercise price per Share exceeds the Fair Market Value of the underlying Shares in exchange for another Award (other than in connection with Substitute Awards), or (C) take any other action with respect to an Option that may be treated as a repricing pursuant to the applicable rules of the Listing Market, without approval of the Company s shareholders.

(ii) ***Time and Method of Exercise***. The Committee shall determine the time or times at which or the circumstances under which an Option may be exercised in whole or in part (including based on achievement of performance goals and/or future service requirements), the time or times at which Options shall cease to be or become exercisable following termination of Continuous Service or upon other conditions, the methods by which the exercise price may be paid or deemed to be paid (including in the discretion of the Committee a cashless exercise procedure), the form of such payment, including, without limitation, cash, Shares (including without limitation the withholding of Shares otherwise deliverable pursuant to the Award), other Awards or awards granted under other plans of the Company or a Related Entity, or other property (including notes or other contractual obligations of Participants to make payment on a deferred basis provided that such deferred payments are not in violation of Section 13(k) of the Exchange Act, or any rule or regulation adopted thereunder or any other applicable law), and the methods by or forms in which Shares will be delivered or deemed to be delivered to Participants.

(iii) ***Incentive Stock Options***. The terms of any Incentive Stock Option granted under the Plan shall comply in all respects with the provisions of Section 422 of the Code. Anything in the Plan to the contrary notwithstanding, no term of the Plan relating to Incentive Stock Options (including any Stock Appreciation Right issued in tandem therewith) shall be interpreted, amended or altered, nor shall any discretion or authority granted under the Plan be exercised, so as to disqualify either the Plan or any Incentive Stock Option under Section 422 of the Code, unless the Participant has first requested, or consents to, the change that will result in such disqualification. Thus, if and to the extent required to comply with Section 422 of the Code, Options granted as Incentive Stock Options shall be subject to the following special terms and conditions:

(A) the Option shall not be exercisable for more than ten years after the date such Incentive Stock Option is granted; provided, however, that if a Participant owns or is deemed to own (by reason of the attribution rules of Section 424(d) of the Code) more than 10% of the combined voting power of all classes of stock of the Company (or any parent corporation or subsidiary corporation of the Company, as those terms are defined in Sections 424(e) and (f) of the Code, respectively) and the Incentive Stock Option is granted to such Participant, the term of the Incentive Stock Option shall be (to the extent required by the Code at the time of the grant) for no more than five years from the date of grant; and

(B) The aggregate Fair Market Value (determined as of the date the Incentive Stock Option is granted) of the Shares with respect to which Incentive Stock Options granted under the Plan and all other option plans of the Company (and any parent corporation or subsidiary corporation of the Company, as those terms are defined in Sections 424(e) and (f) of the Code, respectively) that become exercisable for the first time by the Participant during any calendar year shall not (to the extent required by the Code at the time of the grant) exceed $100,000.

(c) ***Stock Appreciation Rights***. The Committee may grant Stock Appreciation Rights to any Eligible Person in conjunction with all or part of any Option granted under the Plan or at any subsequent time during the term of such Option (a Tandem Stock Appreciation Right), or without regard to any Option (a Freestanding Stock Appreciation Right), in each case upon such terms and conditions as the Committee may establish in its sole discretion, not inconsistent with the provisions of the Plan, including the following:

(i) ***Right to Payment***. A Stock Appreciation Right shall confer on the Participant to whom it is granted a right to receive, upon exercise thereof, the excess of (A) the Fair Market Value of one Share on the date of exercise over (B) the grant price of the Stock Appreciation Right as determined by the Committee. The grant price of a Stock Appreciation Right shall not be less than 100% of the Fair Market Value of a Share on the date of grant, in the case of a Freestanding Stock Appreciation Right, or less than the associated Option exercise price, in the case of a Tandem Stock Appreciation Right. Other than pursuant to Section 10(c)(i) and (ii), the Committee shall not be permitted to (A) lower the grant price per Share of a Stock Appreciation Right after it is granted, (B) cancel a Stock Appreciation Right when the grant price per Share exceeds the Fair Market Value of the underlying Shares in exchange for another Award (other than in connection with Substitute Awards), or (C) take any other action with respect to a Stock Appreciation Right that may be treated as a repricing pursuant to the applicable rules of the Listing Market, without shareholder approval.

(ii) ***Other Terms***. The Committee shall determine at the date of grant or thereafter, the time or times at which and the circumstances under which a Stock Appreciation Right may be exercised in whole or in part (including based on achievement of performance goals and/or future service requirements), the time or times at which Stock Appreciation Rights shall cease to be or become exercisable following termination of Continuous Service or upon other conditions, the method of exercise, method of settlement, form of consideration payable in settlement, method by or forms in which Shares will be

delivered or deemed to be delivered to Participants, whether or not a Stock Appreciation Right shall be in tandem or in combination with any other Award, and any other terms and conditions of any Stock Appreciation Right.

(iii) ***Tandem Stock Appreciation Rights***. Any Tandem Stock Appreciation Right may be granted at the same time as the related Option is granted or, for Options that are not Incentive Stock Options, at any time thereafter before exercise or expiration of such Option. Any Tandem Stock Appreciation Right related to an Option may be exercised only when the related Option would be exercisable and the Fair Market Value of the Shares subject to the related Option exceeds the exercise price at which Shares can be acquired pursuant to the Option. In addition, if a Tandem Stock Appreciation Right exists with respect to less than the full number of Shares covered by a related Option, then an exercise or termination of such Option shall not reduce the number of Shares to which the Tandem Stock Appreciation Right applies until the number of Shares then exercisable under such Option equals the number of Shares to which the Tandem Stock Appreciation Right applies. Any Option related to a Tandem Stock Appreciation Right shall no longer be exercisable to the extent the Tandem Stock Appreciation Right has been exercised, and any Tandem Stock Appreciation Right shall no longer be exercisable to the extent the related Option has been exercised.

