

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of
the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant |
Filed by a Party other than the Registrant |

Check the appropriate box:

- Preliminary Proxy Statement
 Confidential, for Use of the Commission Only
(as permitted by Rule 14a-6(e)(2))
 Definitive Proxy Statement
 Definitive Additional Materials
 Soliciting Material Pursuant to ss.240.14a-11(c) or ss.240.14a-12

DISCOVERY LABORATORIES, INC.

(Name of Registrant as Specified In Its Charter)

Not Applicable

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No Fee Required
 Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

1. Title of each class of securities to which transaction applies:

Not Applicable

2. Aggregate number of securities to which transaction applies:

Not Applicable

3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

Not Applicable

4. Proposed maximum aggregate value transaction:

Not Applicable

5. Total fee paid:

Not Applicable

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration number, or the Form or Schedule and the date of its filing.

1. Amount previously paid:

Not Applicable

2. Form, Schedule or Registration Statement No.:

Not Applicable

3. Filing Party:

Not Applicable

4. Date Filed:

Not Applicable

Discovery Laboratories, Inc.
350 South Main Street, Suite 307
Doylestown, PA 18901
(215) 340-4699

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To be held on Friday, June 15, 2001

To the Stockholders of Discovery Laboratories, Inc.:

The Annual Meeting of Stockholders of Discovery Laboratories, Inc., a Delaware corporation (the "Corporation"), will be held on Friday, June 15, 2001, at 9:00 a.m. Eastern Daylight Time at the New York Athletic Club at 180 Central Park South, New York, NY 10019 for the following purposes:

- I. To elect seven members to the Board of Directors to serve for the ensuing year and until their respective successors have been duly elected and qualified;
- II. To act upon the selection of Ernst & Young LLP as the Corporation's independent auditors for the fiscal year ending December 31, 2001;
- III. To consider and approve an amendment to the Corporation's Amended and Restated 1998 Stock Incentive Plan (the "1998 Plan") to increase the number of shares of Common Stock available for issuance under the 1998 Plan from 3,000,000 shares of Common Stock to 4,150,000 shares of Common Stock; and
- IV. To transact such other business as may properly come before the meeting and any adjournments or postponements thereof.

Only stockholders of record of the Corporation's Common Stock at the close of business on April 27, 2001, are entitled to notice of, and to vote at, the meeting and any adjournment or postponements thereof. A complete list of those stockholders will be open to examination by any stockholder, for any purpose germane to the meeting, during ordinary business hours at the Corporation's executive offices at 350 South Main Street, Suite 307, Doylestown, Pennsylvania 18901, for a period of 10 days prior to the meeting. The stock transfer books of the Corporation will not be closed.

The vote of each Stockholder is important. Whether or not you expect to attend the Annual Meeting, please complete, date and sign the enclosed proxy card and mail it promptly in the enclosed envelope in order to assure representation of your shares of Common Stock. If you do attend the Annual Meeting you may revoke your proxy and vote by ballot at that time.

By Order of the Board of Directors

/s/ David L. Lopez

David L. Lopez, C.P.A., Esq.
Corporate Secretary

Doylestown, Pennsylvania
May 7, 2001

Discovery Laboratories, Inc.
350 South Main Street, Suite 307
Doylestown, PA 18901
(215) 340-4699

PROXY STATEMENT

ANNUAL MEETING OF STOCKHOLDERS

June 15, 2001

Proxies in the form enclosed with this Proxy Statement are solicited by the Board of Directors of Discovery Laboratories, Inc., a Delaware corporation ("Discovery" or the "Corporation"), with its principal executive offices at 350 South Main Street, Suite 307, Doylestown, Pennsylvania 18901, for use at the Annual Meeting of Stockholders and any adjournment thereof (the "Annual Meeting") to be held on Friday, June 15, 2001, at 9:00 a.m. Eastern Daylight Time at the New York Athletic Club, 180 Central Park South, New York, NY 10019. It is expected that this Proxy Statement and the form of proxy, attached hereto as Appendix II, will be mailed to stockholders on or about May 7, 2001.

Only holders of shares of Common Stock, par value \$.001 per share (the "Common Stock") of the Corporation of record as of April 27, 2001 (the "Record Date"), will be entitled to vote at the Annual Meeting and any adjournments or postponements thereof. As of April 12, 2001, there were 20,875,694 shares of Common Stock outstanding. Each share of Common Stock outstanding as of the Record Date will be entitled to one vote.

Stockholders may vote at the annual meeting in person or by proxy. Execution of a proxy will not in any way affect a stockholder's right to attend the Annual Meeting and vote in person. Any stockholder giving a proxy has the right to revoke it by written notice to the Secretary of the Corporation at any time before it is exercised, by executing a proxy with a later date, or by attending and voting at the Annual Meeting. All properly executed proxies that are returned in time to be counted at the Annual Meeting will be voted as stated below under "Voting Procedures." Any stockholder giving a proxy has the right to withhold authority to vote for any individual nominee to the Board of Directors by striking through that nominee's name on the proxy. In addition to the election of directors, the stockholders will consider and vote upon a proposal approving the selection of the Corporation's independent auditors and a proposal to amend the Corporation's Amended and Restated 1998 Stock Incentive Plan, as amended (the "1998 Plan"), to increase the number of shares of Common Stock available for issuance under the 1998 Plan from 3,000,000 to 4,150,000 where a choice has been specified on the proxy with respect to the foregoing matters, the shares represented by the proxy will be voted in accordance with the specifications and will be voted FOR a respective matter if no specification is indicated.

The Board of Directors of the Corporation knows of no other matters to be presented at the Annual Meeting. If any other matter should be presented at the Annual Meeting upon which a vote properly may be taken, shares represented by all proxies received by the Board of Directors will be voted with respect thereto in accordance with the judgment of the persons named as proxies in the form of proxy.

PROPOSAL I

ELECTION OF DIRECTORS

At the Annual Meeting, seven directors will be elected by the stockholders to hold office until the next annual meeting of stockholders and until their successors have been elected and qualified. Management recommends that the persons named below be elected as directors of the Corporation and it is intended that the accompanying proxy will be voted for their election as directors, unless the proxy contains contrary instructions. Shares represented by all proxies received by the Board of Directors and not so marked as to withhold authority to vote for any individual nominee or for all nominees will be voted (unless one or more nominees are unable to serve) for the election of the nominees named below. The Board of Directors knows of no reason why any such nominee should be unable or unwilling to serve, but if such should be the case, proxies will be voted for the election of some other person or the size of the Board of Directors will be fixed at a lower number. The persons nominated for election to the Corporation's Board of Directors are: Robert J. Capetola, Ph.D.; Max Link, Ph.D.; Herbert H. McDade, Jr.; Richard G. Power; Mark C. Rogers, MD; Marvin E. Rosenthale, Ph.D.; and Mark S. Siegel. Each of the nominees currently serves as a director of the Corporation. A plurality of the votes cast by the stockholders present or represented by proxy and entitled to vote at the Annual Meeting is required for the election of directors. See "Voting Procedures."

General Information Concerning the Board of Directors and its Committees

The Board of Directors met four times in person, once telephonically, and acted by unanimous written consent in lieu of a meeting four times during the fiscal year ended December 31, 2000. Each incumbent director attended, in person or by telephone, at least 75% of the meetings of the Board of Directors and committees of the Board of Directors on which he served during such fiscal year. The Board of Directors has an Audit Committee, a Compensation Committee and a Nominating Committee.

Audit Committee. The Audit Committee of the Board of Directors, currently consisting of Herbert H. McDade, Jr., Richard G. Power and Marvin E. Rosenthale, Ph.D., oversees the appointment and reappointment of independent accountants for the Corporation from time to time and addresses matters of accounting policy with such accountants. The Audit Committee also oversees management's response to and implementation of accounting policy and practice recommendations. The Audit Committee is responsible for the reporting of significant events to the Board of Directors with respect to the above audit issues. The Audit Committee met two times during 2000. See "Report of the Audit Committee."

Compensation Committee. The Board of Directors also has a Compensation Committee, currently consisting of Max Link, Ph.D., Mark C. Rogers, MD, and Marvin E. Rosenthale, Ph.D. The Compensation Committee reviews and makes recommendations concerning executive and general compensation matters and administers the 1998 Plan together with the Board of Directors. The Compensation Committee met two times during 2000, and otherwise their respective responsibilities were assumed by the full Board of Directors.

Nominating Committee. The Nominating Committee, currently consisting of Robert J. Capetola, Ph.D., Max Link, Ph.D., and Herbert H. McDade, Jr., has the authority to designate the nominees for director at each annual meeting of the stockholders of the Corporation, to fill vacancies on the Board of Directors occurring between such annual meetings and to evaluate the performance of the executive officers. The Nominating Committee does not consider nominees recommended by stockholders. The Nominating Committee met one time during 2000.

Report of the Audit Committee

The Audit Committee reviews the financial reporting process, the system of internal controls, the audit process and the process for monitoring compliance with laws and regulations. The Corporation's management is responsible for preparing the Corporation's financial statements and the independent auditors are responsible for auditing those financial statements. The Audit Committee is responsible for overseeing the conduct of these activities by the Corporation's management and independent auditors and reports to and acts on behalf of the Board of Directors. Each of the Audit Committee members satisfies the definition of an independent director under the applicable rules of The NASDAQ SmallCap Market. The Board of Directors adopted a written charter for the Audit Committee on April 25, 2000, which is attached to this proxy statement as Appendix I. The Corporation operates with a January 1 to December 31 fiscal year. The Audit Committee met two times during 2000.

The Audit Committee has reviewed the Corporation's audited financial statements and discussed such statements with management. The Audit Committee has discussed with Ernst & Young LLP, the Corporation's independent

auditors for the fiscal year ending December 31, 2000, the matters required to be discussed by Statement of Auditing Standards No. 61 (Communication with Audit Committees, as amended). The Audit Committee received from Ernst & Young LLP the written disclosures required by Independence Standards Board Standard No. 1 and discussed with Ernst & Young LLP its independence. The Audit Committee also considered whether non-audit services provided by Ernst & Young LLP during the fiscal year 2000 were compatible with maintaining its independence. Based on the review and discussions noted above, the Corporation recommended to the Audit Committee, and the Audit Committee and the Board of Directors has approved, that the Corporation's audited financial statements be included in the Corporation's Annual Report on Form 10-KSB for the fiscal year 2000 for filing with the U.S. Securities and Exchange Commission (the "SEC").

