

OMB Number:	3235-0059
Expires:	February 28, 2006
Estimated average burden hours per response	12.75

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

SCHEDULE 14A

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 §240.14a-12

Stemcells, Inc.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- 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:

2) Aggregate number of securities to which transaction applies:

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

4) Proposed maximum aggregate value of transaction:

5) Total fee paid:

Fee paid previously with preliminary materials.

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

1) Amount Previously Paid:

2) Form, Schedule or Registration Statement No.:

3) Filing Party:

4) Date Filed:

TABLE OF CONTENTS

[NOTICE OF ANNUAL MEETING OF STOCKHOLDERS](#)

[PROXY STATEMENT](#)

[QUORUM, REQUIRED VOTES, AND METHOD OF TABULATION](#)

[SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS](#)

[INFORMATION CONCERNING THE BOARD AND ITS COMMITTEES](#)

[EXECUTIVE OFFICERS](#)

[COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION](#)

[CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS](#)

[EXECUTIVE COMPENSATION](#)

[EMPLOYMENT AND SEVERANCE AGREEMENTS](#)

[REPORT OF THE AUDIT COMMITTEE](#)

[REPORT OF THE COMPENSATION AND STOCK OPTION COMMITTEE](#)

[Compensation Philosophy for Executive Officers](#)

[PROPOSAL NUMBER 1 ELECTION OF DIRECTORS](#)

[NOMINEES FOR ELECTION AS CLASS III DIRECTORS — TERMS EXPIRE 2006](#)

[INCUMBENT CLASS I DIRECTORS — TERMS EXPIRE 2007](#)

[INCUMBENT CLASS II DIRECTORS — TERM EXPIRES 2008](#)

[PROPOSAL NUMBER 2 Ratification of Selection of Independent Public Accountants](#)

[PROPOSAL NUMBER 3 Adoption of the 2006 Equity Incentive Plan](#)

[OTHER INFORMATION](#)

[Accounting Matters](#)

[Stockholder Proposals](#)

[Stockholder Nominations of Directors](#)

[Form 10 -K](#)

[Appendix A](#)

STEMCELLS, INC.

3155 Porter Drive
Palo Alto, CA 94304

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on June 21, 2006**

To the Stockholders of
STEMCELLS, INC.

Notice is hereby given that the Annual Meeting of Stockholders of StemCells, Inc. ("StemCells" or the "company") will be held on June 21st, 2006 at 2 P.M. at 3155 Porter Drive, Palo Alto, CA 94304 for the following purposes:

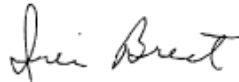
1. To elect Class III directors to serve until the 2009 Annual Meeting of Stockholders;
2. To consider and vote upon a proposal to ratify the selection of Grant Thornton LLP as independent public accountants for the company for the fiscal year ending December 31, 2006;
3. To consider and vote upon a proposal to adopt the 2006 Equity Incentive Plan as proposed;
4. To transact any and all other business that may properly come before the meeting.

The Board of Directors has fixed the close of business on April 26, 2006 as the record date for determining those Stockholders who are entitled to notice of and to vote at the meeting. The stock transfer books will not be closed between the record date and the date of the meeting.

Representation of at least a majority of all outstanding shares of Common Stock of StemCells is required to constitute a quorum. Accordingly, it is important that your shares be represented at the meeting. **WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE SIGN AND DATE THE ENCLOSED PROXY AND RETURN IT PROMPTLY IN THE ENCLOSED ENVELOPE.** Your proxy may be revoked at any time prior to the time it is voted.

Please read the proxy material carefully. Your vote is important, and the company appreciates your cooperation in considering and acting on the matters presented.

By Order of the Board of Directors,



Iris Brest
Secretary

April 27, 2006
Palo Alto, California

PROXY STATEMENT
ANNUAL MEETING OF STOCKHOLDERS
OF
STEMCELLS, INC.

The enclosed form of proxy is solicited on behalf of the Board of Directors of StemCells, Inc. (the “company”) for use at the Annual Meeting of Stockholders (the “Annual Meeting”) to be held on June 21, 2006 at 2 P.M. at the company’s headquarters at 3155 Porter Drive, Palo Alto, California 94304. The cost of solicitation of proxies will be borne by the company. Directors, officers and employees of the company may solicit proxies by telephone, facsimile or in person for no additional compensation. The company will reimburse banks, brokerage firms, and other custodians, nominees and fiduciaries for reasonable expenses incurred by them in sending proxy materials to the beneficial owners of shares.

The Board has fixed the close of business on April 26, 2006 as the record date for determining stockholders entitled to notice of and to vote at the Annual Meeting or any adjournment thereof. There were 77,733,866 shares of our Common Stock, \$.01 par value (the “Common Stock”), outstanding on April 7, 2006, each of which is entitled to one vote for each share on the matters to be voted upon.

Shares of our Common Stock represented by proxies in the form enclosed that are properly executed and returned to us and not revoked will be voted as specified therein by the stockholder. In the absence of contrary instructions, or in instances where no specification is made, the shares will be voted FOR the election as directors of the nominees as described herein under “Proposal Number 1 — Election of Directors,” FOR ratification of the selection of accountants as described herein under “Proposal Number 2 — Ratification of Selection of Independent Public Accountants,” FOR adoption of the proposed 2006 Equity Incentive Plan as described herein under “Proposal 3 — Adoption of the 2006 Equity Incentive Plan,” and in the discretion of the named proxies, as to any other matter that may properly come before the Annual Meeting. Any stockholder signing and delivering a proxy may revoke it at any time before it is voted by delivering to the Secretary of the company a written revocation or a duly executed proxy bearing a date later than the date of the proxy being revoked. Any stockholder attending the Annual Meeting in person may revoke his or her proxy and vote his or her shares at the Annual Meeting.

A copy of the company’s Annual Report to Stockholders for the fiscal year ended December 31, 2005 will be mailed, along with this Proxy Statement, on or about May 7, 2006 to all stockholders entitled to vote at the Annual Meeting.

QUORUM, REQUIRED VOTES, AND METHOD OF TABULATION

Consistent with Delaware law and under the company’s Amended and Restated By-laws, a majority of the shares entitled to be cast on a particular matter, present in person or represented by proxy, constitutes a quorum as to such matter. The company will appoint election inspectors for the meeting to count votes cast by proxy or in person at the Annual Meeting.

Election of directors by stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote at the election that are present in person or represented by proxy. The approval of the proposals to ratify the selection of accountants and to adopt the company’s 2006 Equity Incentive Plan each requires a majority of the votes properly cast to be affirmative. The election inspectors will count shares represented by proxies that withhold authority to vote for a nominee for election as a director or that reflect abstentions and “broker non-votes” (i.e., shares represented at the meeting held by brokers or nominees as to which (i) instructions have not been received from the beneficial owners or persons entitled to vote and (ii) the broker or nominee does not have discretionary voting power on a particular matter) only as shares that are present and entitled to vote on the matter for purposes of determining the presence of a quorum, but neither abstentions nor broker non-votes have any effect on the outcome of voting on the election of directors or the selection of accountants.

Management does not know of any matters to be presented at this Annual Meeting other than those set forth in this Proxy Statement and in the Notice accompanying this Proxy Statement. If other matters should properly come

before the meeting, the proxy holders will vote such matters in their discretion. Any stockholder has the right to revoke his or her proxy at any time before it is voted.

SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The following table sets forth certain information regarding the beneficial ownership of our Common Stock as of April 7, 2006 by (i) each person known by us to be the beneficial owner of more than 5% of our outstanding Common Stock, (ii) each director and nominee for director, (iii) each executive officer named in the Summary Compensation Table and (iv) all executive officers and directors of the company as a group. Except as otherwise indicated, we believe that the beneficial owners of the Common Stock listed below, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable, and that there are no other affiliations among the stockholders listed in the table.

Name and Address of Beneficial Owner*	Shares Beneficially Owned**	Percentage of Class Beneficially Owned***
Eric H. Bjerkholt(1)	23,333	***
Ricardo Levy(2)	82,165	***
Martin McGlynn(3)	947,397	1.1%
Roger M. Perlmutter(4)	98,503	***
John J. Schwartz(5)	260,958	***
Irving Weissman(6)	1,782,465	2.1%
Judi Lum(7)		***
Ann Tsukamoto(8)	355,009	***
Rodney K.B. Young(9)	601	***
All directors and executive officers as a group	3,549,830	4.2%

- * The address of all persons listed in the table is c/o StemCells, Inc., 3155 Porter Drive, Palo Alto, California 94304.
- ** All numbers are based on information obtained by questionnaire or filings on Forms 13D or 13G received by the company.
- *** Less than 1%
- (1) Includes 23,333 shares issuable upon exercise of stock options exercisable within 60 days.
- (2) Includes 82,165 shares issuable upon exercise of stock options exercisable within 60 days.
- (3) Includes 928,125 shares issuable upon exercise of stock options exercisable within 60 days. Includes 19,272 shares in 401(k) plan.
- (4) Includes 98,503 shares issuable upon exercise of stock options exercisable within 60 days.
- (5) Includes 260,958 shares issuable upon exercise of stock options exercisable within 60 days.
- (6) Includes 675,292 shares issuable upon exercise of stock options exercisable within 60 days. Includes 14,511 shares in trust for Dr. Weissman’s children as to which he disclaims beneficial ownership.
- (7) Ms. Lum, former Chief Financial Officer and Vice President, Finance, was no longer in the company’s employ at December 31, 2005, and no longer held stock or options at that date.
- (8) Includes 305,437 shares issuable upon exercise of stock options exercisable within 60 days. Includes 22,738 shares included in Dr. Tsukamoto’s 401(k) plan. Includes a total of 26,834 shares held in trusts for the benefit of Dr. Tsukamoto and her family members, including 4,000 shares owned by Dr. Tsukamoto’s parents as to which she disclaims beneficial ownership.
- (9) Includes 601 shares in 401(k) plan.