(d) ***Restricted Stock Awards***. The Committee is authorized to grant Restricted Stock Awards to any Eligible Person on the following terms and conditions:

(i) ***Grant and Restrictions***. Restricted Stock Awards shall be subject to such restrictions on transferability, risk of forfeiture and other restrictions, if any, as the Committee may impose, or as otherwise provided in this Plan during the Restriction Period. The terms of any Restricted Stock Award granted under the Plan shall be set forth in a written Award Agreement which shall contain provisions determined by the Committee and not inconsistent with the Plan. The restrictions may lapse separately or in combination at such times, under such circumstances (including based on achievement of performance goals and/or future service requirements), in such installments or otherwise, as the Committee may determine at the date of grant or thereafter. Except to the extent restricted under the terms of the Plan and any Award Agreement relating to a Restricted Stock Award, a Participant granted Restricted Stock shall have all of the rights of a shareholder, including the right to vote the Restricted Stock and the right to receive dividends thereon (subject to any mandatory reinvestment or other requirement imposed by the Committee). During the period that the Restriction Stock Award is subject to a risk of forfeiture, subject to Section 10(b) below and except as otherwise provided in the Award Agreement, the Restricted Stock may not be sold, transferred, pledged, hypothecated, margined or otherwise encumbered by the Participant.

(ii) ***Forfeiture***. Except as otherwise determined by the Committee, upon termination of a Participant s Continuous Service during the applicable Restriction Period, the Participant s Restricted Stock that is at that time subject to a risk of forfeiture that has not lapsed or otherwise been satisfied shall be forfeited and reacquired by the Company; provided that the Committee may provide, by rule or regulation or in any Award Agreement, or may determine in any individual case, that forfeiture conditions relating to Restricted Stock Awards shall be waived in whole or in part in the event of terminations resulting from specified causes, and the Committee may in other cases waive in whole or in part the forfeiture of Restricted Stock.

(iii) ***Certificates for Stock***. Restricted Stock granted under the Plan may be evidenced in such manner as the Committee shall determine. If certificates representing Restricted Stock are registered in the name of the Participant, the Committee may require that such certificates bear an appropriate legend referring to the terms, conditions and restrictions applicable to such Restricted Stock, that the Company retain physical possession of the certificates, and that the Participant deliver a stock power to the Company, endorsed in blank, relating to the Restricted Stock.

(iv) ***Dividends and Splits***. As a condition to the grant of a Restricted Stock Award, the Committee may require or permit a Participant to elect that any cash dividends paid on a Share of Restricted Stock be automatically reinvested in additional Shares of Restricted Stock or applied to the purchase of additional Awards under the Plan. Unless otherwise determined by the Committee, Shares distributed in connection with a stock split or stock dividend, and other property distributed as a dividend, shall be subject to restrictions and a risk of forfeiture to the same extent as the Restricted Stock with respect to which such Shares or other property have been distributed.

(e) ***Restricted Stock Unit Award***. The Committee is authorized to grant Restricted Stock Unit Awards to any Eligible Person on the following terms and conditions:

(i) ***Award and Restrictions***. Satisfaction of a Restricted Stock Unit Award shall occur upon expiration of the deferral period specified for such Restricted Stock Unit Award by the Committee (or, if permitted by the Committee, as elected by the Participant). In addition, a Restricted Stock Unit Award shall be subject to such restrictions (which may include a risk of forfeiture) as the Committee may impose, if any, which restrictions may lapse at the expiration of the deferral period or at earlier specified times (including based on achievement of performance goals and/or future service requirements),

separately or in combination, in installments or otherwise, as the Committee may determine. A Restricted Stock Unit Award may be satisfied by delivery of Shares, cash equal to the Fair Market Value of the specified number of Shares covered by the Restricted Stock Units, or a combination thereof, as determined by the Committee at the date of grant or thereafter. Prior to satisfaction of a Restricted Stock Unit Award, a Restricted Stock Unit Award carries no voting or dividend or other rights associated with Share ownership.

(ii) ***Forfeiture***. Except as otherwise determined by the Committee, upon termination of a Participant s Continuous Service during the applicable deferral period or portion thereof to which forfeiture conditions apply (as provided in the Award Agreement evidencing the Restricted Stock Unit Award), the Participant s Restricted Stock Unit Award that is at that time subject to a risk of forfeiture that has not lapsed or otherwise been satisfied shall be forfeited; provided that the Committee may provide, by rule or regulation or in any Award Agreement, or may determine in any individual case, that forfeiture conditions relating to a Restricted Stock Unit Award shall be waived in whole or in part in the event of terminations resulting from specified causes, and the Committee may in other cases waive in whole or in part the forfeiture of any Restricted Stock Unit Award.

(iii) ***Dividend Equivalents***. Unless otherwise determined by the Committee at the date of grant, any Dividend Equivalents that are granted with respect to any Restricted Stock Unit Award shall be either (A) paid with respect to such Restricted Stock Unit Award at the dividend payment date in cash or in Shares of unrestricted stock having a Fair Market Value equal to the amount of such dividends, or (B) deferred with respect to such Restricted Stock Unit Award and the amount or value thereof automatically deemed reinvested in additional Restricted Stock Units, other Awards or other investment vehicles, as the Committee shall determine or permit the Participant to elect. The applicable Award Agreement shall specify whether any Dividend Equivalents shall be paid at the dividend payment date, deferred or deferred at the election of the Participant. If the Participant may elect to defer the Dividend Equivalents, such election shall be made within 30 days after the grant date of the Restricted Stock Unit Award, but in no event later than 12 months before the first date on which any portion of such Restricted Stock Unit Award vests (or at such other times prescribed by the Committee as shall not result in a violation of Section 409A of the Code).