This report of the Audit Committee shall not be deemed incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933 (the "Securities Act") or the Securities Exchange Act of 1934 (the "Exchange Act"), except to the extent that the Corporation specifically incorporates this information by reference, and shall not otherwise be deemed filed under such Acts.

Submitted by the Audit Committee

Herbert H. McDade, Jr.
Richard G. Power
Marvin E. Rosenthale, Ph.D.

Audit Fees

The aggregate fees billed, including out-of-pocket expenses, by Ernst & Young LLP for professional services rendered for the audit of the Corporation's annual financial statements for the fiscal year ended December 31, 2000, were \$68,449.

Financial Information Systems Design and Implementation Fees

There were no services provided by Ernst & Young LLP for the design and implementation of financial information systems during the fiscal year 2000.

All Other Fees

Aggregate fees, including out-of-pocket expenses, of \$10,202 were billed by Ernst & Young LLP for all other non-audit services, including tax related services, for the fiscal year ended December 31, 2000.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Corporation's directors, executive officers (including a person performing a principal policy-making function) and persons who own more than 10% of a registered class of the Corporation's equity securities (collectively, "Reporting Persons") to file with the SEC initial reports of ownership and reports of changes in ownership of the Corporation's Common Stock and other equity securities of the Corporation. Reporting Persons are required by SEC regulations to furnish the Corporation with copies of all of the Section 16(a) reports they file. Specific due dates for these reports have been established and the Corporation is required to identify in this Proxy Statement those Reporting Persons who failed to timely file these reports. To the Corporation's knowledge, based solely upon a review of the copies of such filings received by it with respect to the fiscal year ended December 31, 2000, and representations made by the Reporting Persons, the Corporation believes that during fiscal year 2000 its Reporting Persons complied with all substantive filing requirements under Section 16(a) of the Exchange Act except for the following: A Form 4 reporting one transaction was filed late by each of Thomas E. Wiswell, MD, Max Link, Ph. D., and Huei Tsai, Ph.D.; a Form 4 reporting three transactions was filed late by Christopher J. Schaber; an amended Form 5 reporting six transactions was filed late by David Naveh; and each of Mark C. Rogers, MD, and Marvin E. Rosenthale, Ph.D., inadvertently failed to timely file a Form 5.

Nominees for Election to the Board of Directors

The following table sets forth the names and ages, as of April 12, 2001, of the nominees to be elected at the Annual Meeting, their respective principal occupations during the past five years and the period during which each has served as a director of the Corporation. For information concerning the number of shares of Common Stock beneficially owned by each nominee, see "Principal Stockholders."

Name	Age	Position with the Corporation
Robert J. Capetola, Ph.D.	51	Director, Chief Executive Officer
Max Link, Ph.D.	60	Director
Herbert H. McDade, Jr.	74	Director, Chairman of the Board of Directors
Richard G. Power	71	Director
Mark C. Rogers, MD	58	Director
Marvin E. Rosenthale, Ph.D.	67	Director
Mark S. Siegel	49	Director

Robert J. Capetola, Ph.D., has served as President, Chief Executive Officer and a Director of Discovery since Discovery completed the acquisition of the then outstanding minority interest in Acute Therapeutics, Inc. ("ATI"), through the merger of a transitory subsidiary of Discovery with and into ATI (the "1998 Merger"), and prior to that time served as Chairman and Chief Executive Officer of ATI, which was 60% owned by Discovery Laboratories Inc., a former Delaware corporation and a predecessor to Discovery ("Old Discovery") from its inception in October 1996. From February 1994 to May 1996, Dr. Capetola was the President of Delta Biotechnology, a subsidiary of Ohmeda Pharmaceutical Products Division, a division of The BOC Group ("Ohmeda"), in the U.K. He also served on the Board of Directors of Delta Biotechnology. From December 1992 to September 1996, Dr. Capetola served as Vice President of Research and Development at Ohmeda. He served on Ohmeda's operating board and was responsible for all aspects of Ohmeda's research and development, including preclinical research and development, clinical development, biometrics and regulatory affairs. From 1977 to 1992, Dr. Capetola held a variety of positions as a drug discovery scientist at Johnson & Johnson Pharmaceutical Research Institute, including Senior Worldwide Director of Experimental Therapeutics. Dr. Capetola received his B.S. from the Philadelphia College of Pharmacy & Science and his Ph.D. in pharmacology from Hahnemann Medical College.

Max Link, Ph.D., has served as a Director of Discovery since November 25, 1997, the date on which Old Discovery was merged with and into Discovery (the "1997 Merger") and was a Director of Old Discovery from October 1996 until such time. He has been a Director of ATI since October 1996. Dr. Link has held a number of executive positions with pharmaceutical and health care companies. He currently serves on the Boards of Directors of six other publicly-traded life science companies: Alexion Pharmaceuticals, Inc., Protein Design Labs, Inc., Human Genome Sciences, Inc., Cell Therapeutics, Inc., Procept, Inc., Cytrx Corporation and Access Pharmaceuticals, Inc. From May 1993 until June 1994, Dr. Link was Chief Executive Officer of Corange Limited ("Corange"), the parent company of Boehringer Mannheim and DePuy Acromed, Inc., an orthopedic company. Prior to joining Corange, he served in a number of positions within Sandoz Pharma, Ltd., including Chief Executive Officer from 1987 until April 1992, and Chairman from April 1992 until May 1993.

Herbert H. McDade, Jr., has served as a Director of Discovery since the effective time of the 1997 Merger and was a Director of Old Discovery from June 1996 until such time. Mr. McDade is the Chairman of Access Pharmaceutical, Inc., and a member of the Boards of Directors of one other publicly-held company, Cytrx Corporation. Mr. McDade was employed with the Upjohn Company for 20 years, served for 14 years as President of Revlon Health Care Pharmaceuticals and Revlon Health Care International, and served as Chairman and President of Armour Pharmaceutical Company from 1986 to 1990.

Richard G. Power has been a Director of Discovery since the effective time of the 1998 Merger and a Director of ATI since October 1996. Mr. Power is a Principal and Executive Director of The Sage Group, founded in 1994, which specializes in providing strategic and transactional services to the management and boards of, and investors in, health care companies. He serves on the Board of Directors of The Quantum Group, and Neuromedica, Inc. From 1980 to 1994, Mr. Power served as President of R.G. Power & Associates, Inc., which specializes in worldwide business development and financing strategy for the health care industry. From 1955 to 1980, Mr. Power held senior management positions with several pharmaceutical industry firms, including SmithKline, G.D. Searle

and as a corporate officer at Johnson & Johnson, Inc. Mr. Power received his B.A. from Loras College in 1951 and attended graduate school at the University of Wisconsin.

Mark C. Rogers, MD, has served as a Director of Discovery since the effective time of the 1997 Merger and was a Director of Old Discovery from June 1996 until such time. Dr. Rogers is currently the President of Paramount Capital Asset Management, Inc. ("PCAM"), Paramount Capital Investments, LLC, and Paramount Capital, Inc. PCAM serves as the general partner of the Aries Domestic Fund, L.P. and the Aries Domestic Fund II, L.P., and also serves as the investment manager to the Aries Master Fund. Dr. Rogers also serves as the chairman of the Board of Directors of Genta Corporation and as a director of Cypress Bioscience, Inc. Dr. Rogers also serves on the Board of Directors of several other privately-held companies. Dr. Rogers also serves as the Chairman of Gemini Management Partners, LLC, which serves as the investment manager of Gemini Master Fund and the general partner of each of Gemini Domestic Fund, L.P. and Gemini Domestic Fund II, L.P. Dr. Rogers was formerly Senior Vice President, Corporate Development and Chief Technology Officer of the Perkin-Elmer Corporation. Prior to that time, Dr. Rogers was the Vice Chancellor for Health Affairs, Executive Director and Chief Executive Officer of Duke University Hospital and Health Network from 1992 to 1996. Prior to his employment at Duke, Dr. Rogers was on the faculty of Johns Hopkins University for 16 years where he served as Distinguished Faculty Professor and Chairman of the Department of Anesthesiology and Critical Care Medicine, Associate Dean for Clinical Practice, Director of the Pediatric Intensive Care Unit and Professor of Pediatrics. In 1996, Dr. Rogers was elected to the National Institute of Medicine of the National Academy of Sciences and was subsequently chosen to chair the Fulbright Scholar selection committee. Dr. Rogers received his M.D. from Upstate Medical Center and his M.B.A. from The Wharton School of Business. He received his B.A. from Columbia University and held a Fulbright Scholarship.

Marvin E. Rosenthale, Ph.D., has been a Director of Discovery since the effective time of the 1998 Merger and a Director of ATI since October 1996. Dr. Rosenthale currently serves on the Boards of Directors of the publicly-held company, Allergan Specialty Therapeutics, Inc., and the privately-held company, Medinox, Inc. He has served as President and Chief Executive Officer of Allergan Ligand Retinoid Therapeutics, Inc. ("ALRT") from 1994 until 1997. He joined the ALRT joint venture formed by Allergan and Ligand, the entity through which they combined their resources to pursue the development of retinoid research and development prior to ALRT, in August 1993 as Vice President. Prior to joining ALRT, Dr. Rosenthale served as Vice President, Drug Discovery Worldwide, at R.W. Johnson Pharmaceutical Research Institute from 1990 to 1993. From 1977 to 1990, Dr. Rosenthale served in a variety of positions in drug discovery research for Ortho Pharmaceutical Corporation, including director of the divisions of pharmacology and biological research and executive director of drug discovery research. From 1960 to 1977, he served in various positions with Wyeth Laboratories. Dr. Rosenthale received a Ph.D. in pharmacology from Hahnemann Medical College & Hospital, an M.Sc. in pharmacology from Philadelphia College of Pharmacy and Science and a B.Sc. in pharmacy from the Philadelphia College of Pharmacy.

Mark S. Siegel was appointed to the Board of Directors of Discovery in April of 2001. Mr. Siegel currently serves as Chairman of the Boards of Directors of two publicly-held companies, UTI Energy Corp. and Variflex Inc. He has been President of REMY Investors & Consultants, Incorporated since 1993. From 1992 to 1993, Mr. Siegel was President, Music Division, Blockbuster Entertainment Corp. From 1988 through 1992, Mr. Siegel was an Executive Vice President of Shamrock Holdings, Inc., and Managing Director of Shamrock Capital Advisors, Incorporated. Mr. Siegel holds a B.A. from Colgate University and a J.D. from Boalt Hall School of Law.