INFORMATION CONCERNING THE BOARD AND ITS COMMITTEES

During 2005, the Board of Directors was composed of Messrs. McGlynn and Bjerkholt and Drs. Levy, Perlmutter, Schwartz and Weissman for the entire year. The independent members of the Board, as defined by NASD rules, are Mr. Bjerkholt and Drs. Levy, Perlmutter and Schwartz. During 2005, the Board had three standing committees — the Compensation and Stock Option Committee (the “Compensation Committee”), the Corporate Governance and Nominating Committee (the “Corporate Governance Committee”) and the Audit Committee — as well as the Single Member Committee established under the company’s 2001 and 2004 Equity Incentive Plans. All members of the Compensation Committee, the Audit Committee, and the Corporate Governance Committee are, and are required by the charters of the respective committees to be, independent as defined by NASD rules.

The Corporate Governance Committee operates pursuant to a written charter, a copy of which is available through the company’s website at www.stemcellsinc.com. It is composed of Drs. Levy, Perlmutter and Schwartz, and held one meeting in 2005. The Corporate Governance Committee oversees nominations to the Board and considers the experience, ability and character of potential nominees to serve as directors, as well as particular skills or knowledge that may be desirable in light of the company’s position at any time. At least one member of the Board must be a “financial expert” (as defined in Securities and Exchange Commission (“SEC”) and NASD rules). The Corporate Governance Committee may identify potential candidates through any reliable means available, including without limitation identification by a search firm and recommendations of past or current members of the Board from their knowledge of the industry and of the company. Potential candidates recommended by security holders will be considered as provided in the company’s Policy Regarding Shareholder Candidates for Nomination as a Director, which sets forth the procedures and conditions for such recommendations. This Policy is also available through the company’s website (www.stemcellsinc.com).

The Compensation Committee, which is composed of Dr. Schwartz and Mr. Bjerkholt, held two meetings in 2005. The Compensation Committee makes recommendations to the Board and the company’s management concerning salaries in general, determines executive compensation and, except to the extent that such decisions have been delegated to and made by the Single Member Committee, approves incentive compensation for company employees and consultants. The Compensation Committee acts pursuant to a charter which is available through the company’s website at www.stemcellsinc.com.

The Audit Committee is composed of Mr. Bjerkholt and Drs. Schwartz and Levy. The Audit Committee held five meetings during 2005. The Committee acts pursuant to a charter which was included as Appendix B to the company’s Proxy Statement for the 2004 Annual Meeting of Stockholders, and which is also available through the company’s website at www.stemcellsinc.com. The primary function of the Audit Committee is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing financial reports and other financial information provided by the company to any governmental body or the public, the company’s systems of internal controls regarding finance, accounting, legal compliance and ethics that management and the Board have established, and the company’s auditing, accounting and financial processes generally. The Audit Committee meets quarterly, and at such other times as it finds it necessary, recommends to the Board of Directors the appointment of a firm of independent auditors to audit the financial statements of the company and meets with such personnel of the company to review the scope and the results of the annual audit, the amount of audit fees, the company’s internal accounting controls, the company’s financial statements contained in the company’s Annual Report to Stockholders and other related matters. Each of the members of the Audit Committee is independent, and the Board has determined that Mr. Bjerkholt is an “audit committee financial expert,” as defined in SEC and NASD rules.

Stockholders who wish to communicate with the Board of Directors or with a particular director may send a letter to the Secretary of the company at StemCells, Inc., 3155 Porter Drive, Palo Alto, California 94304. Any communication should clearly specify that it is intended to be made to the entire Board of Directors or to one or more particular director(s). The Secretary of the company will review all such correspondence and forward to the Board of Directors a summary of all such correspondence and copies of all correspondence that, in the opinion of the Secretary, deals with the functions of the Board of Directors or committees thereof or that she otherwise determines requires their attention. The Secretary maintains a log of all correspondence received by the company that is addressed to members of the Board of Directors, and any Director may at any time review and request copies of any such correspondence.

Concerns relating to accounting, internal controls or auditing matters will immediately be brought to the attention of the Chairman of the Audit Committee and handled in accordance with established procedures, which are set out in the Audit Committee's Policy on Receipt, Retention and Treatment of Complaints Regarding Accounting, Internal Controls and Auditing Matters. A copy of the Policy is available on the company's website, www.stemcellsinc.com.

The company does not have a policy on director attendance at Annual Meetings of shareholders. At the 2005 Annual Meeting, Director Martin McGlynn, President and Chief Executive Officer of the company, was present and presided.

Prior to September 20, 2004, non-employee directors received an annual retainer of \$18,000 (\$35,000 for the Chairman), payable quarterly, in addition to \$1,500 for each Board meeting attended (\$500 for each meeting attended by telephone) and \$500 for each Committee meeting attended if not contemporaneous with a Board meeting. In addition, upon election, each such director also received an initial option to purchase 20,000 shares of our Common Stock, and upon re-election after their initial three-year term, each such director received an additional option to purchase 15,000 shares of our Common Stock. Each of these options was exercisable at the fair market value of the Common Stock at the time of grant, and the shares vested in equal portions over three years on the anniversaries of the respective grant dates. Effective September 20, 2004, non-employee directors receive quarterly retainers of \$4,500 (\$8,750 for the Chairman); the chairs of the standing committees receive quarterly stipends of \$1,000 (Audit Committee) or \$500 (Compensation and Corporate Governance Committees). Non-employee directors also receive \$1,500 for each Board meeting, and \$1,000 for each Standing Committee meeting, attended in person or by videoconference (\$500 for each meeting attended by telephone). All dollar amounts are paid in cash. Non-employee directors now receive an initial option of 20,000 shares at market value, vesting ratably over three years, and an option for 10,000 shares on each anniversary of their appointments, vesting one year after issuance, each exercisable at the fair market value of the stock on the date of the respective grant. Directors are reimbursed for their expenses in attending meetings of the Board of Directors and meetings of committees of the Board of Directors.

The Board of Directors of StemCells held four regular and three special meetings during the fiscal year ended December 31, 2005; a meeting of the outside directors without the Chief Executive Officer present was held at each of the regular meetings of the Board. Each of the Directors attended more than 75% of the meetings of the Board of Directors and of the committees on which they served.

EXECUTIVE OFFICERS

The current executive officers of the company who are not also directors of the company are:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Ann Tsukamoto, Ph.D.	52	Vice President, Research and Development
Rodney K.B. Young	43	Chief Financial Officer and Vice President, Finance

Ann Tsukamoto, Ph.D., joined the company in November 1997 as Senior Director, Scientific Operations, and was appointed Vice President, Scientific Operations in June 1998 and Vice President, Research and Development in February 2002. From 1989 until she joined StemCells, Dr. Tsukamoto was employed at SyStemix, Inc., where she served in various research capacities before transitioning to the position of Director of Clinical Science. At SyStemix, Inc., Dr. Tsukamoto assisted in the launch of its clinical research program for the hematopoietic stem cell. She received her Ph.D. degree from the University of California, Los Angeles and did postdoctoral research with Dr. Harold Varmus at the University of California, San Francisco. Dr. Tsukamoto is an inventor on six issued U.S. Patents related to the human hematopoietic stem cell.

Rodney K.B. Young joined the company in September 2005 as Chief Financial Officer and Vice President, Finance. From 2003 to 2005, Mr. Young was Chief Financial Officer and a director of Extropy Pharmaceuticals, Inc., a private biopharmaceutical company focused on developing drugs for pediatric indications. From 2000 to 2002, Mr. Young was Managing Director, Healthcare Corporate Finance, and head of healthcare investment banking for Europe at SG Cowen Securities Corp. From 1999 to 2000, Mr. Young was Executive Director, Global Mergers & Acquisitions and head of the healthcare mergers & acquisition team for Europe at Lehman Brothers Inc.

From 1989 to 1999, Mr. Young was an investment banker in the Global Healthcare group at Lehman Brothers Inc. Mr. Young received both his BA and MBA degrees from the University of Chicago.

Martin McGlynn, President and Chief Executive Officer of the company, is its other executive officer; Mr. McGlynn is a member of the Board of Directors.

All executive officers of the company are elected annually and serve at the discretion of the Board of Directors.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During 2005, none of our executive officers served on the board of directors of any entities that had one or more executive officers serve on our Compensation Committee. No current or past executive officers or employees of the company serve on our Compensation Committee. The following directors served on the Compensation Committee in 2005: Dr. Schwartz and Mr. Bjerkholt.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Dr. Weissman, a member of the Board of Directors, was retained in September 1997 to serve as a consultant to us. Pursuant to his Consulting Agreement, Dr. Weissman provides consulting services to us and serves on our Scientific Advisory Board. In return, we pay Dr. Weissman \$50,000 per year for his services and granted him an option to purchase 500,000 shares of Common Stock for \$5.25 per share, of which 31,250 shares vested at the date of grant. Originally, the remainder of the option would have vested upon the occurrence of certain events, but we amended Dr. Weissman's option on October 27, 2000 so that the shares vested over the eight year period from the original grant date. The option was fully vested as of September 25, 2005, remains exercisable, and has been expensed in full. Based on the fair value of this option (which was determined using the Black-Scholes method) and its vesting schedule, we recorded a total expense of \$1,262,443. We also agreed to nominate Dr. Weissman for a position on the Board of Directors, and he agreed to serve if elected. Since October 1, 2000, he has been compensated for this service in the same manner and amount as other non-employee members of the Board. The Consulting Agreement contains confidentiality, non-competition, and assignment of invention provisions and is for a term of fifteen years, subject to earlier termination by either party. From October 1, 2002 through January 1, 2004, we made the consulting payments in options exercisable at \$0.10 per share, the number of shares being determined by dividing \$12,500.00 by the difference between ten cents and the average of the closing price of our common stock on each of the twenty trading days preceding the date on which payment was due. As a result of action taken by the Board of Directors on March 11, 2004, Dr. Weissman's consulting fee has since then been, and will continue to be, paid in cash.