(f) ***Bonus Stock and Awards in Lieu of Obligations***. The Committee is authorized to grant Shares to any Eligible Persons as a bonus, or to grant Shares or other Awards in lieu of obligations to pay cash or deliver other property under the Plan or under other plans or compensatory arrangements, provided that, in the case of Eligible Persons subject to Section 16 of the Exchange Act, the amount of such grants remains within the discretion of the Committee to the extent necessary to ensure that acquisitions of Shares or other Awards are exempt from liability under Section 16(b) of the Exchange Act. Shares or Awards granted hereunder shall be subject to such other terms as shall be determined by the Committee.

(g) ***Dividend Equivalents***. The Committee is authorized to grant Dividend Equivalents to any Eligible Person entitling the Eligible Person to receive cash, Shares, other Awards, or other property equal in value to the regular dividends paid with respect to a specified number of Shares, or other periodic payments. Dividend Equivalents may be awarded on a free-standing basis or in connection with another Award. The Committee may provide that Dividend Equivalents shall be paid or distributed when accrued or shall be deemed to have been reinvested in additional Shares, Awards, or other investment vehicles, and subject to such restrictions on transferability and risks of forfeiture, as the Committee may specify. Any such determination by the Committee shall be made at the grant date of the applicable Award.

(h) ***Performance Awards***. The Committee is authorized to grant Performance Awards to any Eligible Person payable in cash, Shares, or other Awards, on terms and conditions established by the Committee, subject to the provisions of Section 8 if and to the extent that the Committee shall, in its sole discretion, determine that an Award shall be subject to those provisions. The performance criteria to be achieved during any Performance Period and the length of the Performance Period shall be determined by the Committee upon the grant of each Performance Award. Except as provided in Section 9 or as may be provided in an Award Agreement, Performance Awards will be distributed only after the end of the relevant Performance Period. The performance goals to be achieved for each Performance Period shall be conclusively determined by the Committee and may be based upon the criteria set forth in Section 8(b), or in the case of an Award that the Committee determines shall not be subject to Section 8 hereof, any other criteria that the Committee, in its sole discretion, shall determine should be used for that purpose. The amount of the Award to be distributed shall be conclusively determined by the Committee. Performance Awards may be paid in a lump sum or in installments following the close of the Performance Period or, in accordance with procedures established by the Committee, on a deferred basis in a manner that does not violation the requirements of Section 409A of the Code.

(i) ***Other Stock-Based Awards***. The Committee is authorized, subject to limitations under applicable law, to grant to any Eligible Person such other Awards that may be denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, Shares, as deemed by the Committee to be consistent with the purposes of the Plan. Other Stock-Based Awards may be granted to Participants either alone or in addition to other Awards granted under the Plan, and such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan. The

Committee shall determine the terms and conditions of such Awards. Shares delivered pursuant to an Award in the nature of a purchase right granted under this Section 6(i) shall be purchased for such consideration, (including without limitation loans from the Company or a Related Entity provided that such loans are not in violation of Section 13(k) of the Exchange Act, or any rule or regulation adopted thereunder or any other applicable law) paid for at such times, by such methods, and in such forms, including, without limitation, cash, Shares, other Awards or other property, as the Committee shall determine.

7. ***Certain Provisions Applicable to Awards***.

(a) ***Stand-Alone, Additional, Tandem, and Substitute Awards***. Awards granted under the Plan may, in the discretion of the Committee, be granted either alone or in addition to, in tandem with, or in substitution or exchange for, any other Award or any award granted under another plan of the Company, any Related Entity, or any business entity to be acquired by the Company or a Related Entity, or any other right of a Participant to receive payment from the Company or any Related Entity. Such additional, tandem, and substitute or exchange Awards may be granted at any time. If an Award is granted in substitution or exchange for another Award or award, the Committee shall require the surrender of such other Award or award in consideration for the grant of the new Award. In addition, Awards may be granted in lieu of cash compensation, including in lieu of cash amounts payable under other plans of the Company or any Related Entity, in which the value of Shares subject to the Award is equivalent in value to the cash compensation (for example, Restricted Stock or Restricted Stock Units), or in which the exercise price, grant price or purchase price of the Award in the nature of a right that may be exercised is equal to the Fair Market Value of the underlying Shares minus the value of the cash compensation surrendered (for example, Options or Stock Appreciation Right granted with an exercise price or grant price discounted by the amount of the cash compensation surrendered), provided that any such determination to grant an Award in lieu of cash compensation must be made in compliance with Section 409A of the Code.

(b) ***Term of Awards***. The term of each Award shall be for such period as may be determined by the Committee; provided that in no event shall the term of any Option or Stock Appreciation Right exceed a period of ten years (or in the case of an Incentive Stock Option such shorter term as may be required under Section 422 of the Code).