EXECUTIVE OFFICERS

The following table sets forth the names and positions of the executive officers of the Corporation:

Name	Age	Position with the Corporation
Robert J. Capetola, Ph.D.	51	President, Chief Executive Officer and Director
Cynthia Davis	32	Controller
Evan Myriantopoulos	36	Vice President, Finance
Christopher J. Schaber	34	Chief Operating Officer and Executive Vice President, Drug Development and Regulatory Compliance
Huei Tsai, Ph.D.	61	Vice President, Biometrics
Deni M. Zodda, Ph.D.	47	Senior Vice President of Business Development and Principal Financial Officer

Robert J. Capetola, Ph.D., has served as President, Chief Executive Officer and a Director of Discovery since the 1998 Merger. Additional information regarding Dr. Capetola is included in the preceding pages under "Nominees for Election to the Board of Directors."

Cynthia Davis has served as Controller of Discovery since the effective time of the 1998 Merger and was Controller of ATI from October 1996 until such time. Ms. Davis was an office manager with ERD Environmental Group from September 1991 until September 1996. Ms. Davis received her A.A. degree from the Lansdale School of Business in May 1989.

Evan Myriantopoulos has served as Vice President, Finance of the Corporation since the effective time of the 1998 Merger. He served as Chief Financial Officer of Discovery from December 1997 until June 1998 and as Chief Operating Officer of Discovery from the effective time of the 1997 Merger until June 1998. From June 1996 until November 1997 he served as Chief Operating Officer and Director of Old Discovery. Prior to joining Old Discovery, he was a Technology Associate of Paramount Capital Investments, L.L.C., from December 1995 until January 1987. Before joining Paramount Capital Investments, L.L.C., Mr. Myriantopoulos managed a hedge fund for S + M Capital Management. The fund specialized in syndicate and secondary stock issues and also engaged in arbitrage of municipal and mortgage bonds. Prior to his employment with S + M Capital Management, Mr. Myriantopoulos was employed at the New York Branch of National Australia Bank where he was Assistant Vice President of Foreign Exchange trading. Mr. Myriantopoulos received a B.S. in Economics and Psychology from Emory University in 1986.

Christopher J. Schaber has served as Chief Operating Officer since May 2000 and Executive Vice President of Drug Development and Regulatory Compliance since April 1999. Previously, he held the positions of Chief Development Officer and Vice President of Regulatory Affairs and Quality Assurance\Quality Control of Discovery since June 1998. Prior to such time, he held the position of Vice President of Regulatory Affairs and Quality Assurance with ATI commencing in November 1996. Before joining ATI, Mr. Schaber was employed from October 1994 to November 1996 by Ohmeda as Director of Worldwide Regulatory Affairs. At Ohmeda, Mr. Schaber was directly responsible for all regulatory strategies with the United States Food and Drug Administration and other health authority bodies. From 1989 to 1994, Mr. Schaber held a variety of regulatory positions of increasing importance with The Liposome Company, Inc., and Elkins-Sinn Inc., a division of Wyeth-Ayerst Laboratories. Mr. Schaber received his B.A. from Western Maryland College and his M.S. in Pharmaceuticals from Temple University. Mr. Schaber is currently pursuing his Ph.D. in Pharmaceutical Sciences with The Union Graduate School. In 1994, Mr. Schaber received his Regulatory Affairs Certification (RAC) from the Regulatory Affairs Professional Society.

Huei Tsai, Ph.D., has served as Vice President of Biometrics of the Corporation since the effective time of the 1998 Merger. Prior to such time, he held such position with ATI commencing in February 1997. Prior to joining ATI, Dr. Tsai was a statistical consultant after retiring from the position of Director of Biometrics and Clinical Information at Ohmeda. At Ohmeda, Dr. Tsai was responsible for all statistical, computer operations, database and data coordination. From 1994 to 1995, Dr. Tsai was a statistical consultant to a variety of companies, including Janssen Pharmaceutical Company. For 17 years prior to that, Dr. Tsai held a variety of biostatistical positions at the Robert Wood Johnson Pharmaceutical Research Institute and Ortho (both wholly-owned subsidiaries of J&J),

including Director of Biostatistics for Clinical Pharmacology. Dr. Tsai received a B.A. degree in economics from Tunghai University in 1962, and a Ph.D. in mathematical statistics from Oklahoma State University in 1976.

Deni M. Zodda, Ph.D., has served as Senior Vice President for Business Development since September 2000 and is also presently serving as Principal Financial Officer. Previously, he held the position of Managing Director of the Corporate Finance-Life Sciences Group at KPMG, LLC, commencing March 1998. At KPMG he was responsible for managing a group offering M&A, Business Development, and strategic advisory services to the biopharmaceutical industry. Prior to joining KPMG, Dr. Zodda was employed as Senior Director of Business Development at Cephalon, Inc., from 1995 through 1997. Earlier in his career he held increasingly senior marketing and business development positions with Wyeth-Ayerst Laboratories, Inc.; Premier Hospitals Alliance, Inc.; Baxter Healthcare Corporation, Inc.; and SmithKline Diagnostics, Inc. Dr. Zodda holds a B.S. in Biology from Villanova University, an M.B.A. in Marketing and Finance from the University of Santa Clara, and a Ph.D. from the University of Notre Dame.

Family Relationships

There are no family relationships among directors or executive officers of the Corporation.

The Board of Directors recommends a vote "FOR" the nominees to the Board of Directors set forth above.

PRINCIPAL STOCKHOLDERS

The following table sets forth, as of April 12, 2001, certain information regarding the beneficial ownership of the Common Stock (i) by each person known by the Corporation to be the beneficial owner of more than five percent of the outstanding shares of the Common Stock, (ii) by each director, (iii) by each of the executive officers listed in the table below, and (iv) by all such executive officers and directors of the Corporation as a group. The address of all individuals is c/o Discovery Laboratories, Inc., 350 South Main Street, Suite 307, Doylestown, Pennsylvania 18901, unless otherwise noted.

Name and Address of Beneficial Owner (1) -----	Number of Shares -----	Percentage of Class Beneficially Owned (1) -----
Robert J. Capetola, Ph.D.(2)	1,179,909	5.35%
Cynthia Davis (3)	187,206	*
Evan Myriantopoulos (4)	297,933	1.41%
Christopher J. Schaber (5)	349,661	1.65%
Huei Tsai, Ph.D. (6)	289,744	1.37%
Deni M. Zodda, Ph.D. (7)	70,000	*
Marvin E. Rosenthale, Ph.D. (8) 6908 Queenferry Circle Boca Raton, FL 33496	55,600	*
Richard G. Power (9) The Sage Group 245 Route 22 West, Suite 304 Bridgewater, NJ 08807	139,960	*
Herbert H. McDade, Jr. (10) 720 Milton Road, Apt. K-1 Rye, NY 10580	54,619	*
Max Link, Ph.D. (11) 230 Central Park West, Apt.14A New York, NY 10024	86,819	*

Name and Address of Beneficial Owner (1) -----	Number of Shares -----	Percentage of Class Beneficially Owned (1) -----
Mark C. Rogers, MD (12) Paramount Capital, Inc. 787 Seventh Avenue, 48th Floor New York, NY 10019	139,685	*
Mark S. Siegel (13) 1801 Century Park East Suite 1111 Los Angeles, CA 90067	20,000	*
Finsbury Worldwide Pharmaceutical Trust (14) 767 Third Avenue, 6th Floor New York, NY 10017	1,652,892	7.34%
Caduceus Capital II, L.P. (14) 767 Third Avenue, 6th Floor New York, NY 10017	330,578	1.56%
Winchester Global Trust Company Ltd., as Trustee for Caduceus Capital Trust (14) Williams House, 20 Reid Street Hamilton, HM11 Bermuda	1,322,314	5.96%
OrbiMed Advisors, LLC (14) 767 Third Avenue, 6th Floor New York, NY 10017	3,512,049	14.4%
The Aries Master Fund, a Cayman Island Exempted Company (15) c/o Mees Pierson (Cayman) Ltd. P.O. Box 2003 British American Centre, Phase 3 Dr. Roy's Drive George Town, Grand Cayman	1,198,452	5.43%
Aries Domestic Fund, L.P. (16) 787 Seventh Avenue, 48th Floor New York, NY 10019	514,680	2.41%
RAQ, LLC (17) 787 Seventh Avenue, 48th Floor New York, NY 10019	982,109	4.49%
Lindsay A. Rosenwald, MD(18) 787 Seventh Avenue, 48th Floor New York, NY 10019	3,140,029	13.07%
Paramount Capital Asset Management, Inc. (19) 787 Seventh Avenue, 48th Floor New York, NY 10019	1,713,132	7.58%
All Discovery directors and officers as a group (12 persons)	2,871,134	13.75%

* Less than 1%

(1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act and includes voting and investment power with respect to shares of Common Stock. Shares of Common Stock and shares of Common Stock subject to options or warrants currently exercisable or exercisable within 60 days of the date hereof, are deemed outstanding for computing the percentage ownership of the person holding such options or warrants, but are not deemed outstanding for purposes of computing the percentage ownership of any other person.

(2) Includes 21,793 shares of Common Stock issuable on the exercise of outstanding options granted on April 17, 1997; 43,010 shares of Common Stock issuable on the exercise of outstanding options granted on March 5, 1998; 115,090 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 59,500 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 54,240 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 187,730 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1999; 62,500 shares of Common Stock issuable on the exercise of outstanding options granted on September 30, 1999; and 125,000 shares of common stock issuable on the exercise of outstanding options granted on September 15, 2000, all of which are immediately exercisable and fully vested.