In April 2000, we sold 750 shares of our 6% cumulative convertible preferred stock plus a warrant to purchase 37,500 shares (subject to adjustment in number, exercise price and duration) of our Common Stock to each of Dr. Weissman and Mr. Mark Levin, also a member of the Board at the time, for \$750,000, for a total of \$1,500,000, on terms more favorable to us than we were able to obtain from outside investors. The shares were convertible at the option of the holders into common stock at the initial conversion price of \$3.77 per share (based on the face value of the preferred shares), subject to adjustment upon the occurrence of certain equity transactions. We valued the beneficial conversion feature reflecting the April 13, 2000 commitment date and the most beneficial per share discount available to the preferred shareholders at \$481,000; we treated that amount as a deemed dividend as of the commitment date. The conversion price was reduced a number of times as a result of equity transactions, as provided in the terms of the preferred shares. On June 7, 2002, Mr. Levin converted his 750 shares of 6% cumulative convertible preferred stock plus accumulated dividends, at an effective conversion price of \$1.94 per share for 439,442 shares of common stock. On October 4, 2002, the remaining 750 shares together with accumulated dividends, which were held by Dr. Weissman, converted automatically at the then-effective conversion price of \$1.07 to 812,802 shares of common stock. On March 10, 2005, Mr. Levin exercised his warrant, which then covered 72,252 shares at the adjusted exercise price of \$3.42 per share, for cash in the amount of \$247,102. On May 27, 2005, Dr. Weissman exercised his warrant, also covering 72,252 shares at the adjusted exercise price of \$3.42 per share, in a cashless exchange in which he received 10,784 shares.

Dr. Weissman is a member of the Board of Directors and co-chairman of the Scientific Advisory Board of Cellerant Therapeutics, Inc., a privately-owned biotechnology company that was a tenant in the building in which we are located. (Cellerant was formerly known as Celtrans, LLC, and Dr. Weissman was at one time its interim Chief Executive Officer and a member of its Board of Managers.) We have also provided Cellerant use of part of our animal facility and access to our irradiator under space-sharing and other agreements. The last of these agreements expires as of June 30, 2006.

EXECUTIVE COMPENSATION

The following table sets forth the compensation paid by us to our Chief Executive Officer, our Vice President, Research and Development, and our current and former Chief Financial Officers during the fiscal years ended December 31, 2005, 2004, and 2003. No other people served as executive officers during 2005.

Summary Compensation Table

Name and Principal Position	Year	Annual Compensation			Long Term Compensation Awards		All Other Compensation (\$)
		Salary (\$)	Bonus (\$)	Other Annual Compensation (\$)	Restricted Stock Awards (\$)	Securities Underlying Options (#)	
Martin McGlynn	2005	324,000	96,390(1)		—		210,406(5)
President and Chief Executive Officer	2004	310,000	113,101(2)		—	350,000	209,407(6)
	2003	272,250	71,500(3)	30,000(4)	—	300,000	205,935(7)
Ann Tsukamoto, Ph.D.	2005	250,000	53,125(1)		—		9,174(8)
VP, Research and Development	2004	225,000	58,636(2)		—	225,000	9,180(8)
	2003	190,448	30,010(3)	15,000(4)	—	—	4,974(8)
Rodney K.B. Young Chief Financial Officer and Vice President, Finance (9)	2005	75,962	16,970(1)	—	—		2,279(10)
Judi Lum	2005	219,829(12)	24,368(13)				4,660(14)
Chief Financial Officer and Vice President, Finance(11)	2004	28,942	10,000(15)	—	—		1,168(14)

- (1) Awarded by the Board in February 2006 for performance goals met in 2005.
- (2) Awarded by the Board in February and March 2005 for performance goals met in 2004.
- (3) Awarded by the Board in December 2003 for services rendered in 2003, but not paid until January 2004.
- (4) Special payment awarded by the Board in December 2003 for services rendered in 2003, but not paid until January 2004.
- (5) Represents housing allowance of \$201,406, and \$9,000 of fair market value of the company matching contributions of Common Stock to Mr. McGlynn's account in our 401(k) Plan.
- (6) Represents housing allowance of \$201,407, and \$8,000 of fair market value of the company matching contributions of Common Stock to Mr. McGlynn's account in our 401(k) Plan.
- (7) Represents housing allowance of \$201,406, and \$4,529 of fair market value of the company matching contributions of Common Stock to Mr. McGlynn's account in our 401(k) Plan.
- (8) Represents \$7,994, \$8,000, and \$3,794 of fair market value of the company matching contributions of Common Stock to Dr. Tsukamoto's account in our 401(k) Plan for the years 2005, 2004, and 2003 respectively, plus \$1,180 paid by the company for term life insurance for Dr. Tsukamoto in each such year.
- (9) Mr. Young became Chief Financial Officer and Vice President, Finance, effective September 6, 2005.
- (10) Represents the fair market value of the company matching contributions of Common Stock to Mr. Young's account in our 401(k) Plan for the year 2005.

[Table of Contents](#)

- (11) Ms. Lum served as Chief Financial Officer and Vice President, Finance, from November 8, 2004 through September 5, 2005.
- (12) Includes \$64,500 paid to Ms. Lum as a consultant in 2005 after her resignation from the position of Chief Financial Officer and Vice President, Finance.
- (13) Awarded by the Board in February 2006 for performance goals met in 2005, pro-rated for Ms. Lum’s tenure as Chief Financial Officer and Vice President, Finance during 2005, pursuant to agreement.
- (14) Represents the fair market value of the company matching contributions of Common Stock to Ms. Lum’s account in our 401(k) Plan for the years 2004 and 2005.
- (15) Sign-on bonus provided to Ms. Lum in accordance with terms of offer of employment.

The following table provides information on option grants in 2005 to the named executive officers.

Name	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term(3)	
	Number of Securities Underlying Options Granted	Percent of Total Options Granted to Employees in Fiscal Year(1)	Exercise of Base Price (\$/Share) (2)	Expiration Date	5%	10%
					(\$)	(\$)
Martin McGlynn	—	0				
Judi Lum	—	0				
Ann Tsukamoto, Ph.D.	—	0				
Rodney K.B. Young	450,000	48%	\$ 5.43	9/06/2015	1,536,704	3,894,310

- (1) The company granted options covering 935,000 shares of Common Stock to employees in the fiscal year ended December 31, 2005.
- (2) The exercise price may be paid by delivery of already-owned shares and tax withholding obligations related to exercise may be paid by offset of the underlying shares, subject to certain conditions.
- (3) As required by the Commission’s rules on executive compensation disclosure, the company has presented option values based on arbitrary growth rates, and this disclosure is not intended to forecast future appreciation, if any, in our stock price.

The following table provides information about option exercises in 2005 by the named executive officers and the value of such officers’ unexercised options at December 31, 2005.

Name	Shares Acquired on Exercise (#)	Value Realized (\$)	Number of Securities Underlying Unexercised Options at Fiscal Year End (1) (#)		Value of Unexercised in-the-Money Options at Fiscal Year End (\$) Exercisable/Unexercisable (2)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
Martin McGlynn	0	—	844,791	330,209	1,121,590	683,635
Judi Lum(3)	106,250	\$ 129,005	0	0	0	0
Ann Tsukamoto, Ph.D.	0	—	271,062	167,188	308,206	332,501
Rodney K.B. Young	0	—	0	450,000	0	0

- (1) December 31, 2005.
- (2) The closing price of the company’s Common Stock on December 30, 2005 (the last trading day of 2005) on the NASDAQ National Market System was \$3.45. The numbers shown reflect the value of options accumulated over all years of employment.
- (3) At the time of exercise, Ms. Lum was no longer an executive officer or employee of the company.

EMPLOYMENT AND SEVERANCE AGREEMENTS

Martin McGlynn joined the company as President and Chief Executive Officer on January 15, 2001. Under the terms of an agreement between Mr. McGlynn and the company, Mr. McGlynn is entitled to an annual base salary of \$275,000 per year, reviewable annually by the Board of Directors, and a bonus, in the Board's sole discretion, of up to 25% of his base salary. In December 2003, the Board set Mr. McGlynn's target bonus at 35% effective January 1, 2004. Mr. McGlynn was granted an option to purchase 400,000 shares of our Common Stock with an exercise price equal to the fair market value of the Common Stock on the date of his employment, one fourth to vest on the first anniversary of his employment and the remaining three-fourths to vest in equal monthly installments during his second through fourth years of employment. The agreement provides that the Board may, in its sole discretion, grant Mr. McGlynn a bonus option to purchase up to an additional 25,000 shares. The vesting under the option is subject to acceleration in the event of certain changes of control. We also agreed to pay Mr. McGlynn a \$50,000 relocation bonus and to reimburse him for relocation expenses, and have done so. The agreement with Mr. McGlynn provides that if his employment is terminated by us without cause or by Mr. McGlynn for good reason, he will be entitled to severance payments equal to one year's base salary and he will receive healthcare benefits under our plans for one year after termination. If Mr. McGlynn's employment is terminated as a result of his disability, he will receive up to six months' base salary. By virtue of an amendment to the agreement made in April, 2004, if a change in control or similar event occurs and is followed by a material change in his duties, or if we terminate his employment without cause within twelve months following such an event, he will be entitled to severance payments equal to a proportional part of his target bonus plus two times his base salary and the reasonably projected cost of continuing his healthcare benefits for two years plus a cash "gross up" to reflect the reasonably projected tax consequences of the healthcare-related payment. If we terminate Mr. McGlynn's employment for cause or if he resigns, he will not be entitled to any severance or other benefits.

Dr. Ann Tsukamoto, Ph.D., joined the company in November 1997 as Senior Director, Scientific Operations, was appointed Vice President, Scientific Operations in June 1998, and Vice President, Research and Development in February 2002. Under her employment agreement, the company provides Dr. Tsukamoto with \$750,000 of term life insurance during her employment. Dr. Tsukamoto's base salary is no longer controlled by a formal agreement. In December 2003, the Board set Dr. Tsukamoto's target bonus at 25% effective January 1, 2004. Any bonus is in the Board's sole discretion. Our agreement with Dr. Tsukamoto, as amended in July 2000, provides that if her employment is terminated by us without cause at any time, she will be entitled to severance payments of current salary and benefits continuation under COBRA for a period of twelve months after the effective date of termination and to accelerated vesting of time-based options granted under our 1992 Equity Incentive Plan. If we terminate Dr. Tsukamoto's employment for cause or if she resigns, she will not be entitled to any severance or other benefits.