(c) ***Form and Timing of Payment Under Awards; Deferrals***. Subject to the terms of the Plan and any applicable Award Agreement, payments to be made by the Company or a Related Entity upon the exercise of an Option or other Award or settlement of an Award may be made in such forms as the Committee shall determine, including, without limitation, cash, Shares, other Awards or other property, and may be made in a single payment or transfer, in installments, or on a deferred basis, provided that any determination to pay in installments or on a deferred basis shall be made by the Committee at the date of grant. Any installment or deferral provided for in the preceding sentence shall, however, be subject to the Company s compliance with applicable law and all applicable rules of the Listing Market, and in a manner intended to be exempt from or otherwise satisfy the requirements of Section 409A of the Code. Subject to Section 7(e) hereof, the settlement of any Award may be accelerated, and cash paid in lieu of Shares in connection with such settlement, in the sole discretion of the Committee or upon occurrence of one or more specified events (in addition to a Change in Control). Any such settlement shall be at a value determined by the Committee in its sole discretion, which, without limitation, may in the case of an Option or Stock Appreciation Right be limited to the amount if any by which the Fair Market Value of a Share on the settlement date exceeds the exercise or grant price. Installment or deferred payments may be required by the Committee (subject to Section 7(e) of the Plan, including the consent provisions thereof in the case of any deferral of an outstanding Award not provided for in the original Award Agreement) or permitted at the election of the Participant on terms and conditions established by the Committee. The Committee may, without limitation, make provision for the payment or crediting of a reasonable interest rate on installment or deferred payments or the grant or crediting of Dividend Equivalents or other amounts in respect of installment or deferred payments denominated in Shares.

(d) ***Exemptions from Section 16(b) Liability.*** It is the intent of the Company that the grant of any Awards to or other transaction by a Participant who is subject to Section 16 of the Exchange Act shall be exempt from Section 16 pursuant to an applicable exemption (except for transactions acknowledged in writing to be non-exempt by such Participant). Accordingly, if any provision of this Plan or any Award Agreement does not comply with the requirements of Rule 16b-3 then applicable to any such transaction, such provision shall be construed or deemed amended to the extent necessary to conform to the applicable requirements of Rule 16b-3 so that such Participant shall avoid liability under Section 16(b).

(e) ***Code Section 409A***.

(i) The Award Agreement for any Award that the Committee reasonably determines to constitute a Section 409A Plan, as defined in Section 7(e)(ii) hereof, and the provisions of the Plan applicable to that Award, shall be construed in a manner consistent with the applicable requirements of Section 409A, and the Committee, in its sole discretion and without the consent of any Participant, may amend any Award Agreement (and the provisions of the Plan applicable thereto) if and to the extent that the Committee determines that such amendment is necessary or appropriate to comply with the requirements of Section 409A of the Code.

(ii) If any Award constitutes a nonqualified deferred compensation plan under Section 409A of the Code (a Section 409A Plan), then the Award shall be subject to the following additional requirements, if and to the extent required to comply with Section 409A of the Code:

(A) Payments under the Section 409A Plan may not be made earlier than the first to occur of (u) the Participant s separation from service , (v) the date the Participant becomes disabled , (w) the Participant s death, (x) a specified time (or pursuant to a fixed schedule) specified in the Award Agreement at the date of the deferral of such compensation, (y) a change in the ownership or effective control of the corporation, or in the ownership of a substantial portion of the assets of the Company, or (z) the occurrence of an unforeseeable emergency ;

(B) The time or schedule for any payment of the deferred compensation may not be accelerated, except to the extent provided in applicable Treasury Regulations or other applicable guidance issued by the Internal Revenue Service;

(C) Any elections with respect to the deferral of such compensation or the time and form of distribution of such deferred compensation shall comply with the requirements of Section 409A(a)(4) of the Code; and

(D) In the case of any Participant who is specified employee , a distribution on account of a separation from service may not be made before the date which is six months after the date of the Participant s separation from service (or, if earlier, the date of the Participant s death).

For purposes of the foregoing, the terms in quotations shall have the same meanings as those terms have for purposes of Section 409A of the Code, and the limitations set forth herein shall be applied in such manner (and only to the extent) as shall be necessary to comply with any requirements of Section 409A of the Code that are applicable to the Award.

(iii) Notwithstanding the foregoing, or any provision of this Plan or any Award Agreement, the Company does not make any representation to any Participant or Beneficiary that any Awards made pursuant to this Plan are exempt from, or satisfy, the requirements of, Section 409A, and the Company shall have no liability or other obligation to indemnify or hold harmless the Participant or any Beneficiary for any tax, additional tax, interest or penalties that the Participant or any Beneficiary may incur in the event that any provision of this Plan, or any Award Agreement, or any amendment or modification thereof, or any other action taken with respect thereto, is deemed to violate any of the requirements of Section 409A.

8. ***Code Section 162(m) Provisions***.

(a) ***Covered Employees.*** Unless otherwise specified by the Committee, the provisions of this Section 8 shall be applicable to any Performance Award granted to an Eligible Person who is, or is likely to be, as of the end of the tax year in which the Company would claim a tax deduction in connection with such Award, a Covered Employee.