(3) Includes 1,950 shares of Common Stock issuable on the exercise of outstanding options granted on January 2, 1997; 8,775 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1998; 4,428 shares of Common Stock issuable on the exercise of outstanding options granted on March 5, 1998; 11,848 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 6,125 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 7,760 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 28,270 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1999; and 60,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 30, 1999, all of which are immediately exercisable. Also includes 50,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 15, 2000, which vest 25% at the time of grant with the balance vesting in 36 equal monthly installments upon the optionee's successive completion of service with the Corporation. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(4) Includes 11,675 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1997; 30,000 shares of Common Stock issuable on the exercise of outstanding options granted on January 2, 1998; 40,000 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1999; 38,893 shares of Common Stock issuable on the exercise of outstanding options granted on June 28, 1999; and 60,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 30, 1999, all of which are immediately exercisable. Also includes 50,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 15, 2000, which vest 25% at the time of grant with the balance vesting in 36 equal monthly installments upon the optionee's successive completion of service with the Corporation. Unvested shares of Common Stock subject to such options remain subject to the Corporation's right to repurchase at the exercise price paid per share. Does not include an additional 7,906 shares of Common Stock owned by Mr. Myriantopoulos' brother and his brother's family, as to which Mr. Myriantopoulos disclaims beneficial ownership.

(5) Includes 14,813 shares of Common Stock issuable on the exercise of outstanding options granted on March 5, 1998; 39,638 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 20,493 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 18,400 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 40,000 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1999; and 42,500 shares of Common Stock issuable on the exercise of outstanding options granted on September 30, 1999, all of which are immediately exercisable. Also includes 74,500 shares of Common Stock issuable on the exercise of outstanding options granted on September 15, 2000, which vest 25% at the time of grant with the balance vesting in 36 equal monthly installments upon the optionee's successive completion of service with the Corporation. Unvested shares of

Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(6) Includes 14,183 shares of Common Stock issuable on the exercise of outstanding options granted on March 5, 1998; 39,638 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 20,493 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 18,400 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 40,000 shares of Common Stock issuable on the exercise of outstanding options granted on January 1, 1999; and 38,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 30, 1999, all of which are immediately exercisable. Also includes 45,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 15, 2000, which vest 25% at the time of grant with the balance vesting in 36 equal monthly installments upon the optionee's successive completion of service with the Corporation. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(7) Consists of 70,000 shares of Common Stock issuable on the exercise of outstanding options granted on September 18, 2000, which vest 25% at the time of grant with the balance vesting in 3 equal annual installments beginning with the first year anniversary of the grant conditioned upon the optionee's successive completion of service with the Corporation. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(8) Consists of 7,800 shares of Common Stock issuable on the exercise of outstanding options granted on November 1, 1996; 7,800 shares of Common Stock issuable on the exercise of outstanding options granted on January 30, 1998; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 28, 1999; and 20,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 2000, all of which are immediately exercisable. Shares of Common Stock subject to options granted under the Automatic Option Grant Program of the 1998 Plan on June 16, 1998, and thereafter, vest on the first anniversary of the date of grant. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(9) Includes 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 28, 1999; and 20,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 2000, all of which are immediately exercisable. Shares of Common Stock subject to options granted under the Automatic Option Grant Program of the 1998 Plan on June 16, 1998, and thereafter, vest on the first anniversary of the date of grant. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share. Includes 615 shares of Common Stock issuable on the exercise of outstanding warrants purchased on March 23, 2000.

(10) Includes 9,729 shares of Common Stock issuable on the exercise of outstanding options granted on June 1, 1996; 3,892 shares of Common Stock issuable on the exercise of outstanding options granted on June 1, 1997; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 28, 1999; and 20,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 2000, all of which are immediately exercisable. Shares of Common Stock subject to options granted under the Automatic Option Grant Program of the 1998 Plan on June 16, 1998, and thereafter, vest on the first anniversary of the date of grant. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(11) Includes 23,400 shares of Common Stock issuable on the exercise of outstanding options granted on October 28, 1996 and 3,891 shares of Common Stock issuable on the exercise of outstanding options granted on September 1, 1996, all of which are immediately exercisable and fully vested. Also includes 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 28, 1999, which were granted under the Automatic Option Grant Program. Shares of Common Stock subject to options granted under the Automatic Option Grant Program of the 1998 Plan on June 16, 1998, and thereafter, vest on the first anniversary of the date of

grant. Unvested shares of such Common Stock remain subject to the Corporation's right to repurchase such shares at the exercise price paid per share.

(12) Includes 9,729 shares of Common Stock issuable on the exercise of outstanding options granted on June 1, 1996; 3,892 shares of Common Stock issuable on the exercise of outstanding options granted on June 1, 1997; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 1998; 10,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 28, 1999, and 20,000 shares of Common Stock issuable on the exercise of outstanding options granted on June 16, 2000, all of which are immediately exercisable. Shares of Common Stock subject to options granted under the Automatic Option Grant Program of the 1998 Plan on June 16, 1998, and thereafter, vest on the first anniversary of the date of grant. Also includes 31,200 shares of Common Stock issuable on the exercise of outstanding options granted on October 28, 1996, all of which are immediately exercisable and fully vested. Shares of Common Stock subject to options granted under the Automatic Option Grant Program of the 1998 Plan on June 16, 1998, and thereafter, are immediately exercisable and vest on the first anniversary of the date of grant. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(13) Consists of 20,000 shares of Common Stock issuable on the exercise of outstanding options granted on March 15, 2001, all of which are immediately exercisable. Shares of Common Stock subject to these options are immediately exercisable and vest on the first anniversary of the date of grant. Unvested shares of Common Stock subject to all of the foregoing options remain subject to the Corporation's right to repurchase at the exercise price paid per share.

(14) OrbiMed Advisors, LLC, is the general partner of and investment manager of Finsbury Worldwide Pharmaceutical Trust, Caduceus Capital II, L.P., and Winchester Global Trust Company. As a consequence of these relationships, OrbiMed Advisors, LLC, may be deemed to share beneficial ownership of the Common Stock owned by the above parties.

(15) Beneficial ownership of Common Stock includes 55,163 shares of Common Stock issuable upon exercise of common and Series B preferred warrants, all of which are exercisable within 60 days of the date hereof.

(16) Beneficial ownership of Common Stock includes 23,641 shares of Common Stock issuable upon exercise of common and Series B preferred warrants, all of which are exercisable within 60 days of the date hereof. Also includes 2,943 shares of Common Stock owned by Aries Domestic Fund II, LP, which has the same address.

(17) Dr. Rosenwald is the Managing Member of RAQ, LLC, and, accordingly, may be deemed to have beneficial ownership of the Common Stock beneficially owned by RAQ, LLC.

(18) Dr. Rosenwald is Chairman and sole stockholder of PCAM. PCAM is the general partner of the Aries Domestic Fund, L.P. ("Aries Domestic"), and the investment manager of The Aries Master Fund, a Cayman Island Trust ("Aries Master" and, together with Aries Domestic, "Aries"). As a consequence of these relationships, each of Dr. Rosenwald and PCAM may be deemed to share beneficial ownership of the Common Stock beneficially owned by Aries. PCAM's and Dr. Rosenwald's beneficial ownership of Common Stock held by each of Aries Master and Aries Domestic, includes 78,804 shares of Common Stock issuable upon exercise of common and Series B preferred warrants held by Aries, all of which are exercisable within 60 days of the date hereof. Dr. Rosenwald's beneficial ownership also includes (i) 275,986 shares of Common Stock issuable upon exercise of common and Series B preferred warrants held by him (ii) 84,401 shares of Common Stock issuable under Unit Purchase Options, and (iii) 84,401 Class D Warrants issuable under Unit Purchase Options. Dr. Rosenwald disclaims beneficial ownership of any securities issuable upon exercise of warrants granted to employees of Paramount Capital, Inc.

(19) PCAM's and Dr. Rosenwald's beneficial ownership of Common Stock held by Aries includes 78,804 shares of Common Stock issuable upon exercise of common and Series B preferred warrants held by Aries, all of which are exercisable within 60 days of the date hereof.

COMPENSATION AND OTHER INFORMATION
CONCERNING DIRECTORS AND OFFICERS

Executive Compensation

The following Summary Compensation Table sets forth the compensation earned for each of the last three completed fiscal years by (i) the person who served as the Corporation's chief executive officer during the last completed fiscal year, (ii) the four most highly compensated officers of the Corporation other than the chief executive officer who were serving as executive officers at the end of the last completed fiscal year and whose total annual salary and bonus equaled or exceeded \$100,000 and (iii) the executive officer who was not serving as an executive officer at the end of the last fiscal year and whose total annual salary and bonus equaled or exceeded \$100,000, but would have been included under (ii) above if they were an executive officer at the end of such fiscal year (collectively the "Named Officers"), for services rendered in all capacities to the Corporation.

Summary Compensation Table

Name and Principal Position -----	Year ---	Annual Compensation -----		Long Term Compensation Awards -----		
		Salary ----- (\$)	Bonus ----- (\$)	Restricted Stock Award(s) ----- (\$)	Securities Underlying Options/SARs (1) ----- (#)	All Other Compensation ----- (\$)
Robert J. Capetola, Ph.D. President, Chief Executive Officer and Director	2000	\$ 258,500	\$127,000(2,3,4)	--	125,000	--
	1999	\$ 245,700	\$ 63,700(5)	--	312,730	--
	1998	\$ 231,094	\$160,000(6)	--	271,840	--
Cynthia Davis Controller	2000	\$ 101,239	\$ 44,000(3)	--	50,000	--
	1999	\$ 85,000	\$ 37,000(5)	--	88,270	--
	1998	\$ 59,000	--	--	41,861	--
Evan Myrianthopoulos Vice President, Finance	2000	\$ 142,592	\$ 37,000(3)	--	50,000	--
	1999	\$ 110,500	\$ 40,000(5)	--	138,893	--
	1998	\$ 105,000	\$ 20,000(7)	--	30,000	--
Christopher J. Schaber Chief Operating Officer and Executive Vice President	2000	\$ 195,336	\$ 74,500(3)	--	74,500	--
	1999	\$ 159,417	\$ 64,000(5)	--	125,000	--
	1998	\$ 133,333	\$ 12,000	--	93,344	--
Huei Tsai, Ph.D. Vice President, Biometrics	2000	\$ 150,000	\$ 23,000(3)	--	45,000	--
	1999	\$ 147,000	\$ 29,000(5)	--	78,000	--
	1998	\$ 140,000	\$ 5,000	--	93,344	--
Thomas E. Wiswell, MD (8)	2000	\$ 126,667	\$ 10,500(3)	--	--	--
	1999	\$ 204,000	\$ 23,000(5)	--	85,000	--
	1998	\$ 200,000	--	--	93,344	--

(1) Includes options granted in connection with the Corporation's acquisition during 1998 of the previously outstanding minority interest in ATI. Vesting of certain such options (the "Contingent Milestone Options") is contingent upon the consummation of a corporate partnering deal involving any portfolio compound having a total value of at least \$20 million. Also includes options granted in 2000 that vest based on meeting certain performance criteria.