Rodney K.B. Young joined the company in September 2005 as Chief Financial Officer and Vice President, Finance. Under the terms of his agreement with the company, Mr. Young's base salary is \$250,000 per year, with a target cash bonus of up to twenty-five percent of base salary. Any bonus is in the Board's sole discretion. Mr. Young was also granted options to purchase 450,000 shares of the company's common stock. The options will vest over 48 months, with one-quarter of the shares vesting, subject to his continued employment by the company, on the first anniversary of the date on which Mr. Young's employment began and the remaining shares vesting at the rate of 1/48th per month on the last day of each month during the ensuing 36 months. In addition, on the first anniversary of his employment, Mr. Young will be granted an option to acquire no less than 25,000 shares of the Common Stock of the company at the closing price of the stock on the market on which they are listed on the date of the grant, which, subject to his continued employment by the company, will also vest over forty-eight (48) months, one quarter of the shares on the first anniversary of the grant and the remaining shares at the rate of one forty-eighth (1/48) per month on the last day of each month during the ensuing thirty-six months. In the event that Mr. Young's employment is terminated by the company without Cause as defined or if he resigns for Good Reason as defined, he will receive, as severance, six months of salary at his base salary rate in effect at the time, and the company will pay all premiums necessary to maintain his group health insurance coverage in effect for 6 months after the termination date if he makes the COBRA election. If such a termination occurs within 12 months after a Change of Control as defined, he will receive, as severance, 12 months of salary payments and 12 months of company-paid COBRA health insurance coverage if he makes the COBRA election, and the company will "gross him up" for any tax impact associated with this health insurance benefit. Mr. Young's employment is "at will."

REPORT OF THE AUDIT COMMITTEE

The Audit Committee oversees our accounting and financial reporting processes and the audits of our financial statements on behalf of the Board, and selects an independent public accounting firm to perform those audits. Management has the primary responsibility for establishing and maintaining adequate internal control over financial reporting, preparing the financial statements, and establishing and maintaining adequate controls over public reporting. Our independent registered public accounting firm for fiscal 2005, Grant Thornton LLP, had responsibility for conducting an audit of our annual financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and expressing an opinion on the conformity of those audited financial statements with generally accepted accounting principles.

The Audit Committee oversaw the independent public accounting firm's qualifications and independence as well as its performance. The Committee assisted the Board in overseeing the preparation of the company's financial statements, the company's compliance with legal and regulatory requirements, and the performance of the company's internal audit function. The Audit Committee met with personnel of the company and Grant Thornton LLP to review the scope and the results of the annual audit, the amount of audit fees, the company's internal accounting controls, the company's financial statements contained in the company's Annual Report to Stockholders and other related matters.

The Audit Committee has reviewed and discussed with management the financial statements for fiscal year 2005 audited by Grant Thornton LLP, as well as management's report on internal control over financial reporting, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control — Integrated Framework. The Audit Committee has discussed with Grant Thornton LLP various matters related to the financial statements, including those matters required to be discussed by SAS 61 (Codification of Statements on Auditing Standards, AU 380). The Audit Committee has also discussed with Grant Thornton LLP its report on internal control over financial reporting and its report on management's assessment of internal control over financial reporting, has received the written disclosures and the letter from Grant Thornton LLP required by Independence Standards Board Standard No. 1 (Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees), and has discussed with Grant Thornton LLP its independence.

Based upon such review and discussions the Audit Committee recommended to the Board of Directors, and the Board approved the recommendation, that the audited financial statements be included in the company's Annual Report on Form 10-K for the fiscal year ending December 31, 2005 for filing with the SEC.

AUDIT COMMITTEE
Eric Bjerkholt, Chairman
Ricardo B. Levy, Ph.D.
John J. Schwartz, Ph.D.

Notwithstanding anything to the contrary set forth in any of the company's previous filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate future filings, including this Proxy Statement, in whole or in part, the following report and the Performance Graph on page XX shall not be incorporated by reference into any such filings.

REPORT OF THE COMPENSATION AND STOCK OPTION COMMITTEE

The company continues to use its best efforts to apply a consistent philosophy of compensation for all employees, including executive officers. This philosophy is based on the premise that the achievements of the company result from the coordinated efforts of all individuals working toward common objectives within each of the then-existing projects of the company's respective business units. The company strives to achieve those objectives through teamwork focused on meeting or exceeding strategic, scientific and business goals and the expectations of the company's shareholders.

Compensation Philosophy for Executive Officers

- We compensate our executive officers through a combination of base salary combined with periodic awards of cash bonuses and stock options. Our executive officers also participate in the company's benefits programs, which are made available to all employees of the company.
- We are committed to a compensation program that helps attract and retain the best people in the industry. To ensure that our compensation is competitive, we regularly compare our compensation levels with those companies we consider comparable and set our compensation parameters based on this review. We use the industry standard data from the Radford Biotechnology Compensation Surveys and, from time to time, the advice of consultants in evaluating our practice in the areas of base pay, incentive pay, equity participation, and benefits.
- We reward our executive officers for performance.
- Executive officers are rewarded based upon both individual contribution and the performance of the company as a whole. Corporate performance is evaluated by reviewing the extent to which scientific, financial, business and strategic goals are met. Individual performance is evaluated by reviewing the individual's role in the achievement of corporate goals, ability to deal with unforeseeable problems and seize unforeseeable opportunities, and the degree to which teamwork and company values are fostered by the individual's actions.

In early stage biopharmaceutical companies, performance is best judged by success in achievement of scientific and technical milestones, product development progress (including progress toward and through clinical trials), strategic human resources development, capitalization and financing goals, and commercialization goals.

We believe that all employees, including executive officers, should understand and constructively participate in the performance evaluation process, which operates as follows:

1. At the beginning of the performance cycle, the Chief Executive Officer in conference with the company's scientific leadership and other members of management proposes a set of key objectives and goals for the year. These goals and objectives are reviewed and approved by the Board of Directors. Progress toward the accomplishment of these goals is reviewed by the Board of Directors from time to time and adjustments may be made to the goals pursuant to such review. The Board also establishes a bonus pool of cash and/or equity (stock options) for achievement of the goals. The company's budget and its conduct of affairs are, to a significant extent, driven by these goals, as are the individual goals of each employee.
2. At the end of the performance cycle, the Compensation Committee determines whether and to what extent the goals have been achieved and determines whether cash and/or equity bonuses are warranted. To the extent that bonuses are approved, all employees participate in accordance with established guidelines.
3. Managers evaluate the performance of employees reporting to them, and performance is discussed with the Chief Executive Officer. The evaluation of the Chief Executive Officer is normally performed by the Compensation Committee and reported to the Board, but may occasionally be performed by the full Board in the first instance.
4. The performance of other executive officers is discussed with the Compensation Committee, which reviews recommendations for compensation made (subject to their review or to review by the full Board) by the Chief Executive Officer.

Compensation Vehicles

The company uses a simple total compensation program consisting of cash and equity-based compensation. On occasion, to secure the services of outstanding candidates who live elsewhere, the company recognizes the high cost of housing in the San Francisco Bay Area by providing a housing allowance, sometimes including a tax gross-up. Having a compensation program that allows the company to successfully attract and retain executive officers

permits it to enhance shareholder value, motivate technological innovation and foster teamwork. The vehicles used are:

Cash-Based Compensation

Salary — The company sets base salaries for executive officers by reviewing the base salary for individuals in competitive positions in the market and adjusting annually with increases that reflect individual performance.

Annual Cash Bonus — Executive officers and the Chief Executive Officer, as well as all other employees, are eligible to receive an annual cash bonus upon the attainment of predetermined corporate objectives approved by the Compensation Committee at the beginning of the year, with progress against them reviewed at year-end to determine the appropriate bonus payment. At full achievement of objectives, the Chief Executive Officer would be targeted to receive a bonus of 35% of his annual base salary; the Vice President, Research and Development would be targeted to receive a bonus of 25% of her annual base salary, and the Chief Financial Officer would be targeted to receive a bonus of 25% of his annual base salary. The amount actually paid in any one year may be more or less than the targeted bonus based on over or under achievement of objectives and the Board and Compensation Committee's discretion.

Compensation of Chief Executive Officer

For fiscal year 2005, Mr. McGlynn earned \$324,000 in base salary and a bonus of \$96,390 that was paid after the end of the fiscal year. His base salary was set after considering his achievements in 2004, his experience, and the salaries of the chief executive officers of comparable companies. The bonus awarded Mr. McGlynn on account of his work in 2005 reflects the Compensation Committee's assessment of the company's success in attaining specific objectives and Mr. McGlynn's contribution to that success, including his leadership role in formulating and executing the company's business strategy. The Committee took particular note of Mr. McGlynn's achievement in leading the company toward the initiation of clinical development of its lead product, including the successful attempt to obtain FDA approval for its first clinical trial and strengthening the company's liver program.

Equity-Based Compensation

Stock Option Program — The purpose of our stock option program is to provide additional incentives to all employees, including executive officers, to maximize shareholder value. We believe strongly in the use of stock options because they align employee interests directly with shareholder value. The option program also utilizes vesting periods to encourage executive officers to remain with the company and to encourage long-term increases in company stock value. We grant stock options to all employees upon hiring, and provide ongoing grants when appropriate in the Board's judgment, as an incentive vehicle to encourage employee equity participation in our future.

Although provided for under our incentive plans, we do not currently use stock appreciation rights as a compensation vehicle.

Compensation of Executive Officers

The executive officers of the company for 2005 were Martin McGlynn, who served as the company's President and Chief Executive Officer, Ann Tsukamoto, who served as Vice President, Research and Development, Judi Lum, who served as Chief Financial Officer and Vice President, Finance from January 1 to September 6, 2005 and Rodney Young, who served as Chief Financial Officer and Vice President, Finance, beginning September 6, 2005. Their compensation is described under "Employment and Severance Agreements" above.