(b) ***Performance Criteria***. If a Performance Award is subject to this Section 8, then the payment or distribution thereof or the lapsing of restrictions thereon and the distribution of cash, Shares or other property pursuant thereto, as applicable, shall be contingent upon achievement of one or more objective performance goals. Performance goals shall be objective and shall otherwise meet the requirements of Section 162(m) of the Code and regulations thereunder including the requirement that the level or levels of performance targeted by the Committee result in the achievement of performance goals being substantially uncertain. One or more of the following business criteria for the Company, on a consolidated basis, and/or for Related Entities, or for business or geographical units of the Company and/or a Related Entity (except with respect to the total shareholder return and earnings per share criteria), shall be used by the Committee in establishing performance goals for such Awards: (1) earnings per share; (2) revenues or margins; (3) cash flow; (4) operating margin; (5) return on net assets, investment, capital, or equity; (6) economic value added; (7) direct contribution; (8) net income; pretax earnings; earnings before interest and taxes; earnings before interest, taxes, depreciation and amortization; earnings after interest expense and before extraordinary or special items; operating income or income from operations; income before interest income or expense, unusual items and income taxes, local, state or federal and excluding budgeted and actual bonuses which might be paid under any ongoing bonus plans of the Company; (9) working capital; (10) management of fixed costs or variable costs; (11) identification or consummation of investment opportunities or completion of specified projects in accordance with corporate business plans, including strategic mergers, acquisitions or divestitures; (12) total shareholder return; (13) debt reduction; (14) market share; (15) entry into new markets, either geographically or by business unit; (16) customer retention and satisfaction; (17) strategic plan development and implementation, including turnaround plans; and/or (18) the Fair Market Value of a Share. Any of the above goals may be determined on an absolute or relative basis or as compared to the performance of a published or special index deemed applicable by the Committee including, but not limited to, the Standard & Poor s 500 Stock Index or a group of companies that are comparable to the Company. In determining the achievement of the performance goals, unless otherwise specified by the Committee at the time the performance goals are set, the Committee shall exclude the impact of any (i) restructurings, discontinued operations, extraordinary items (as defined pursuant to generally accepted accounting principles), and other unusual or non-recurring charges; (ii) change in accounting standards required by generally accepted accounting principles; or (iii) such other exclusions or adjustments as the Committee specifies at the time the Award is granted.

(c) ***Performance Period; Timing For Establishing Performance Goals***. Achievement of performance goals in respect of Performance Awards shall be measured over a Performance Period specified by the Committee. Performance goals shall

be established not later than 90 days after the beginning of any Performance Period applicable to such Performance Awards, or at such other date as may be required or permitted for performance-based compensation under Section 162(m) of the Code.

(d) ***Adjustments.*** The Committee may, in its discretion, reduce the amount of a settlement otherwise to be made in connection with Awards subject to this Section 8, but may not exercise discretion to increase any such amount payable to a Covered Employee in respect of an Award subject to this Section 8. The Committee shall specify the circumstances in which such Awards shall be paid or forfeited in the event of termination of Continuous Service by the Participant prior to the end of a Performance Period or settlement of Awards.

(e) ***Committee Certification.*** No Participant shall receive any payment under the Plan that is subject to this Section 8 unless the Committee has certified, by resolution or other appropriate action in writing, that the performance criteria and any other material terms previously established by the Committee or set forth in the Plan, have been satisfied to the extent necessary to qualify as performance based compensation under Section 162(m) of the Code.

9. ***Change in Control***.

(a) ***Effect of Change in Control.*** If and only to the extent provided in any employment or other agreement between the Participant and the Company or any Related Entity, or in any Award Agreement, or to the extent otherwise determined by the Committee in its sole discretion and without any requirement that each Participant be treated consistently, upon the occurrence of a Change in Control, as defined in Section 9(b):

(i) Any Option or Stock Appreciation Right that was not previously vested and exercisable as of the time of the Change in Control, shall become immediately vested and exercisable, subject to applicable restrictions set forth in Section 10(a) hereof.

(ii) Any restrictions, deferral of settlement, and forfeiture conditions applicable to a Restricted Stock Award, Restricted Stock Unit Award or an Other Stock-Based Award subject only to future service requirements granted under the Plan shall lapse and such Awards shall be deemed fully vested as of the time of the Change in Control, except to the extent of any waiver by the Participant and subject to applicable restrictions set forth in Section 10(a) hereof.

(iii) With respect to any outstanding Award subject to achievement of performance goals and conditions under the Plan, the Committee may, in its discretion, deem such performance goals and conditions as having been met as of the date of the Change in Control.

(iv) Notwithstanding the foregoing or any provision in any Award Agreement to the contrary, and unless the Committee otherwise determines in a specific instance or as is provided in any employment or other agreement between the Participant and the Company or any Related Entity, each outstanding Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit Award or Other Stock-Based Award shall not be accelerated as described in Sections 9(a)(i), (ii) and (iii), if either (A) the Company is the surviving entity in the Change in Control and the Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit Award or Other Stock-Based Award continues to be outstanding after the Change in Control on the substantially same terms and conditions as were applicable immediately prior to the Change in Control or (B) the successor company assumes or substitutes for the applicable Award, as determined in accordance with Section 10(c)(ii) hereof.

(b) ***Definition of Change in Control*** . A Change in Control shall mean the occurrence of any of the following:

(i) The acquisition by any Person of Beneficial Ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of more than fifty percent (50%) of either (A) the value of then outstanding equity securities of the Company (the Outstanding Company Stock) or (B) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the Outstanding Company Voting Securities) (the foregoing Beneficial Ownership hereinafter being referred to as a Controlling Interest); provided, however, that for purposes of this Section 9(b), the following acquisitions shall not constitute or result in a Change in Control: (v) any acquisition directly from the Company; (w) any acquisition by the Company; (x) any acquisition by any Person that as of the Effective Date owns Beneficial Ownership of a Controlling Interest; (y) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any Related Entity; or (z) any acquisition by any entity pursuant to a transaction which complies with clauses (A), (B) and (C) of subsection (iii) below; or