(2) Includes a \$30,000 bonus that was payable upon the attainment of certain corporate milestones which was approved by the Compensation Committee. In March 2000, the Board of Directors accelerated the payment of such bonus.

- (3) Includes bonuses paid in connection with the Corporation's completion of a Phase II clinical trial in accordance with the management letter entered into in March 1998 among the Corporation and certain of its executive officers in connection with the 1998 Merger.
- (4) Includes 1999 bonus paid in 2000.
- (5) Includes 1998 bonus paid in 1999.
- (6) \$60,000 represents 1997 bonus paid in 1998; \$100,000 represents signing bonus relating to Dr. Capetola's prior employment agreement with the Corporation, which was executed in June 1998.
- (7) Represents 1997 bonus paid in 1998.
- (8) Dr. Wiswell's full-time employment with the Corporation as its Executive Vice President of Clinical Research and Development was terminated effective as of July 1, 2000. Dr. Wiswell is currently employed part-time by the Corporation as a Clinical Advisor.

Option Grants In Last Fiscal Year

The following table contains information concerning the stock option grants (including grants of Contingent Milestone Options) made to the Named Officers for the fiscal year ended December 31, 2000. No stock appreciation rights were granted to these individuals during such year.

Name ----- ----	Expiration ----- Date ----	Number of Securities Underlying Options Granted -----	% of Total Options Granted to Employees in Fiscal Year -----	Exercise or Base Price ----- (\$/sh) (1) -----
Robert J. Capetola, Ph.D.	09/14/10	125,000	14.53%	\$5.063
Cynthia Davis	09/14/10	50,000	5.81%	\$5.063
Evan Myriantopoulos	09/14/10	50,000	5.81%	\$5.063
Christopher J. Schaber	09/14/10	75,000	8.66%	\$5.063
Huei Tsai, Ph.D.	09/14/10	45,000	5.23%	\$5.063
Thomas E. Wiswell, MD	--	--	--	--

- (1) The exercise price of options issued by the Corporation may be paid in cash, in shares of Common Stock valued at the fair market value on the exercise date or through a cashless exercise procedure involving a same-day sale of the purchased shares. The Corporation may also finance the exercise of options issued by the Corporation by loaning the optionee sufficient funds to pay the exercise price for the purchased shares.

Aggregate Option Exercises In Last Fiscal Year And Fiscal Year-End Option Values

The following table sets forth information concerning option exercises and option holdings (including Contingent Milestone Options) for the fiscal year ended December 31, 2000, with respect to the Named Officers. No stock appreciation rights were exercised during such year or were outstanding at the end of that year.

Name	Shares Acquired on Exercise (#)	Value Realized	Number of Securities Underlying Unexercised Options at FY-End		Value of Unexercised In The Money Options at FY-End (1)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
Robert J. Capetola, Ph.D.	62,500	\$245,781	668,863	--	\$494,265	--
Cynthia Davis	--	--	--	--	\$249,033	--
Evan Myrianthopoulos	--	--	230,568	--	\$270,914	--
Christopher J. Schaber	73,700	\$680,461	250,344	--	\$171,870	--
Huei Tsai, Ph.D.	31,200	\$180,804	216,344	--	\$159,090	--
Thomas E. Wiswell, MD	77,600	\$765,580	115,844	--	\$66,270	--

(1) Based on the fair market value of the Common Stock at year-end, \$4.22 per share, less the exercise price payable for such shares.

Deductibility of Compensation

The Internal Revenue Code of 1986, as amended, Section 162(m) provides that compensation in excess of \$1 million paid to an executive officer is not deductible unless it is performance based. Base salary does not qualify as performance-based compensation under Section 162(m). The Corporation's policy is to qualify future compensation arrangements to ensure deductibility, except in those limited cases where shareholder value may be maximized by an alternative approach.

Compensation of Directors

Pursuant to the 1998 Plan, non-employee directors of the Corporation are entitled to receive an award of options for the purchase of 20,000 shares of Common Stock upon their election to the Board of Directors of the Corporation and an annual award of options for the purchase of 20,000 shares of Common Stock following each annual meeting of stockholders at which they are reelected provided they have served for at least six months prior to such meeting. Each such option has an exercise price equal to 60% of the fair market value of Common Stock on its date of grant and has a maximum term of 10 years, subject to earlier termination should the optionee cease to serve as a director of the Corporation. Each option is immediately exercisable for all of the option shares. However, the option shares are subject to repurchase by the Corporation, at the exercise price paid per share, in the event of the optionee's termination of service prior to vesting in the shares. Such options vest on the first anniversary of the date of grant. In addition, each of the Corporation's non-employee Directors receives cash compensation in the amount of \$1,500 per quarter, \$1,000 for each meeting of the Board of Directors attended in person and \$500 for each meeting of the Board of Directors attended telephonically. Directors are not precluded from serving the Corporation in any other capacity and receiving compensation therefor.

Employment Agreements

In December 2000, the Compensation Committee recommended to the Board of Directors, and the Board approved, that Dr. Capetola be retained as President and Chief Executive Officer of the Corporation for a four-year period that commenced January 1, 2001. Pursuant to Dr. Capetola's employment agreement with the Corporation (the "Capetola Employment Agreement"), Dr. Capetola is currently entitled to a base salary of \$275,000 per annum and a minimum increase in such base salary of 5% per annum. Dr. Capetola is entitled to a minimum annual bonus equal to 20% of his base salary. Dr. Capetola is also entitled to a discretionary bonus, as determined by the Compensation Committee, to be paid in either cash or equity, upon the completion of any Phase 2 or 3 clinical trials or the receipt of marketing approval with respect to any portfolio compound of the Corporation.

The Corporation has agreed to provide Dr. Capetola with \$2 million in life insurance and long-term disability insurance, subject to a combined premium cap of \$15,000 for the first year of Capetola Employment Agreement, which cap shall be increased by 5% for each successive full year under the Capetola Employment

The Capetola Employment Agreement has a term of four years expiring December 31, 2004. In the event the Capetola Employment Agreement is terminated prior to such date without cause, Dr. Capetola will be entitled to a lump-sum severance payment equal to 15 months of his then current base salary, which will not be subject to setoff for any compensation received by Dr. Capetola from subsequent employment. Dr. Capetola has agreed not to engage in certain activities competitive with the business of the Corporation throughout his employment term and for a period of 15 months following any termination of his employment with the Corporation.

Pursuant to employment agreements with the Corporation executed simultaneously with the closing of the 1998 Merger, each of Christopher J. Schaber, the Corporation's Chief Operating Officer and Executive Vice President of Drug Development and Regulatory Compliance; Cynthia Davis, the Corporation's Controller; and Huei Tsai, Ph.D., the Corporation's Vice President of Biometrics, has been retained for a term of three years ending June 15, 2001, at the following respective base salaries currently in effect: \$210,000; \$110,000; and \$155,000. Mr. Schaber is entitled to an annual tuition reimbursement payment in the amount of \$12,000. Each such officer is entitled to a discretionary year-end cash bonus and a discretionary bonus to be paid in either cash or equity upon the completion of Phase 3 clinical trials or the receipt of marketing approval with respect to any portfolio compound of the Corporation, in each case as determined by the Compensation Committee.

Pursuant to an employment agreement commencing September 11, 2000, Deni M. Zodda, Ph.D., the Corporation's Senior Vice President of Business Development has been retained for a term of three years ending September 10, 2003, at a base salary currently in effect of \$182,000. In addition, Dr. Zodda is entitled to a discretionary year-end cash bonus and a discretionary bonus to be paid in either cash or equity, solely at the discretion of the Compensation Committee. In the event Mr. Schaber's, Dr. Tsai's or Dr. Zodda's employment is terminated by the Corporation without good cause, such officer will be entitled to severance pay equal to six months of his base salary, payable on the Corporation's normal payroll dates, which will be subject to setoff for any compensation received from subsequent employment during the severance period. In addition, if Dr. Zodda's employment with the Corporation is terminated in certain circumstances in connection with a change of control, he will be entitled to severance pay equal to 12 months of his base salary, payable on normal payroll dates, subject to setoff for certain compensation received during the severance period. Mr. Schaber and Dr. Tsai have each agreed not to engage in activities competitive with the business of the Corporation for a period of 18 months following any termination of his employment with the Corporation. Dr. Zodda has agreed not to engage in activities competitive with the business of the Corporation for periods of either 6, 12 or 18 months, depending upon the circumstances, following any termination of his employment with the Corporation.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

During March and April 1999, the Corporation placed with certain investors, in transactions exempt from registration under the Securities Act pursuant to Section 4(2) thereof and Regulation D thereunder (the "1999 Financing"), shares of Common Stock and a newly created class of warrants of the Corporation (the "Class C Warrants") for an aggregate purchase price of \$1,000,000. Investors in the 1999 Financing received, for each \$100,000 invested, 53,191 shares of Common Stock at a purchase price of \$1.88 and 53,191 Class C Warrants, each of which is exercisable for the purchase of a share of Common Stock for an exercise price of \$2.30 at any time prior to the seventh anniversary of the issuance of such warrant. Under certain circumstances, the investors in the 1999 Financing will be entitled to receive additional shares of Common Stock, and to have the exercise price applicable to the Class C Warrants reduced, without the payment of further consideration. The investors in the 1999 Financing included Aries which was, or was affiliated with, a 5%-or-greater beneficial owner of the Common Stock prior to the 1999 Financing. As of April 12, 2001, 56,907 of the Class C Warrants remain unexercised.

In July 1999, Paramount Capital, Inc. ("Paramount"), acted as placement agent in connection with a private placement of \$2,450,000 of Common Stock and Class D Warrants. Paramount received a commission of approximately \$171,500 and 202,479 unit purchase options exercisable at \$1.33 per share for an aggregate of (i) 202,479 shares of Common Stock and (ii) 202,479 Class D Warrants, each exercisable for one share of Common Stock at \$1.33 per share.