COMPENSATION AND STOCK OPTION COMMITTEE

John J. Schwartz, Ph.D., Chairman

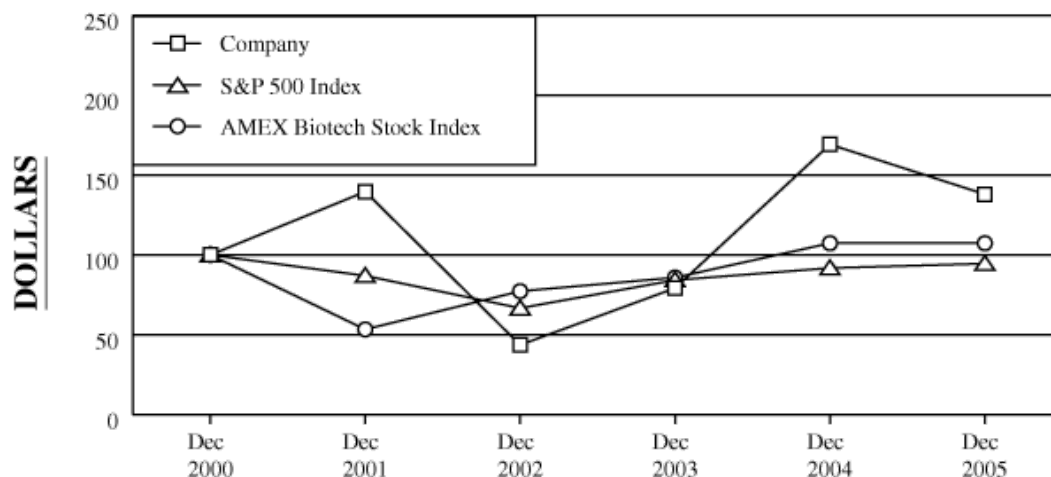
Eric Bjerkholt

PERFORMANCE GRAPH

Note: The stock price performance shown on the graph below is not necessarily indicative of future stock price performance.

The graph below compares the cumulative total returns on the company's Common Stock with the cumulative total returns of the Amex Biotechnology Stock Index and the S&P 500 Index for the period from December 31, 2000 until December 31, 2005. (1)

**Comparison of Cumulative Total Returns on Common Stock of StemCells, Inc.,
the Amex Biotechnology Stock Index and S&P 500 Index
for the Period From December 31, 2000 Until December 31, 2005**



	December 31, 2000	December 31, 2001	December 31, 2002	December 31, 2003	December 31, 2004	December 31, 2005
COMPANY	\$100	\$139.60	\$43.60	\$79.20	\$169.20	\$138.00
S&P 500 INDEX	\$100	\$ 86.96	\$66.64	\$84.22	\$ 91.79	\$ 94.55
AMEX BIOTECH STOCK INDEX	\$100	\$ 53.32	\$77.26	\$85.80	\$107.34	\$107.34

(1) Based on the closing price of the company's Common Stock on the first day of trading on the NASDAQ National Market System. Cumulative total returns assume reinvestment of all dividends and a hypothetical investment of \$100 on December 31, 2000.

**PROPOSAL NUMBER 1
ELECTION OF DIRECTORS**

The number of directors is currently fixed at six. Our Certificate of Incorporation as amended and Amended and Restated By-laws provide for the classification of the Board of Directors into three classes, as nearly equal in number as possible, with the term of office of one class expiring each year. Unless otherwise instructed, the enclosed proxy will be voted to elect the nominees named below, who are now Class III directors, as Class III directors for a term of three years expiring at the 2009 Annual Meeting of Stockholders and until their successors are duly elected and qualified. Proxies cannot be voted for a greater number of persons than the number of nominees named below. It is expected that the nominees will be able to serve, but if any are unable to serve, the proxy will be voted for a

substitute nominee or nominees designated by the Board of Directors. The nominees for election as Class III directors and the incumbent Class I and II directors are as follows:

NOMINEES FOR ELECTION AS CLASS III DIRECTORS — TERMS EXPIRE 2006

<u>Name</u>	<u>Principal occupation</u>	<u>Age</u>	<u>Position</u>
Martin McGlynn	President and Chief Executive Officer, StemCells, Inc.	60	Director, Executive Officer
Roger Perlmutter, M.D., Ph.D.	Executive Vice President, Research and Development, Amgen, Inc.	53	Director

Martin M. McGlynn joined the company on January 15, 2001, when he was appointed President and Chief Executive Officer of the company and of its wholly-owned subsidiary, StemCells California, Inc. He was elected to the Board of Directors on February 6, 2001. Mr. McGlynn began his career with Becton Dickinson, Ireland Ltd., and spent 8 years in manufacturing operations. He joined Abbott Labs in 1977 where he held positions as General Manager, Abbott Ireland Ltd., President and General Manager of Abbott Canada Ltd. and Vice President of Abbott International Ltd. In 1990, he joined the BOC Group as President of Anaquest, Inc., a company focused on anesthesia and acute care pharmaceuticals. From 1994 until he joined the company, Mr. McGlynn was President and Chief Executive Officer of Pharmadigm, Inc., a privately held company in Salt Lake City, Utah, engaged in research and development in the fields of inflammation and genetic immunization. Mr. McGlynn is a native of Dublin, Ireland. He received a Bachelor of Commerce degree from University College, Dublin, Ireland in 1968, a diploma in industrial engineering from the Irish Institute of Industrial Engineering in 1970, and a diploma in production planning from the University of Birmingham, England in 1971. He is a former member of the Board of Directors of the Confederation of Irish Industries and the Pharmaceutical Manufacturers Association of Canada.

Roger M. Perlmutter, M.D., Ph.D., was elected to the Board of Directors in December 2000. Dr. Perlmutter is Executive Vice President, Research and Development, of Amgen, Inc., a position he has held since January 2001. Prior to joining Amgen, he was Executive Vice President, Worldwide Basic Research and Preclinical Development, Merck Research Laboratories, a division of Merck & Co., Inc., a position he had held since August 1999. He joined Merck in February 1997 as Senior Vice President, Merck Research Laboratories, from February 1997 to December 1998 and as Executive Vice President from February 1999 to January 2001. Prior to joining Merck, Dr. Perlmutter was a professor in the Departments of Immunology, Biochemistry and Medicine at the University of Washington from January 1991 to January 1997 and served as chairman of the Department of Immunology at the University of Washington from May 1989 to January 1997. He also was an Investigator at the Howard Hughes Medical Institute from October 1991 to January 1997. Dr. Perlmutter was a member of the board of directors of The Irvington Institute for Immunological Research from 1997 to 2001 and of the Institute for Systems Biology since 1999. He is licensed to practice medicine in the State of California and the State of Washington. He was graduated from Reed College in 1973 and received his M.D. and Ph.D. degrees from Washington University, St. Louis, Missouri in 1979.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE FOR THE ELECTION OF THE NOMINEES DESCRIBED ABOVE

INCUMBENT CLASS I DIRECTORS — TERMS EXPIRE 2007

<u>Name</u>	<u>Principal Occupation</u>	<u>Age</u>	<u>Position</u>
John J. Schwartz, Ph.D.	President, Quantum Strategies Management Company.	71	Director, Chairman of the Board
Eric H. Bjerkholt	Senior Vice President and CFO, Sunesis Pharmaceuticals, Inc.	46	Director

John J. Schwartz, Ph.D., was elected to the Board of Directors of the company in December 1998 and was elected Chairman of the Board at the same time. He is the former President and Chief Executive Officer of SyStemix, Inc. Dr. Schwartz is currently President of Quantum Strategies Management Company, a registered

investment advisor located in Palo Alto, California. Prior to his positions at SyStemix, he served as Assistant Professor, Vice President and General Counsel at Stanford University in California. Dr. Schwartz was graduated from Harvard Law School in 1958 and received his Ph.D. degree in physics from the University of Rochester in 1965.

Eric H. Bjerkholt was elected to the Board of Directors of the company on March 1, 2004. He is Senior Vice President and CFO of Sunesis Pharmaceuticals, Inc., a small molecule biopharmaceutical company in South San Francisco, CA. Before joining Sunesis, Mr. Bjerkholt served as Senior Vice President and CFO of IntraBiotics Pharmaceuticals, Inc. Previously, Mr. Bjerkholt co-founded LifeSpring Nutrition, Inc., a privately held nutraceutical company, and served as its CFO, and later as its President and Chief Executive Officer. From 1990 to 1997, Mr. Bjerkholt was an investment banker at J.P. Morgan & Co., Inc. Mr. Bjerkholt holds an M.B.A. from Harvard Business School and a Cand. Oecon degree in economics and econometrics from the University of Oslo, Norway. He is a member of the Board of Directors of Round Table Pizza, Inc.

INCUMBENT CLASS II DIRECTORS — TERM EXPIRES 2008

<u>Name</u>	<u>Principal Occupation</u>	<u>Age</u>	<u>Position</u>
Irving Weissman, M.D.	Professor, Stanford University	66	Director
Ricardo B. Levy, Ph.D.	Chairman of the Board, Catalytica Energy Systems, Inc.	61	Director

Irving L. Weissman, M.D. was elected to the Board of Directors of the company in September 1997. Dr. Weissman is the Virginia and Daniel K. Ludwig Professor of Cancer Research, Professor of Pathology and Professor of Developmental Biology at Stanford University and is the Director of the new Stanford Institute for Stem Cell Biology and Regenerative Medicine, and Director of the Stanford Comprehensive Cancer Center. Dr. Weissman is a cofounder and was a member of the Scientific Advisory Board of SyStemix, Inc, and is Director, founder, and chair of the Scientific Advisory Board of Cellerant, Inc. He has also served on the Scientific Advisory Boards of Amgen Inc., Cellerant, DNAX and T-Cell Sciences, Inc., all of which are biotechnology companies. Dr. Weissman is a member of the National Academy of Sciences and also serves as Chairman of the Scientific Advisory Board of the company.