(ii) During any period of two (2) consecutive years (not including any period prior to the Effective Date) individuals who constitute the Board on the Effective Date (the Incumbent Board) cease for any reason to constitute at

least a majority of the Board; provided, however, that any individual becoming a director subsequent to the Effective Date whose election, or nomination for election by the Company s shareholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(iii) Consummation of a reorganization, merger, statutory share exchange or consolidation or similar transaction involving the Company or any of its Related Entities, a sale or other disposition of all or substantially all of the assets of the Company, or the acquisition of assets or equity of another entity by the Company or any of its Related Entities (each a Business Combination), in each case, unless, following such Business Combination, (A) all or substantially all of the individuals and entities who were the Beneficial Owners, respectively, of the Outstanding Company Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than fifty percent (50%) of the value of the then outstanding equity securities and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of members of the board of directors (or comparable governing body of an entity that does not have such a board), as the case may be, of the entity resulting from such Business Combination (including, without limitation, an entity which as a result of such transaction owns the Company or all or substantially all of the Company s assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership, immediately prior to such Business Combination of the Outstanding Company Stock and Outstanding Company Voting Securities, as the case may be, (B) no Person (excluding any employee benefit plan (or related trust) of the Company or such entity resulting from such Business Combination or any Person that as of the Effective Date owns Beneficial Ownership of a Controlling Interest) beneficially owns, directly or indirectly, fifty percent (50%) or more of the value of the then outstanding equity securities of the entity resulting from such Business Combination or the combined voting power of the then outstanding voting securities of such entity except to the extent that such ownership existed prior to the Business Combination and (C) at least a majority of the members of the Board of Directors or other governing body of the entity resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board, providing for such Business Combination; or

(iv) Approval by the shareholders of the Company of a complete liquidation or dissolution of the Company.

10. ***General Provisions***.

(a) ***Compliance With Legal and Other Requirements***. The Company may, to the extent deemed necessary or advisable by the Committee, postpone the issuance or delivery of Shares or payment of other benefits under any Award until completion of such registration or qualification of such Shares or other required action under any federal or state law, rule or regulation, listing or other required action with respect to the Listing Market, or compliance with any other obligation of the Company, as the Committee, may consider appropriate, and may require any Participant to make such representations, furnish such information and comply with or be subject to such other conditions as it may consider appropriate in connection with the issuance or delivery of Shares or payment of other benefits in compliance with applicable laws, rules, and regulations, listing requirements, or other obligations.

(b) ***Limits on Transferability; Beneficiaries***. No Award or other right or interest granted under the Plan shall be pledged, hypothecated or otherwise encumbered or subject to any lien, obligation or liability of such Participant to any party, or assigned or transferred by such Participant otherwise than by will or the laws of descent and distribution or to a Beneficiary upon the death of a Participant, and such Awards or rights that may be exercisable shall be exercised during the lifetime of the Participant only by the Participant or his or her guardian or legal representative, except that Awards and other rights (other than Incentive Stock Options and Stock Appreciation Rights in tandem therewith) may be transferred to one or more Beneficiaries or other transferees during the lifetime of the Participant, and may be exercised by such transferees in accordance with the terms of such Award, but only if and to the extent such transfers are permitted by the Committee pursuant to the express terms of an Award Agreement (subject to any terms and conditions which the Committee may impose thereon). A Beneficiary, transferee, or other person claiming any rights under the Plan from or through any Participant shall be subject to all terms and conditions of the Plan and any Award Agreement applicable to such Participant, except as otherwise determined by the Committee, and to any additional terms and conditions deemed necessary or appropriate by the Committee.

(c) ***Adjustments.***

(i) ***Adjustments to Awards***. In the event that any extraordinary dividend or other distribution (whether in the form of cash, Shares, or other property), recapitalization, forward or reverse split, reorganization, merger, consolidation, spin-off, combination, repurchase, share exchange, liquidation, dissolution or other similar corporate transaction or

event affects the Shares and/or such other securities of the Company or any other issuer, then the Committee shall, in such manner as it may deem equitable, substitute, exchange or adjust any or all of (A) the number and kind of Shares which may be delivered in connection with Awards granted thereafter, (B) the number and kind of Shares by which annual per-person Award limitations are measured under Section 4 hereof, (C) the number and kind of Shares subject to or deliverable in respect of outstanding Awards, (D) the exercise price, grant price or purchase price relating to any Award and/or make provision for payment of cash or other property in respect of any outstanding Award, and (E) any other aspect of any Award that the Committee determines to be appropriate.

(ii) ***Adjustments in Case of Certain Transactions***. In the event of any merger, consolidation or other reorganization in which the Company does not survive, or in the event of any Change in Control, any outstanding Awards may be dealt with in accordance with any of the following approaches, without the requirement of obtaining any consent or agreement of a Participant as such, as determined by the agreement effectuating the transaction or, if and to the extent not so determined, as determined by the Committee: (a) the continuation of the outstanding Awards by the Company, if the Company is a surviving entity, (b) the assumption or substitution for, as those terms are defined below, the outstanding Awards by the surviving entity or its parent or subsidiary, (c) full exercisability or vesting and accelerated expiration of the outstanding Awards, or (d) settlement of the value of the outstanding Awards in cash or cash equivalents or other property followed by cancellation of such Awards (which value, in the case of Options or Stock Appreciation Rights, shall be measured by the amount, if any, by which the Fair Market Value of a Share exceeds the exercise or grant price of the Option or Stock Appreciation Right as of the effective date of the transaction). For the purposes of this Agreement, an Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit Award or Other Stock-Based Award shall be considered assumed or substituted for if following the Change in Control the Award confers the right to purchase or receive, for each Share subject to the Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit Award or Other Stock-Based Award immediately prior to the Change in Control, on substantially the same vesting and other terms and conditions as were applicable to the Award immediately prior to the Change in Control, the consideration (whether stock, cash or other securities or property) received in the transaction constituting a Change in Control by holders of Shares for each Share held on the effective date of such transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares); provided, however, that if such consideration received in the transaction constituting a Change in Control is not solely common stock of the successor company or its parent or subsidiary, the Committee may, with the consent of the successor company or its parent or subsidiary, provide that the consideration to be received upon the exercise or vesting of an Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit Award or Other Stock-Based Award, for each Share subject thereto, will be solely common stock of the successor company or its parent or subsidiary substantially equal in fair market value to the per share consideration received by holders of Shares in the transaction constituting a Change in Control. The determination of such substantial equality of value of consideration shall be made by the Committee in its sole discretion and its determination shall be conclusive and binding. The Committee shall give written notice of any proposed transaction referred to in this Section 10(c)(ii) at a reasonable period of time prior to the closing date for such transaction (which notice may be given either before or after the approval of such transaction), in order that Participants may have a reasonable period of time prior to the closing date of such transaction within which to exercise any Awards that are then exercisable (including any Awards that may become exercisable upon the closing date of such transaction). A Participant may condition his exercise of any Awards upon the consummation of the transaction.