In March 2000, Paramount acted as placement agent in connection with a private placement (the "2000 Financing") of approximately \$19 million of Common Stock and Class E Warrants in which the Corporation received approximately \$17.5 million in net proceeds. The Placement Agent received a commission of approximately \$1,320,795 and warrants exercisable at \$8.113 per share for 348,341 shares of Common Stock. Richard G. Power, a Director of the Corporation, invested \$20,000 in the 2000 Financing.

In April 2001, Remy Capital Partners III, LP, an affiliate of Mark S. Siegel, a Director of the Corporation, purchased shares of Common Stock from the Corporation for an aggregate purchase price of \$1,000,000 in a transaction exempt from registration under the Securities Act pursuant to Section 4(2) thereof and Regulation D thereunder.

The Corporation leases its principal executive offices from Huei Tsai, Ph.D., the Vice President of Biometrics of the Corporation. Pursuant to such lease, as amended, the Corporation pays Dr. Tsai base rent equal to \$198,172 per annum (subject to escalation in subsequent years) and is liable for its proportionate share of real estate taxes levied and certain operation and maintenance expenses incurred with respect to the building in which the Corporation's offices are located. The Corporation believes that the terms of its lease with Dr. Tsai are comparable to the terms that would be obtained from an unrelated third party lessor.

In May 2000, the Corporation entered into an agreement with Clinical Data Management, Inc. ("CDM"), to perform duties associated with processing data for clinical trials. CDM is wholly owned by the spouse of the Corporation's President and Chief Executive Officer. Payments made to CDM and its owner for the year ended December 31, 2000, including payments made prior to the agreement, were approximately \$110,700. The Corporation believes that the terms of its agreement with CDM are comparable to the terms that would be obtained from an unrelated third party service provider.

A construction company owned by the spouse of Cynthia Davis, the Corporation's Controller, performed renovations and maintenance on certain premises leased and owned by the Corporation as its principal offices. The aggregate cost of such services for the fiscal year 2000 was approximately \$78,000. The Corporation believes that the terms of these services were comparable to the terms that would have been obtained from an unrelated third party provider.

In October 1996, a predecessor of the Corporation entered into a consulting agreement with The Sage Group pursuant to which The Sage Group was paid a monthly consulting fee of \$7,500 through March 1998. Richard G. Power, a Director of the Corporation, is a partner in The Sage Group. The Corporation's consulting arrangement with The Sage Group was modified in April 1998 to provide for a monthly payment of \$4,000, and to make such agreement terminable at any time upon 30 days' notice by the Corporation. In October 1998, such consulting agreement was further modified to provide that twice the amount of the reduced portion of the consulting fee (i.e., \$3,500 per month commencing with October 1998) would be paid to The Sage Group upon consummation of a corporate partnering transaction. Following the March 2000 private placement, The Sage Group received a payment in the amount of \$52,000 as final payment in lieu of payment following a corporate partnering transaction.

Lindsay A. Rosenwald, MD, is the sole stockholder of PCAM (which in turn is the general partner of Aries Domestic Fund, LP, and The Aries Domestic Fund II, LP, and the investment manager of Aries Master and the Chairman of the Board of Directors and sole stockholder of Paramount. Prior to the 1997 Merger, Dr. Rosenwald was a director of Old Discovery.

Mark C. Rogers, MD, a Director of the Corporation, is the President of Paramount and PCAM.

The Corporation has agreed pursuant to its charter documents to indemnify its directors to the maximum extent permissible under the General Corporation Law of the State of Delaware.

PROPOSAL II

ACTION REGARDING THE SELECTION OF INDEPENDENT AUDITORS

The Board of Directors, acting upon the recommendation of the Audit Committee of the Board, has appointed the firm of Ernst & Young LLP as the Corporation's independent auditors for the fiscal year ending December 31, 2001. Although action by the shareholders in this matter is not required under the laws of the State of Delaware, the Board of Directors believes that it is appropriate to seek shareholder action regarding this appointment in light of the critical role played by independent auditors in maintaining the integrity of the Corporation's financial controls and reporting.

The Board of Directors recommends a vote "FOR" this proposal.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

On December 15, 2000, the Audit Committee of the Corporation's Board of Directors elected to dismiss Richard A. Eisner & Co., LLP ("RAE"), as the Corporation's independent public accountants.

RAE's report on the financial statements of the Corporation for each of the Corporation's two fiscal years ended December 31, 1999, did not contain any adverse opinion or disclaimer of opinion and was not qualified or modified as to uncertainty, audit scope or accounting principles.

During the Corporation's two most recent fiscal years ended December 31, 1999, and through the subsequent interim period through December 15, 2000, to the knowledge of the Corporation's then current Board of Directors, there were no disagreements with RAE on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of RAE, would have caused RAE to make reference to the subject matter of the disagreements in connection with their report with respect to the financial statements of the Corporation.

To the knowledge of the Corporation's then current Board of Directors, during the Corporation's two most recent fiscal years ended December 31, 1999, and through the subsequent interim period through December 15, 2000, there was no disagreement or difference of opinion with RAE regarding any event of the type described in Item 304(a)(1)(iv)(B) of Regulation S-B.

To the Corporation's knowledge, RAE has responded fully to all inquiries of the Corporation's successor accountant, Ernst & Young LLP. In addition, RAE has provided the Corporation with a letter addressed to the SEC, as required by Item 304(a)(3) of Regulation S-B, and such letter has been filed with the SEC.

The Corporation has engaged Ernst & Young LLP as its new independent auditors as of December 21, 2000. Prior to the engagement of Ernst & Young LLP, the Corporation did not consult with such firm regarding the application of accounting principles to a specific completed or contemplated transaction, or any matter that was either the subject of a disagreement or a reportable event. The Corporation also did not consult with Ernst & Young LLP regarding the type of audit opinion which might be rendered on the Corporation's financial statements and no oral or written report was provided by Ernst & Young LLP.

PROPOSAL III

PROPOSAL TO AMEND THE 1998 STOCK INCENTIVE PLAN TO INCREASE THE NUMBER OF AUTHORIZED SHARES

The Amended and Restated 1998 Stock Incentive Plan of the Corporation, as amended (1998 Plan), was adopted by the Board of Directors on March 24, 1998, and was approved by the stockholders on June 16, 1998. The 1998 Plan expires by its own terms on March 24, 2008. The Corporation's stockholders have previously approved amendments to the 1998 Plan increasing the number of shares authorized under the 1998 Plan from 1,406,024 to 2,200,959 shares, effective as of June 28, 1999, and from 2,200,959 to 3,000,000 shares, effective as of on June 16, 2000. The purposes of the 1998 Plan is to provide incentive to employees, consultants, and non-employee directors of the Corporation, to encourage employee and director proprietary interests in the Corporation, to encourage employees to remain in the employ of the Corporation and to attract to the Corporation individuals of experience and ability.

Pursuant to the 1998 Plan, as of April 12, 2001, options to purchase 2,721,580 shares of Common Stock were outstanding at a weighted average price of \$3.69 per share, and 216,400 options had been exercised. As of April 12,

2001, the market value of the Common Stock was \$4.00 per share, based upon the closing price on such date on the Nasdaq SmallCap Market. In addition, there are options to purchase 81,724 shares of Common Stock with a weighted average price of \$0.50 per share, outstanding under Old Discovery's 1996 Stock Option/Stock Issuance Plan and options to purchase 162,890 shares of Common Stock with a weighted average price of \$0.14 outstanding under ATI's 1996 Stock Option/Stock Issuance Plan, all of which have been assumed by the Corporation.

Such options do not confer upon holders thereof any voting or any other rights of a stockholder of the Corporation. The shares of Common Stock issuable upon exercise of the options in accordance with the terms thereof will be fully paid and nonassessable.

Currently, the number of shares authorized for issuance under the 1998 Plan is 3,000,000 shares. As of April 12, 2001, of the 3,000,000 shares of Common Stock authorized for issuance under the 1998 Plan, 62,020 shares remained available for new grants of options to purchase shares.

The purpose of the Amendment is to permit the Board of Directors, the Corporation's Compensation Committee and its management to continue to provide long term, equity based incentives to present and future officers, employees, consultants and non-employee directors. If the Amendment is not approved, the Corporation will have only 62,020 shares available for grant under the 1998 Plan and thereafter will not be able to grant additional options under the 1998 Plan.

The Board of Directors has approved and recommends to the stockholders that they vote "FOR" this proposal to amend the 1998 Plan to increase the number of shares of Common Stock issuable pursuant to the 1998 Plan to 4,150,000 shares.

Description of the 1998 Plan

The principal features of the 1998 Plan are summarized below, but the summary is qualified in its entirety by reference to the 1998 Plan itself. Copies of the 1998 Plan can be obtained by writing to the Corporation's Secretary and Vice President, General Counsel, David L. Lopez, C.P.A., Esq., at 350 South Main Street, Suite 307, Doylestown, Pennsylvania 18901.

Structure

The 1998 Plan includes three separate equity incentive programs: (i) the Discretionary Option Grant Program, (ii) the Stock Issuance Program and (iii) the Automatic Option Grant Program. The principal features of each program are described below.

Administration

The Compensation Committee of the Board of Directors of the Corporation serves as the Plan Administrator with respect to the Discretionary Option Grant and Stock Issuance Programs. However, the Board of Directors may also administer those programs or one or more additional Board committees may be appointed to administer those programs with respect to certain designated classes of individuals in the Corporation's service. The term "Plan Administrator" as used in this summary will mean the Compensation Committee, the Board and any other appointed committee acting within the scope of its administrative authority under the 1998 Stock Incentive Plan. Administration of the Automatic Option Grant Program is self-executing in accordance with the express provisions of such program.

Share Reserve

An aggregate of 1,406,024 shares were initially reserved for issuance under the 1998 Plan. An additional 794,935 shares were reserved for issuance under an amendment to the 1998 Plan approved in 1999 and an additional 799,041 shares were reserved for issuance under an amendment to the 1998 Plan approved in 2000. If approved, an additional 1,150,000 shares will be reserved for issuance under the proposed Amendment. In the event any change is made to the outstanding shares of Common Stock by reason of any recapitalization, stock dividend, stock split, combination of shares, exchange of shares or other change in corporate structure effected without the Corporation's receipt of consideration, appropriate adjustments will be made to the securities issuable (in the aggregate and to each participant) under the 1998 Plan and to each outstanding option.

Shares subject to any outstanding options under the 1998 Plan (including options incorporated from predecessor plans) which expire or otherwise terminate prior to exercise are available for subsequent issuance. Unvested shares

issued under the 1998 Plan and subsequently repurchased by the Corporation pursuant to its repurchase rights under the 1998 Plan will also be available for subsequent issuance.