Ricardo B. Levy, Ph.D., is Chairman of the Board of Catalytica Energy Systems, Inc., and has been a member of its Board of Directors since June 1995, when the company was formed as a subsidiary of Catalytica, Inc. He also served as director of Catalytica Pharmaceuticals Inc. from 1995 to 2000. Dr. Levy was a founder of Catalytica, Inc. in 1974, serving as Chief Operating Officer from 1974 until 1991 and President and Chief Executive Officer until December 2000, when Catalytica, Inc. and Catalytica Pharmaceuticals Inc. were sold to DSM N.V. Before founding Catalytica, Inc., Dr. Levy was a founding member of Exxon's chemical physics research team, and prior to that served as Chief Executive Officer of Sudamericana C.A. in Quito, Ecuador. He currently also serves on the Board of Directors of Accelrys Inc. (formerly Pharmacoepia, Inc.) and NovoDynamics, Inc. Dr. Levy holds an M.S. from Princeton University, a Ph.D. in chemical engineering from Stanford University and is an alumnus of Harvard University's Executive Management Program.

PROPOSAL NUMBER 2

Ratification of Selection of Independent Public Accountants

The company is asking the stockholders to ratify the selection of Grant Thornton LLP as the company's independent public accountants for the fiscal year ending December 31, 2005. The affirmative vote of the holders of a majority of the shares represented and voting at the Annual Meeting will be required to ratify the selection of Grant Thornton LLP.

In the event the stockholders fail to ratify the appointment, the Audit Committee of the Board of Directors will consider it as a direction to select other auditors for the subsequent year. Even if the selection is ratified, the Audit Committee of the Board at its discretion could decide to terminate the engagement of Grant Thornton LLP and

engage another firm at any time if the Committee determines that such a change would be necessary or desirable in the best interests of the company and its stockholders.

A representative of Grant Thornton LLP is expected to attend the Annual Meeting and is not expected to make a statement, but will be available to respond to appropriate questions and may make a statement if such representative desires to do so.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE FOR THE PROPOSAL TO RATIFY THE SELECTION OF GRANT THORNTON LLP AS THE COMPANY'S INDEPENDENT PUBLIC ACCOUNTANTS FOR THE FISCAL YEAR ENDING DECEMBER 31, 2006.

**PROPOSAL NUMBER 3
Adoption of the 2006 Equity Incentive Plan**

On April 7, 2006, the Board of Directors adopted the 2006 Equity Incentive Plan (the "Plan"), subject to shareholder approval.

The purpose of the Plan is to advance the interests of the company by enhancing its ability to attract and retain employees and other persons or entities providing services to the company who are in a position to make significant contributions to the success of the company, and to reward participants for such contributions, through the grant of equity awards under the Plan. The Plan is intended to accomplish these goals by enabling the company to grant awards in the form of stock options, stock appreciation rights, restricted stock, unrestricted stock, deferred stock, or performance awards (in cash or stock), or combinations thereof, all as more fully described below. As of April 24, 2006, only approximately 1,076,592, shares were available for grant under all existing equity incentive plans.

OVERVIEW

The Plan will be administered by the Board of Directors (the "Board") or a committee appointed by the Board (the "Committee"). The term "Administrator" is used in this proxy statement to refer to the person (Board or Committee, and their delegates) charged with administering the Plan. Under the Plan, the Administrator may grant stock options, stock appreciation rights, restricted stock, unrestricted stock, deferred stock, and performance awards (in cash or stock), or combinations thereof, may set the terms and conditions of any such award subject to the terms of the Plan, and may waive the terms and conditions of any award. A total of 6,000,000 shares of Common Stock may be issued under the Plan. No awards may be granted under the Plan after June 20, 2016, but awards previously granted may extend beyond that date. Employees of the company, including executive officers, directors and other persons or entities providing services to the company or its subsidiaries who are in a position to make a significant contribution to the success of the company are eligible to receive awards under the Plan. As of April 27, 2006, approximately 60 persons were in this eligible class. StemCells expects that approximately 100 persons will participate in the Plan annually.

Section 162(m) of the Code places annual limitations on the deductibility by public companies of compensation in excess of \$1,000,000 paid to each of the chief executive officer and the other four most highly compensated officers, unless, among other things, the compensation is performance-based. For compensation attributable to stock options and stock appreciation rights to qualify as performance-based, the plan under which they are granted must state a maximum number of shares with respect to which options and rights may be granted to an individual during a specified period and must be approved by the company's shareholders. To comply with these requirements, the Plan provides that the maximum number of shares as to which options may be granted to any participant during any calendar year is 1,000,000 and the maximum number of shares as to which stock appreciation rights may be granted to any participant during that period is 1,000,000, and the Plan is being submitted for shareholder approval.

Stock Options. The exercise price of any stock option granted under the Plan shall be no less than 100% of the fair market value of the Common Stock at the time of grant. Subject to the foregoing, the Administrator determines the exercise price of each option granted under the Plan. The exercise price may be paid in cash or by check acceptable to the Administrator. Subject to certain additional limitations, the Administrator may also permit the exercise price to be paid by tendering shares of Common Stock that have been outstanding for at least six months, by

delivery of a promissory note, through a broker-assisted exercise program or by other means acceptable to the Administrator, or a combination of the foregoing, in each case if permitted under applicable law.

Stock Appreciation Rights (SARs). Stock appreciation rights (“SARs”) may be granted either alone or in tandem with stock option grants. Each SAR entitles the holder on exercise to receive an amount in cash or Common Stock or a combination thereof (such form to be determined by the Administrator) an amount equal to appreciation in the fair market value of a share of Common Stock from the date of grant.

Stock Awards; Deferred Stock. The Plan provides for awards of nontransferable shares of restricted Common Stock subject to resale to the company for less than fair market value or forfeiture (“Restricted Stock”), as well as unrestricted shares of Common Stock. Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable period and the satisfaction of any other conditions or restrictions established by the Administrator. Except as the Administrator may otherwise determine, if a participant dies or ceases to be an employee or ceases to continue the consulting or other similar relationship engaged in by such participant with the company for any reason during the restricted period, the company may repurchase the shares of Restricted Stock or the shares of Restricted Stock may be forfeited to the company. The Plan also provides for deferred grants entitling the recipient to receive shares of Common Stock in the future at such times and on such conditions as the Administrator may specify. The maximum number of shares subject to stock-based awards other than stock options or SARs granted to any person in any calendar year is 1,000,000.

Performance Awards. The Plan provides for performance awards entitling the recipient to receive cash or Common Stock following the attainment of performance goals determined by the Administrator. Performance conditions may also be attached to other awards under the Plan. In the case of any performance award intended to qualify for the performance-based remuneration exception described in Section 162(m) of the Code (an “Exempt Award”), the Administrator will in writing pre-establish specific performance goals that are based upon any one or more of the following operational, result or event-specific goals, or a combination thereof: sales; revenues; assets; expenses; earnings before or after deduction for all or any portion of interest, taxes, depreciation, or amortization, whether or not on a continuing operations or an aggregate or per share basis; return on equity, investment, capital or assets; one or more operating ratios; borrowing levels, leverage ratios or credit rating; market share; capital expenditures; cash flow; stock price; stockholder return; sales of particular products or services; customer acquisition or retention; acquisitions and divestitures (in whole or in part); joint ventures and strategic alliances; spin-offs, split-ups and the like; reorganizations; or recapitalizations, restructurings, financings (issuance of debt or equity) or refinancings.

Termination. Except as otherwise provided by the Administrator, if a participant dies, stock options and SARs exercisable immediately prior to death may be exercised by the participant’s executor, administrator or transferee during a period of one year following such death (or for the remainder of their original term, if less). Options and SARs not exercisable at a participant’s death terminate. In the case of termination for reasons other than death, outstanding stock options and SARs remain exercisable, to the extent they were exercisable immediately prior to termination, for three months (or for the remainder of their original term, if less); provided that if in the Administrator’s judgment the reason for the award holder’s termination casts discredit on the company sufficient to justify immediate termination of the award, then such award will immediately terminate.

Change of Control. In the case of certain mergers, consolidations or other transactions in which StemCells is acquired or is liquidated and there is a surviving or acquiring corporation, the Plan permits the Board to arrange for the assumption of awards outstanding under the Plan or the grant to participants of replacement awards by the surviving corporation. Alternatively, if the transaction is one in which shareholders of the company will receive payment in cash or otherwise, the Administrator may provide for a “cash-out” with respect to some or all awards equal in the case of each affected award to the excess of the fair market value per share of Common Stock times the number of shares of Common Stock subject to the Award, less the aggregate exercise or purchase price, if any, under the award. All outstanding awards not assumed by the surviving or acquiring corporation, or cashed out, shall become exercisable immediately prior to the consummation of such merger, consolidation or other transaction and upon such consummation all outstanding awards that have not been assumed or replaced will terminate.

Amendment. The Board may amend the Plan or any outstanding award at any time, provided that no such amendment will, without the approval of the shareholders of the company, effectuate a change for which

shareholder approval is required under applicable law, including the Code and applicable stock exchange requirements. Except in connection with stock split, stock dividends or the like, there will be no reduction in the exercise price of any option other than in accordance with the applicable stockholder approval requirements of Nasdaq.

Effective Date of the Plan. The Plan will become effective as of June 21, 2006, provided that it is approved by the shareholders at this meeting.

NEW PLAN BENEFIT

The future benefits or amounts that would be received under the Plan by the executive officers and the non-executive officer employees are discretionary and are therefore not determinable at this time. As noted under “Information Concerning the Board and Its Committees” above, as part of their compensation, directors receive an option to purchase 20,000 shares at fair market value upon election or appointment to an initial term on the Board, vesting ratably over 3 years, and an option for 10,000 shares on each anniversary of the appointments, vesting one year after issuance, all exercisable at the fair market value on the date of the respective grant.

FEDERAL TAX EFFECTS

The following discussion summarizes certain federal income tax consequences of the issuance and receipt of options under the Plan. The summary does not purport to cover federal employment tax or other federal tax consequences that may be associated with the Plan, nor does it cover state, local or non-U.S. taxes.