(iii) ***Other Adjustments***. The Committee (and the Board if and only to the extent such authority is not required to be exercised by the Committee to comply with Section 162(m) of the Code) is authorized to make adjustments in the terms and conditions of, and the criteria included in, Awards (including Performance Awards, or performance goals and conditions relating thereto) in recognition of unusual or nonrecurring events (including, without limitation, acquisitions and dispositions of businesses and assets) affecting the Company, any Related Entity or any business unit, or the financial statements of the Company or any Related Entity, or in response to changes in applicable laws, regulations, accounting principles, tax rates and regulations or business conditions or in view of the Committee s assessment of the business strategy of the Company, any Related Entity or business unit thereof, performance of comparable organizations, economic and business conditions, personal performance of a Participant, and any other circumstances deemed relevant. Adjustments permitted hereby may include, without limitation, increasing the exercise price of Options and Stock Appreciation Rights, increasing performance goals, or other adjustments that may be adverse to the Participant. Notwithstanding the foregoing, no adjustments may be made with respect to any Performance Awards subject to Section 8 if and to the extent that such adjustment would cause the Award to fail to qualify as performance-based compensation under Section 162(m) of the Code.

(d) ***Taxes***. The Company and any Related Entity are authorized to withhold from any Award granted, any payment relating to an Award under the Plan, including from a distribution of Shares, or any payroll or other payment to a Participant, amounts of withholding and other taxes due or potentially payable in connection with any transaction involving an Award, and to take such other action as the Committee may deem advisable to enable the Company or any Related Entity and Participants to satisfy obligations for the payment of withholding taxes and other tax obligations relating to any Award. This authority shall include

authority to withhold or receive Shares or other property and to make cash payments in respect thereof in satisfaction of a Participant s tax obligations, either on a mandatory or elective basis in the discretion of the Committee.

(e) ***Changes to the Plan and Awards***. The Board may amend, alter, suspend, discontinue or terminate the Plan, or the Committee s authority to grant Awards under the Plan, without the consent of shareholders or Participants, except that any amendment or alteration to the Plan shall be subject to the approval of the Company s shareholders not later than the annual meeting next following such Board action if such shareholder approval is required by any federal or state law or regulation (including, without limitation, Rule 16b-3 or Code Section 162(m)) or the rules of the Listing Market, and the Board may otherwise, in its discretion, determine to submit other such changes to the Plan to shareholders for approval; provided that, except as otherwise permitted by the Plan or Award Agreement, without the consent of an affected Participant, no such Board action may materially and adversely affect the rights of such Participant under the terms of any previously granted and outstanding Award. The Committee may waive any conditions or rights under, or amend, alter, suspend, discontinue or terminate any Award theretofore granted and any Award Agreement relating thereto, except as otherwise provided in the Plan; provided that, except as otherwise permitted by the Plan or Award Agreement, without the consent of an affected Participant, no such Committee or the Board action may materially and adversely affect the rights of such Participant under terms of such Award.

(f) ***Limitation on Rights Conferred Under Plan***. Neither the Plan nor any action taken hereunder or under any Award shall be construed as (i) giving any Eligible Person or Participant the right to continue as an Eligible Person or Participant or in the employ or service of the Company or a Related Entity; (ii) interfering in any way with the right of the Company or a Related Entity to terminate any Eligible Person s or Participant s Continuous Service at any time, (iii) giving an Eligible Person or Participant any claim to be granted any Award under the Plan or to be treated uniformly with other Participants and Employees, or (iv) conferring on a Participant any of the rights of a shareholder of the Company including, without limitation, any right to receive dividends or distributions, any right to vote or act by written consent, any right to attend meetings of shareholders or any right to receive any information concerning the Company s business, financial condition, results of operation or prospects, unless and until such time as the Participant is duly issued Shares on the stock books of the Company in accordance with the terms of an Award. None of the Company, its officers or its directors shall have any fiduciary obligation to the Participant with respect to any Awards unless and until the Participant is duly issued Shares pursuant to the Award on the stock books of the Company in accordance with the terms of an Award. Neither the Company nor any of the Company s officers, directors, representatives or agents is granting any rights under the Plan to the Participant whatsoever, oral or written, express or implied, other than those rights expressly set forth in this Plan or the Award Agreement.