Eligibility

Officers and employees, non-employee directors and independent consultants and advisors in the service of the Corporation or its parent and subsidiaries (whether now existing or subsequently established) are eligible to participate in the Discretionary Option Grant and Stock Issuance Programs. Only non-employee directors are eligible to participate in the Automatic Option Grant Program.

As of the date of this Proxy Statement, eight executive officers, 29 other employees and six non-employee directors are eligible to participate in the 1998 Plan.

Valuation

The fair market value per share of the Corporation's Common Stock on any relevant date under the 1998 Plan will be the closing selling price per share on that date on the Nasdaq SmallCap Market. On April 12, 2001, the closing selling price per share of Common Stock was \$4.00.

Discretionary Option Grant Program

The options granted under the Discretionary Option Grant Program may be either incentive stock options under the federal tax laws or non-statutory options. Each granted option has an exercise price per share not less than 100% of the fair market value per share of the Corporation's Common Stock on the option grant date, and no granted option has a term in excess of ten years. The shares subject to each option generally vest in a series of installments over a specified period of service measured from the grant date.

Upon cessation of service, the optionee has a limited period of time in which to exercise any outstanding option to the extent exercisable for vested shares. The Plan Administrator has complete discretion to extend the period following the optionee's cessation of service during which his or her outstanding options may be exercised and/or to accelerate the exercisability or vesting of such options in whole or in part. Such discretion may be exercised at any time while the options remain outstanding, whether before or after the optionee's actual cessation of service.

Incentive stock options granted under the Discretionary Option Grant Program may not be assigned or transferred, except by the provisions of the optionee's will or the laws of inheritance following his or her death. Non-statutory options may be assigned or transferred pursuant to the optionee's will or the laws of inheritance and may also be assigned during the optionee's lifetime, in connection with the optionee's estate plan, to members of his or her immediate family or to a trust established exclusively for the benefit of such individuals.

The Plan Administrator has the authority to effect the cancellation of outstanding options under the Discretionary Option Grant Program (including outstanding options under the Predecessor Plans) and to issue replacement options with an exercise price based on the fair market value of the Corporation's Common Stock at the time of the new grant.

Stock Issuance Program

Shares may be issued under the Stock Issuance Program for such valid consideration under the Delaware General Corporation Law as the Plan Administrator deems appropriate, provided the value of such consideration, as determined by the Plan Administrator, is not less than the fair market value of the issued shares on the date of issuance. Shares may also be issued as a bonus for past services.

Shares issued as a bonus for past services will be fully vested upon issuance. All other shares issued under the program will be subject to a vesting schedule tied to the performance of service or the attainment of designated financial or key project milestones.

The Plan Administrator has the sole and exclusive authority, exercisable upon a participant's termination of service, to vest any or all unvested shares of Common Stock at the time held by that participant, to the extent the Plan Administrator determines that such vesting provides an appropriate severance benefit under the circumstances.

Automatic Option Grant Program

Non-employee directors are eligible to receive option grants under the Automatic Option Grant Program of the 1998 Plan. Presently, each individual who first becomes a non-employee director of the Corporation or any of its subsidiaries, whether through election by the stockholders or appointment by the Board, receives, at the time of such

initial election or appointment, an automatic option grant for 20,000 shares of Common Stock. In addition, on the date of each annual stockholders meeting, each individual who is re-elected as a non-employee director is automatically granted at that meeting a stock option to purchase additional shares of Common Stock, provided that such individual has served as a non-employee Board member for at least six months. Under an amendment to the 1998 Plan, which was approved by the stockholders in 2000, the amount of shares that each non-employee director receives as an automatic grant on the date of each stockholders meeting was increased from 10,000 shares to 20,000 shares.

Each option has an exercise price per share equal to 60% of the fair market value per share of Common Stock on the option grant date and a maximum term of ten years measured from the grant date. The option is immediately exercisable for all the option shares, but any purchased shares are subject to repurchase by the Corporation, at the exercise price paid per share, upon the optionee's cessation of Board service prior to vesting in those shares. An amendment to the 1998 Plan, which was approved by the stockholders in 2000, provided that options granted on or after the date of the 1998 annual stockholders meeting will vest on the first anniversary of the date of grant. Prior to such amendment, the 1998 Plan provided that the shares subject to options granted under the Automatic Option Grant Program vest (and the Corporation's repurchase rights lapse) in four successive equal annual installments over the optionee's period of Board service, with the first of such vesting periods beginning six months after the option grant date.

The shares subject to each outstanding automatic option grant will immediately vest should any of the following events occur while the optionee continues in Board service: (i) the optionee's death or permanent disability, (ii) an acquisition of the Corporation by merger or asset sale or (iii) the successful completion of a hostile tender offer for more than 50% of the outstanding voting securities or a change in the majority of the Board occasioned by one or more contested elections for Board membership. Each automatic option grant held by an optionee upon his or her termination of Board service will remain exercisable, for any or all of the option shares in which the optionee is vested at the time of such termination, for up to a 12-month period following such termination date.

Automatic option grants may be assigned by the provisions of the optionee's will or the laws of inheritance following his or her death and may also be assigned during the optionee's lifetime, in connection with the optionee's estate plan, to members of his or her immediate family or to a trust established exclusively for the benefit of such individuals.

General Provisions

Acceleration

In the event that the Corporation is acquired by merger or asset sale, each outstanding option under the Discretionary Option Grant Program which is not to be assumed or replaced by the successor corporation will automatically accelerate in full, and all unvested shares under the Stock Issuance Program will immediately vest, except to the extent the Corporation's repurchase rights with respect to those shares are to be assigned to the successor corporation. The Plan Administrator will have complete discretion to grant one or more options under the Discretionary Option Grant Program which will become fully exercisable for all the option shares in the event those options are assumed in the acquisition and the optionee's service with the Corporation or the acquiring entity is involuntarily terminated or the optionee resigns for good cause within a designated period following such acquisition. The Plan Administrator will have similar discretion to grant options which will become fully exercisable for all the option shares should the optionee's service terminate, whether involuntarily or through a resignation for good reason, within a designated period following a hostile change in control of the Corporation (whether by successful tender offer for more than 50% of the outstanding voting stock or by proxy contest for the election of Board members). The Plan Administrator may also provide for the automatic vesting of any outstanding shares under the Stock Issuance Program upon similar terms and conditions.

The acceleration of vesting in the event of a change in the ownership or control of the Corporation may be seen as an anti-takeover provision and may have the effect of discouraging a merger proposal, a takeover attempt or other efforts to gain control of the Corporation.

Financial Assistance

The Plan Administrator may institute a loan program to assist one or more participants in financing the exercise of outstanding options under the Discretionary Option Grant Program or the purchase of shares under the Stock Issuance Program. The Plan Administrator will determine the terms of any such assistance. However, the

maximum amount of financing provided any participant may not exceed the cash consideration payable for the issued shares plus all applicable taxes incurred in connection with the acquisition of the shares.

Special Tax Election

The Plan Administrator may provide one or more holders of options or unvested shares with the right to have the Corporation withhold a portion of the shares otherwise issuable to such individuals in satisfaction of the tax liability incurred by such individuals in connection with the exercise of those options or the vesting of those shares. Alternatively, the Plan Administrator may allow such individuals to deliver previously acquired shares of the Corporation Common Stock in payment of such tax liability.

Amendment and Termination

The Board of Directors may amend or modify the 1998 Plan in any or all respects whatsoever, subject to any required stockholder approval. The Board may terminate the 1998 Plan at any time, and the 1998 Plan will in all events terminate upon the expiration of its ten-year term measured from the date of its adoption, March 24, 1998, by the Board of Directors.

Tax Aspects

The Federal income tax aspects of ISOs and non-ISOs (collectively "Options") are generally described below. An employee will generally not be taxed at the time of grant or exercise of an ISO, although the excess of the fair market value of the stock over the exercise price on exercise of an ISO will taken into account for alternative minimum tax purposes. If the employee holds the shares acquired upon exercise of an ISO until at least one year after issuance and two years after grant of the Option, the employee will have long term capital gain (or loss) on disposition of the shares based on the difference between the amount realized on the sale or disposition and the exercise price of the Option. If these holding periods are not satisfied, then upon disposition of the shares of Common Stock, the employee will recognize ordinary income equal, in general, to the excess of the fair market value of the shares at the time of exercise over the exercise price of the Option, plus capital gain in respect of any additional appreciation. With respect to a non-ISO, an optionee will not be taxed at the time of grant; however, upon exercise, the optionee will generally recognize compensation income to the extent that the fair market value of the shares of Common Stock exceeds the exercise price of the Option. The Corporation generally will have a compensation deduction to the extent that, and at the time that, an optionee realizes compensation income with respect to an Option. In the case of an ISO, this means that the Corporation ordinarily is not entitled to a compensation deduction.

VOTING PROCEDURES

The presence, in person or by proxy, of at least a majority of the holders of the outstanding shares of Common Stock entitled to vote at the Annual Meeting is necessary to establish a quorum for the transaction of business. Shares represented by proxies pursuant to which votes have been withheld from any nominee for director, or which contain one or more abstentions or broker "non-votes," are counted as present for purposes of determining the presence or absence of a quorum for the Annual Meeting. A "non-vote" occurs when a broker or other nominee holding shares for a beneficial owner votes on one proposal, but does not vote on another proposal because the broker does not have discretionary voting power and has not received instructions from the beneficial owner.

On each matter properly brought before the Annual Meeting, holders of shares of Common Stock will be entitled to one vote for each share of Common Stock held as of the Record Date.

Proposal I. Directors are elected by a plurality of the votes cast, in person or by proxy, at the Annual Meeting. The seven nominees receiving the highest number of affirmative votes of the shares present, in person or represented by proxy, and voting on the election of directors at the Annual Meeting will be elected as directors. Shares represented by all proxies received by the Board of Directors and not so marked as to withhold authority to vote for any individual nominee or for all nominees will be voted (unless one or more nominees are unable to serve) for the election of the nominees. Where the stockholder properly withheld authority to vote for a particular nominee or nominees, such stockholder's shares will not be counted toward such nominee's achievement of a plurality.