Incentive Stock Options. In general, an optionee realizes no taxable income upon the grant or exercise of an ISO. However, the exercise of an ISO may result in an alternative minimum tax liability to the optionee. With certain exceptions, a disposition of shares purchased under an ISO within two years from the date of grant or within one year after exercise produces ordinary income to the optionee (and a deduction to the company) equal to the value of the shares at the time of exercise less the exercise price. Any additional gain recognized in the disposition is treated as a capital gain for which the company is not entitled to a deduction. If the optionee does not dispose of the shares until after the expiration of these one- and two-year holding periods, any gain or loss recognized upon a subsequent sale is treated as a long-term capital gain or loss for which the company is not entitled to a deduction.

Nonstatutory (Non-ISO) Options. In general, in the case of a non-ISO, the optionee has no taxable income at the time of grant but realizes income in connection with exercise of the option in an amount equal to the excess (at the time of exercise) of the fair market value of the shares acquired upon exercise over the exercise price. A corresponding deduction is available to the company. Upon a subsequent sale or exchange of the shares, appreciation or depreciation after the date of exercise is treated as capital gain or loss for which the company is not entitled to a deduction.

In general, an ISO that is exercised more than three months after termination of employment (other than termination by reason of death) is treated as a non-ISO. ISOs are also treated as non-ISOs to the extent they first become exercisable by an individual in any calendar year for shares having a fair market value (determined as of the date of grant) in excess of \$100,000.

Under the so-called “golden parachute” provisions of the Code, the vesting or accelerated exercisability of awards in connection with a change in control of the company may be required to be valued and taken into account in determining whether participants have received compensatory payments, contingent on the change in control, in excess of certain limits. If these limits are exceeded, a substantial portion of amounts payable to the participant, including income recognized by reason of the grant, vesting or exercise of awards under the Plan, may be subject to an additional 20% federal tax and may not be deductible to the company.

Awards that are subject to but fail to comply with Section 409A would be exposed to a penalty tax of 20% in addition to ordinary income tax, as well as to interest charges, and may result in an acceleration of the timing of income inclusion in respect of such awards for income tax purposes. The stock options granted under the Plan are intended to be exempt from the rules of Section 409A of the Code and guidance issued thereunder and will be administered accordingly.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain information with respect to all of the company's equity compensation plans in effect as of December 31, 2005.

Equity Compensation Plan Information

<u>Plan Category</u>	<u>(A) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</u>	<u>(B) Weighted-average Exercise Price of Outstanding Options, Warrants and Rights</u>	<u>(C) Number of Securities Remaining Available for Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (A))</u>
Equity compensation plans approved by security holders	6,608,109(1)	\$ 3.02	1,583,543
Equity compensation arrangements not approved by security holders	100,000(2)	\$ 1.20	N/a
Totals	6,708,109	\$ 2.88	958,631

- (1) Consists of Incentive Stock Options issued to employees and options issued as compensation to consultants for consultation services. These options were issued under the company's 1992 Equity Incentive Plan, its Directors' Stock Option Plan, its StemCells, Inc. Stock Option Plan, its 2001 Equity Incentive Plan, or its 2004 Equity Incentive Plan.
- (2) Consists of warrants outstanding that are fully vested to purchase 100,000 shares of our common stock that was issued in January 2003 fully vested with an exercise price of \$1.20 per share and exercisable, in whole or in part, for five years from the date of issuance. These warrants, which constitute the equity compensation arrangements not approved by security holders, were all issued in exchange for advisory services by non-employees.

RECOMMENDATION

The Board of Directors of the company has unanimously approved a proposal to adopt the Plan set forth herein as Appendix C and recommended that the proposed Plan be submitted to the company's stockholders for consideration and approval at the Annual Meeting. The affirmative vote of a majority of all votes entitled to be cast at the Annual Meeting will be required to approve the Plan.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE FOR THE ADOPTION OF THE 2006 EQUITY INCENTIVE PLAN AS SET FORTH HEREIN AS APPENDIX A.

OTHER INFORMATION**Accounting Matters**

The Board of Directors, upon the recommendation of the Audit Committee, has selected the independent accounting firm of Grant Thornton LLP to audit the accounts of the company for the year ending December 31, 2006.

The Audit Committee considered the tax compliance services provided by Grant Thornton LLP, concluded that provision of such services is compatible with maintaining the independence of the independent accountants, and approved the provision by Grant Thornton LLP of tax compliance services with respect to the year ending December 31, 2005.

The Audit Committee has adopted policies and procedures for pre-approving all services (audit and non-audit) performed by our independent auditors. In accordance with such policies and procedures, the Audit Committee is required to pre-approve all audit and non-audit services to be performed by the independent auditors in order to assure that the provision of such services is in accordance with the rules and regulations of the SEC and does not

[Table of Contents](#)

impair the auditors' independence. Under the policy, pre-approval is generally provided up to one year and any pre-approval is detailed as to the particular service or category of services and is subject to a specific budget. In addition, the Audit Committee may pre-approve additional services on a case-by-case basis. During 2005, all services performed by our independent auditors were pre-approved.

The Audit Committee received the following information concerning the fees of the independent accountants for the years ended December 31, 2003 and 2004, has considered whether the provision of these services is compatible with independence of the independent accountants, and concluded that it is:

	<u>Year Ended</u> <u>12/31/04</u>	<u>Year Ended</u> <u>12/31/05</u>
Audit Fees (including review of 10-Qs and proxy filings)	\$ 131,405	\$ 142,045
Audit-Related Fees (Fees for auditing management's assessment of internal controls)	197,774	187,198
Tax Fees	20,464	22,470
All Other Fees (i.e., review of other SEC filings)	41,498	61,466
Total Fees	\$ 391,141	\$ 413,179

A representative of Grant Thornton LLP who audited the accounts of the company for the year ended December 31, 2005 is expected to be present at the Annual Meeting of Stockholders and will be afforded the opportunity to make a statement if he or she desires to do so and is expected to be available to reply to appropriate stockholder inquiries.

Stockholder Proposals

Stockholders who wish to present proposals for inclusion in the company's proxy materials for the 2007 Annual Meeting of Stockholders may do so by following the procedures prescribed in Rule 14a-8 under the Securities Exchange Act of 1934. To be eligible, the stockholder proposals must be received by the Secretary of the company on or before January 15, 2007.

Stockholders who wish to make a proposal at the 2007 annual meeting, other than one that will be included in our proxy materials, must notify us no later than March 31, 2007. If a stockholder who wishes to present a proposal fails to notify us by March 31, 2007, the proxies that management solicits for the meeting will confer discretionary authority to vote on the stockholder's proposal if it is properly brought before the meeting.

Stockholder Nominations of Directors

The Corporate Governance Committee will consider and evaluate up to two candidates recommended by stockholders or groups of stockholders that, individually or as a group, have beneficially owned at least 5% of the company's common stock for at least one year prior to the date the Nominating Stockholder submits a candidate (a "Nominating Stockholder") for nomination for election as a director at any annual meeting of stockholders in accordance with Board policy. The submission must be in writing and delivered to StemCells, Inc., Attn: Secretary, Board of Directors, 3155 Porter Drive, Palo Alto, California 94304, no later than January 15, 2007 for nominees to be considered for nomination at the 2007 Annual Meeting. Submissions must include the name, address and number of shares of common stock beneficially owned by the Nominating Stockholder, a representation the Nominating Stockholder meets the requirements described above and will continue to meet them through the date of the annual meeting, a description of all arrangements or understandings between or among the Nominating Stockholder (or any participant in a Nominating Stockholder group) and the candidate or any other person or entity regarding the candidate, all information regarding the candidate that the company would be required to disclose in a proxy statement under SEC rules, including whether the candidate is independent or if not, a description of the reasons why not, and representations by the candidate regarding his or her performance of the duties of a director. Full details may be obtained from the Secretary of the Board of Directors at the address above. The Committee will consider and evaluate candidates recommended by stockholders on the same basis as candidates recommended by other sources.

[Table of Contents](#)

In addition, the company's by-laws provide that a stockholder entitled to vote for the election of directors at a meeting may nominate persons for election as directors by giving timely notice thereof in proper written form to the Secretary accompanied by a petition signed by at least 100 record holders of capital stock of the corporation that shows the class and number of shares held by each person and that represent in the aggregate 1% of the outstanding shares entitled to vote in the election of directors. To be timely, notice by the stockholder must be received at the principal executive offices not later than the close of business on the tenth day following the day on which notice of the date of the meeting was mailed or public disclosure of such date was made. The requesting stockholder is required to provide information with respect to the nominee(s) for director similar to that described above, as more fully set forth in the company's by-laws.

Form 10-K

The company's Annual Report on Form 10-K for the fiscal year ended December 31, 2005, as filed with the SEC, is available without charge upon request by writing to StemCells, Inc. at 3155 Porter Drive, Palo Alto, CA 94304, Attention: Investor Relations.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the company's officers and directors, and persons who own more than ten percent of a registered class of the company's Common Stock, to file reports of ownership and changes in ownership on Forms 3, 4 and 5 with the SEC. Officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish to the company copies of all Forms 3, 4 and 5 they file.

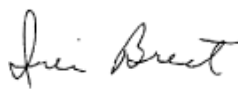
"Householding" of Proxy Materials

The SEC has adopted rules that permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements with respect to two or more shareholders sharing the same address by delivering a single proxy statement addressed to those shareholders. This process, which is commonly referred to as "householding," potentially provides extra convenience for shareholders and cost savings for companies. The company and some brokers household proxy materials, delivering a single proxy statement to multiple shareholders sharing an address unless contrary instructions have been received from the affected shareholders. Once you have received notice from your broker or us that they or we will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement, or if you are receiving multiple copies of the proxy statement and wish to receive only one, please notify your broker if your shares are held in a brokerage account or us if you hold registered shares. You can notify us by sending a written request to StemCells, Inc., 3155 Porter Drive, Palo Alto, CA 94304, Attention: Investor Relations.

Other Business

The Board of Directors knows of no business that will come before the meeting for action except as described in the accompanying Notice of Meeting. However, as to any such business, the persons designated as proxies will have authority to act in their discretion.