(g) ***Unfunded Status of Awards; Creation of Trusts***. The Plan is intended to constitute an unfunded plan for incentive and deferred compensation. With respect to any payments not yet made to a Participant or obligation to deliver Shares pursuant to an Award, nothing contained in the Plan or any Award Agreement shall give any such Participant any rights that are greater than those of a general creditor of the Company; provided that the Committee may authorize the creation of trusts and deposit therein cash, Shares, other Awards or other property, or make other arrangements to meet the Company s obligations under the Plan. Such trusts or other arrangements shall be consistent with the unfunded status of the Plan unless the Committee otherwise determines with the consent of each affected Participant. The trustee of such trusts may be authorized to dispose of trust assets and reinvest the proceeds in alternative investments, subject to such terms and conditions as the Committee may specify and in accordance with applicable law.

(h) ***Nonexclusivity of the Plan***. Neither the adoption of the Plan by the Board nor its submission to the shareholders of the Company for approval shall be construed as creating any limitations on the power of the Board or a committee thereof to adopt such other incentive arrangements as it may deem desirable including incentive arrangements and awards which do not qualify under Section 162(m) of the Code.

(i) ***Payments in the Event of Forfeitures; Fractional Shares***. Unless otherwise determined by the Committee, in the event of a forfeiture of an Award with respect to which a Participant paid cash or other consideration, the Participant shall be repaid the amount of such cash or other consideration. No fractional Shares shall be issued or delivered pursuant to the Plan or any Award. The Committee shall determine whether cash, other Awards or other property shall be issued or paid in lieu of such fractional shares or whether such fractional shares or any rights thereto shall be forfeited or otherwise eliminated.

(j) ***Governing Law***. The validity, construction and effect of the Plan, any rules and regulations under the Plan, and any Award Agreement shall be determined in accordance with the laws of the State of New York without giving effect to principles of conflict of laws, and applicable federal law.

(k) ***Non-U.S. Laws***. The Committee shall have the authority to adopt such modifications, procedures, and subplans as may be necessary or desirable to comply with provisions of the laws of foreign countries in which the Company or its

Related Entities may operate to assure the viability of the benefits from Awards granted to Participants performing services in such countries and to meet the objectives of the Plan.

(l) ***Plan Effective Date and Shareholder Approval; Termination of Plan***. The Plan shall become effective on the Effective Date, subject to subsequent approval, within 12 months of its adoption by the Board, by shareholders of the Company eligible to vote in the election of directors, by a vote sufficient to meet the requirements of Code Sections 162(m) (if applicable) and 422, Rule 16b-3 under the Exchange Act (if applicable), applicable requirements under the rules of any stock exchange or automated quotation system on which the Shares may be listed or quoted, and other laws, regulations, and obligations of the Company applicable to the Plan. Awards may be granted subject to shareholder approval, but may not be exercised or otherwise settled in the event the shareholder approval is not obtained. The Plan shall terminate at the earliest of (a) such time as no Shares remain available for issuance under the Plan, (b) termination of this Plan by the Board, or (c) the tenth anniversary of the Effective Date. Awards outstanding upon expiration of the Plan shall remain in effect until they have been exercised or terminated, or have expired.

FORM OF PROXY

ENZO BIOCHEM, INC.

527 Madison Avenue
New York, New York 10022

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoints Dr. Elazar Rabbani and Dr. Stephen B.H. Kent as Proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side, all the shares of the Common Stock of Enzo Biochem, Inc. held of record by the undersigned as of the close of business on November 19, 2010, at the Annual Meeting of Shareholders to be held on January 14, 2011 or at any adjournment or postponement thereof.

The shares represented by this proxy, when properly executed and returned, will be voted as directed herein. IF THIS PROXY IS DULY EXECUTED AND RETURNED, AND NO VOTING DIRECTIONS ARE GIVEN HEREIN, SUCH SHARES WILL BE VOTED FOR THE ELECTION OF EACH OF THE NOMINEES FOR CLASS II DIRECTOR NAMED IN PROPOSAL 1 IN THIS PROXY CARD, AND FOR EACH OF PROPOSALS 2 AND 3 IN THIS PROXY CARD. The undersigned hereby acknowledges receipt of notice of, and the proxy statement for, the aforesaid Annual Meeting of Shareholders.

(Continued and to be signed on the reverse side)

ANNUAL MEETING OF SHAREHOLDERS OF

ENZO BIOCHEM, INC.

January 14, 2011

Please sign, date and mail your proxy card in the envelope provided as soon as possible.

Please detach along perforated line and mail in the envelope provided.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE ELECTION OF EACH OF THE NOMINEES FOR CLASS II DIRECTOR SET FORTH BELOW IN PROPOSAL 1, AND FOR PROPOSALS 2 AND 3 BELOW.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE x

1. Election of Class II Directors:

NOMINEES:
Barry W. Weiner
Dr. Bernard L. Kasten

FOR all nominees listed above (except as marked to the contrary below)	**WITHHOLD AUTHORITY to vote for all nominees as listed above**
o	o

(INSTRUCTION: To withhold authority to vote for any individual nominee, write the nominee s name in the space provided below.)

	FOR	AGAINST	ABSTAIN
2. To approve and adopt our 2011 Incentive Plan	o	o	o

	FOR	AGAINST	ABSTAIN
3 To ratify the appointment of Ernst & Young LLP as the Company s independent registered public accounting firm for the Company s fiscal year ending July 31, 2011.	o	o	o

In their discretion, the Proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted in the manner directed herein by the undersigned shareholder. If no direction is made, this proxy will be voted FOR the election of each of the nominees for Class II Director named in Proposal 1 in this proxy card, and FOR each of Proposals 2 and 3 in this proxy card.

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method. o

Signature of Shareholder Date: Signature of Shareholder Date:

Title or Authority Title or Authority

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.