Proposal II. The proposal to act on the appointment of the firm of Ernst & Young LLP as the Corporation's independent auditors for the fiscal year ending December 31, 2001, must be approved by the vote of a majority of the votes cast, whether in person or by proxy.

Proposal III. The proposal to approve the Amendment to the 1998 Plan must be approved by the vote of a majority of the votes cast, whether in person or by proxy.

Other Matters. For all other proposals described in this Proxy Statement and submitted to stockholders at the Annual Meeting, the affirmative vote of the majority of holders of the shares of Common Stock present, in person or represented by proxy, and voting on that matter is required for approval.

Abstentions are included in the number of shares present or represented and voting on each matter and, therefore, with respect to votes on a specific proposal, will have the effect of negative votes.

Shares subject to broker "non-votes" are not considered to have been voted for the particular matter and are not counted as present in determining whether a majority of the shares present and entitled to vote on a matter have approved the matter.

If any other matter not discussed in this Proxy Statement should be presented at the Annual Meeting upon which a vote may be properly taken, shares represented by all proxies received by the Board of Directors will be voted with respect thereto in accordance with the judgment of the persons named in the proxies.

INDEPENDENT AUDITORS

The Corporation expects that a representative of Ernst & Young LLP, the Corporation's independent auditors, will attend the Annual Meeting. Such representative will have the opportunity to make a statement, if he or she desires, and will be available to respond to appropriate questions from stockholders.

OTHER MATTERS

The Board of Directors is not aware of any matters which will be brought before the Annual Meeting other than those specifically set forth herein. If any other matter properly comes before the Annual Meeting, it is intended that the persons named in and acting under the enclosed proxy or their substitutes will vote thereon in accordance with their best judgment.

STOCKHOLDER PROPOSALS

Proposals of stockholders intended for inclusion in the Proxy Statement to be furnished to all stockholders entitled to vote at the next annual meeting of stockholders of the Corporation must be received at the Corporation's principal

executive offices not later than January 3, 2002. In order to curtail controversy as to the date on which a proposal was received by the Corporation, it is suggested that proponents submit their proposals by Certified Mail, Return Receipt Requested.

EXPENSES AND SOLICITATION

The cost of solicitation of proxies will be borne by the Corporation. Proxies will be solicited principally through the mails. Further solicitation of proxies from some stockholders may be made by directors, officers and regular employees of the Corporation personally, by telephone, telegraph or special letter. No additional compensation, except for reimbursement of reasonable out-of-pocket expenses will be paid for any such further solicitation. In addition, the Corporation may request banks, brokers and other custodians, nominees and fiduciaries to solicit their customers who have stock of the Corporation registered in the name of a nominee. The Corporation will reimburse such persons for their reasonable out-of-pocket costs.

ANNUAL REPORT ON FORM 10-KSB

Copies of the Corporation's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2000, as filed with the Securities and Exchange Commission, are available to stockholders without charge at www.sec.gov or upon written request addressed to Cynthia Davis, Controller, Discovery Laboratories, Inc., 350 South Main Street, Suite 307, Doylestown, Pennsylvania 18901.

Your cooperation in giving this matter your immediate attention and returning your proxy is appreciated.

By Order of the Board of Directors,

David L. Lopez

David L. Lopez, C.P.A., Esq.
Corporate Secretary

Doylestown, Pennsylvania
May 7, 2001

APPENDIX I

CHARTER AND POWERS OF THE AUDIT COMMITTEE

RESOLVED, that the membership of the audit committee shall consist of at least three independent members of the Board of Directors (as defined under the rules of the Nasdaq), who shall serve at the pleasure of the Board of Directors.

RESOLVED, that the charter and powers of the Audit Committee of the Board of Directors (the "Audit Committee") shall be:

- o Assisting the Board of Directors in the oversight of the maintenance by management of the reliability and integrity of the accounting policies and financial reporting and disclosure practices of the Company;
- o Assisting the Board of Directors in the oversight of the establishment and maintenance by management of processes to assure that an adequate system of internal control is functioning within the Company.
- o Assisting the Board of Directors in the oversight of the establishment and maintenance by management of processes to assure compliance by the Company with all applicable laws, regulations and Company policy;

RESOLVED, that the Audit Committee shall have the following specific powers and duties:

1. Holding such regular meetings as may be necessary and such special meetings as may be called by the Chairman of the Audit Committee or at the request of the independent accountants;
2. Reviewing the performance of the independent accountants and making recommendations of the Board of Directors regarding the appointment or termination of the independent accountants;
3. Ensuring its receipt from the independent accountants of a formal written statement delineating all relationships between the independent accountants and the Company, consistent with Independence Standards Board Standard;
4. Actively engaging in a dialogue with the independent accountants with respect to any disclosed relationships or services that may impact the objectivity and independence of the independent accountants and for taking or recommending that the Board of Directors take, appropriate action to oversee the independence of the outside auditor;
5. Selecting, evaluating and, where appropriate, replacing the independent auditors (or nominating independent auditors) to be proposed for shareholder approval in any proxy statement, which independent auditors shall ultimately be accountable to the Board of Director and the Audit Committee;
6. Conferring with the independent accountants and the internal auditors concerning the scope of their examinations of the books and records of the Company and its subsidiaries; reviewing and approving the independent accountants' annual engagement letter; reviewing and approving the Company's internal annual audit plans and procedures; and authorizing the auditors to perform such supplemental reviews or audits as the Committee may deem desirable;
7. Reviewing with management, the independent accountants' and internal auditors' significant risks and exposures, audit activities and significant audit findings;

8. Reviewing the range and cost of audit and non-audit services performed by the independent accountants;
9. Reviewing the Company's audited annual financial statements and the independent accountants' opinion rendered with respect to such financial statements, including reviewing the nature and extent of any significant changes in accounting principles or the application thereof;
10. Reviewing the adequacy of the Company's systems of internal control;
11. Obtaining from the independent accountants and internal auditors their recommendations regarding internal controls and other matters relating to the accounting procedures and the books and records of the Company and its subsidiaries and reviewing the correction of controls deemed to be deficient;
12. Providing an independent, direct communication between the Board of Directors, internal auditors and independent accountants;
13. Reviewing the adequacy of internal controls and procedures related to executive travel and entertainment;
14. Reviewing the programs and policies of the Company designed to ensure compliance with applicable laws and regulations and monitoring the results of these compliance efforts;
15. Reporting through its Chairman of the Board of Directors following the meetings of the Audit Committee;
16. Reviewing the powers of the Committee annually and reporting and making recommendations to the Board of Directors on these responsibilities;
17. Conducting or authorizing investigations into any matters within the Audit Committee's scope of responsibilities; and
18. Considering such other matters in relation to the financial affairs of the Company and its accounts, and in relation to the internal and external audit of the Company as the Audit Committee may, in its discretion, determine to be advisable.

APPENDIX II

PROXY

Discovery Laboratories, Inc.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned, revoking all prior proxies, hereby appoints Robert J. Capetola, Ph.D., with full power of substitution, as proxy to represent and vote all shares of Common Stock, par value \$.001 per share, of Discovery Laboratories, Inc. (the "Corporation"), which the undersigned would be entitled to vote if personally present at the Annual Meeting of Stockholders of the Corporation to be held on June 15, 2001, at 9:00 a.m. Eastern Daylight Time at the New York Athletic Club at 180 Central Park South, New York, NY 10019, and at all adjournments or postponements thereof, upon matters set forth in the Notice of Annual Meeting of Stockholders and Proxy Statement dated April 27, 2001, a copy of which has been received by the undersigned. Each share of Common Stock is entitled to one vote. The proxies are further authorized to vote, in their discretion, upon such other business as may properly come before the meeting or any adjournments or postponements thereof. Each of Items 1, 2 and 3 is proposed by the Corporation.

PROPOSAL NUMBER 1 - Election of Directors to serve until the next Annual Meeting of Stockholders and until their respective successors have been duly elected and qualified, or until their earlier resignation or removal.

FOR ALL NOMINEES LISTED BELOW (EXCEPT AS MARKED TO THE CONTRARY BELOW): WITHHOLD AUTHORITY TO VOTE FOR ALL NOMINEES LISTED BELOW:

(INSTRUCTIONS: TO WITHHOLD AUTHORITY TO VOTE FOR ANY INDIVIDUAL NOMINEE, STRIKE A LINE THROUGH THE NOMINEE'S NAME IN THE LIST BELOW.)

Nominees: Robert J. Capetola, Ph.D.; Max Link, Ph.D.; Herbert H. McDade, Jr.; Richard G. Power; Mark C. Rogers, MD; Marvin E. Rosenthale, Ph.D.; and Mark S. Siegel.

PROPOSAL NUMBER 2 - Approval of Ernst & Young LLP as the Corporation's independent auditors for the fiscal year ending December 31, 2001.

FOR AGAINST ABSTAIN

PROPOSAL NUMBER 3 - Consideration and approval of an amendment to the Corporation's 1998 Amended and Restated Stock Incentive Plan (the "1998 Plan") that increases the number of shares of Common Stock available for issuance under the 1998 Plan from 3,000,000 to 4,150,000 shares.

FOR AGAINST ABSTAIN

(continued on reverse side)

(continued)

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED BY THE UNDERSIGNED STOCKHOLDER(S). IF NO DIRECTION IS GIVEN, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE NOMINEES SET FORTH ABOVE AS DIRECTORS, FOR THE APPROVAL OF ERNST & YOUNG LLP AS THE CORPORATION'S INDEPENDENT AUDITORS, AND FOR THE APPROVAL OF THE AMENDMENT TO THE 1998 PLAN.

The undersigned hereby acknowledges receipt of the Notice of Annual Meeting, Proxy Statement and Annual Report of Discovery Laboratories, Inc.

Signature of Stockholder Date

Signature of Stockholder Date

PLEASE SIGN THIS PROXY EXACTLY AS YOUR NAME OR NAMES APPEAR ON THE BOOKS OF THE CORPORATION. JOINT OWNERS SHOULD EACH SIGN PERSONALLY. ATTORNEY, EXECUTOR, ADMINISTRATOR, TRUSTEE OR GUARDIAN MUST GIVE FULL TITLE AS SUCH. IF A CORPORATION OR PARTNERSHIP, THE SIGNATURE SHOULD BE THAT OF AN AUTHORIZED PERSON WHO SHOULD STATE HIS OR HER TITLE.

Please Date, Sign and Mail in the Enclosed Reply Envelope.