By Order of the Board of Directors



Iris Brest
Secretary

April 27, 2006

StemCells, Inc.
2006 EQUITY INCENTIVE PLAN

1. DEFINED TERMS

Exhibit A, which is incorporated by reference, defines the terms used in the Plan and sets forth certain operational rules related to those terms.

2. PURPOSE

The Plan has been established to advance the interests of the Company by providing for the grant to Participants of Stock-based and other incentive Awards.

3. ADMINISTRATION

The Administrator has discretionary authority, subject only to the express provisions of the Plan, to interpret the Plan; determine eligibility for and grant Awards; determine, modify or waive the terms and conditions of any Award; prescribe forms, rules and procedures; and otherwise do all things necessary to carry out the purposes of the Plan. In the case of any Award intended to be eligible for the performance-based compensation exception under Section 162(m), the Administrator will exercise its discretion consistent with qualifying the Award for that exception. Determinations of the Administrator made under the Plan will be conclusive and will bind all parties.

4. LIMITS ON AWARDS UNDER THE PLAN

(a) *Number of Shares.* The maximum number of shares of Stock that may be delivered in satisfaction of Awards under the Plan is equal to six million (6,000,000). The number of shares of Stock delivered in satisfaction of Awards shall, for purposes of the preceding sentence, be determined net of shares of Stock withheld by the Company in payment of the exercise price of the Award or in satisfaction of tax withholding requirements with respect to the Award. The limit set forth in this Section 4(a) shall be construed to comply with Section 422 of the Code and regulations thereunder. To the extent consistent with the requirements of Section 422 of the Code and regulations thereunder, and with other applicable legal requirements (including applicable stock exchange requirements), Stock issued under awards of an acquired company that are converted, replaced, or adjusted in connection with the acquisition shall not reduce the number of shares available for Awards under the Plan.

(b) *Type of Shares.* Stock delivered by the Company under the Plan may be authorized but unissued Stock or previously issued Stock acquired by the Company. No fractional shares of Stock will be delivered under the Plan.

(c) *Section 162(m) Limits.* The maximum number of shares of Stock for which Stock Options may be granted to any person in any calendar year and the maximum number of shares of Stock subject to SARs granted to any person in any calendar year will each be one million (1,000,000). The maximum number of shares subject to other Awards granted to any person in any calendar year will be one million (1,000,000). The maximum amount payable to any person in any year under Cash Awards will be one million dollars (\$1,000,000). The foregoing provisions will be construed in a manner consistent with Section 162(m).

5. ELIGIBILITY AND PARTICIPATION

The Administrator will select Participants from among those Employees and directors of, and consultants and advisors to, the Company or its Affiliates who, in the opinion of the Administrator, are in a position to make a significant contribution to the success of the Company and its Affiliates. Eligibility for ISOs is limited to employees of the Company or of a "parent corporation" or "subsidiary corporation" of the Company as those terms are defined in Section 424 of the Code.

6. RULES APPLICABLE TO AWARDS

(a) All Awards

(1) *Award Provisions.* The Administrator will determine the terms of all Awards, subject to the limitations provided herein. By accepting any Award granted hereunder, the Participant agrees to the terms of the Award and the Plan. Notwithstanding any provision of this Plan to the contrary, awards of an acquired company that are converted, replaced or adjusted in connection with the acquisition may contain terms and conditions that are inconsistent with the terms and conditions specified herein, as determined by the Administrator.

(2) *Term of Plan.* No Awards may be made after June 20, 2016, but previously granted Awards may continue beyond that date in accordance with their terms.

(3) *Transferability.* Neither ISOs nor, except as the Administrator otherwise expressly provides, other Awards may be transferred other than by will or by the laws of descent and distribution, and during a Participant's lifetime ISOs (and, except as the Administrator otherwise expressly provides, other non-transferable Awards requiring exercise) may be exercised only by the Participant.

(4) *Vesting, Etc.* The Administrator may determine the time or times at which an Award will vest or become exercisable and the terms on which an Award requiring exercise will remain exercisable. Without limiting the foregoing, the Administrator may at any time accelerate the vesting or exercisability of an Award, regardless of any adverse or potentially adverse tax consequences resulting from such acceleration. Unless the Administrator expressly provides otherwise, however, the following rules will apply: immediately upon the cessation of the Participant's Employment, each Award requiring exercise that is then held by the Participant or by the Participant's permitted transferees, if any, will cease to be exercisable and will terminate, and all other Awards that are then held by the Participant or by the Participant's permitted transferees, if any, to the extent not already vested will be forfeited, except that:

(A) subject to (B) and (C) below, all Stock Options and SARs held by the Participant or the Participant's permitted transferees, if any, immediately prior to the cessation of the Participant's Employment, to the extent then exercisable, will remain exercisable for the lesser of (i) a period of three months or (ii) the period ending on the latest date on which such Stock Option or SAR could have been exercised without regard to this Section 6(a)(4), and will thereupon terminate;

(B) all Stock Options and SARs held by a Participant or the Participant's permitted transferees, if any, immediately prior to the Participant's death, to the extent then exercisable, will remain exercisable for the lesser of (i) the one year period ending with the first anniversary of the Participant's death or (ii) the period ending on the latest date on which such Stock Option or SAR could have been exercised without regard to this Section 6(a)(4), and will thereupon terminate; and

(C) all Stock Options and SARs held by a Participant or the Participant's permitted transferees, if any, immediately prior to the cessation of the Participant's Employment will immediately terminate upon such cessation if the Administrator in its sole discretion determines that such cessation of Employment has resulted for reasons which cast such discredit on the Participant as to justify immediate termination of the Award.

(5) *Taxes.* The Administrator will make such provision for the withholding of taxes as it deems necessary. The Administrator may, but need not, hold back shares of Stock from an Award or permit a Participant to tender previously owned shares of Stock in satisfaction of tax withholding requirements (but not in excess of the minimum withholding required by law).

(6) *Dividend Equivalents, Etc.* The Administrator may provide for the payment of amounts in lieu of cash dividends or other cash distributions with respect to Stock subject to an Award. Any entitlement to dividend equivalents or similar entitlements shall be established and administered consistent either with exemption from, or compliance with, the requirements of Section 409A to the extent applicable.

(7) *Rights Limited.* Nothing in the Plan will be construed as giving any person the right to continued employment or service with the Company or its Affiliates, or any rights as a stockholder except as to shares of Stock actually issued under the Plan. The loss of existing or potential profit in Awards will not constitute an element of

damages in the event of termination of Employment for any reason, even if the termination is in violation of an obligation of the Company or Affiliate to the Participant.

(8) Section 162(m). This Section 6(a)(8) applies to any Performance Award intended to qualify as performance-based for the purposes of Section 162(m) other than a Stock Option or SAR. In the case of any Performance Award to which this Section 6(a)(8) applies, the Plan and such Award will be construed to the maximum extent permitted by law in a manner consistent with qualifying the Award for such exception. With respect to such Performance Awards, the Administrator will pre-establish, in writing, one or more specific Performance Criteria no later than 90 days after the commencement of the period of service to which the performance relates (or at such earlier time as is required to qualify the Award as performance-based under Section 162(m)). Prior to grant, vesting or payment of the Performance Award, as the case may be, the Administrator will certify whether the applicable Performance Criteria have been attained and such determination will be final and conclusive. No Performance Award to which this Section 6(a)(8) applies may be granted after the first meeting of the stockholders of the Company held in 2011 until the listed performance measures set forth in the definition of "Performance Criteria" (as originally approved or as subsequently amended) have been resubmitted to and reapproved by the stockholders of the Company in accordance with the requirements of Section 162(m) of the Code, unless such grant is made contingent upon such approval.

(b) Awards Requiring Exercise

(1) 409A Exemption. Except as the Administrator otherwise determines, no Award requiring exercise shall have deferral features, or shall be administered in a manner, that would cause such Award to fail to qualify for exemption from Section 409A.

(2) Time and Manner of Exercise. Unless the Administrator expressly provides otherwise, an Award requiring exercise by the holder will not be deemed to have been exercised until the Administrator receives a notice of exercise (in form acceptable to the Administrator) signed by the appropriate person and accompanied by any payment required under the Award. If the Award is exercised by any person other than the Participant, the Administrator may require satisfactory evidence that the person exercising the Award has the right to do so.

(3) Exercise Price. The exercise price (or the base value from which appreciation is to be measured) of each Award requiring exercise shall be 100% (in the case of an ISO granted to a ten-percent shareholder within the meaning of Section 422(b)(6) of the Code, 110%) of the fair market value of the Stock subject to the Award, determined as of the date of grant, or such higher amount as the Administrator may determine in connection with the grant. Fair market value shall be determined by the Administrator consistent with the requirements of Section 422 and Section 409A, as applicable. No such Award, once granted, may be repriced other than in accordance with the applicable stockholder approval requirements of Nasdaq.

(4) Payment of Exercise Price. Where the exercise of an Award is to be accompanied by payment, the Administrator may determine the required or permitted forms of payment, subject to the following: all payments will be by cash or check acceptable to the Administrator, or, if so permitted by the Administrator and if legally permissible, (i) through the delivery of shares of Stock that have been outstanding for at least six months (unless the Administrator approves a shorter period) and that have a fair market value equal to the exercise price, (ii) by delivery to the Company of a promissory note of the person exercising the Award, payable on such terms as are specified by the Administrator, (iii) through a broker-assisted exercise program acceptable to the Administrator, (iv) by other means acceptable to the Administrator, or (v) by any combination of the foregoing permissible forms of payment. The delivery of shares in payment of the exercise price under clause (a)(i) above may be accomplished either by actual delivery or by constructive delivery through attestation of ownership, subject to such rules as the Administrator may prescribe.

(c) Awards Not Requiring Exercise

Restricted Stock and Unrestricted Stock, whether delivered outright or under Awards of Stock Units or other Awards that do not require exercise, may be made in exchange for such lawful consideration, including services, as the Administrator determines. Any Award resulting in a deferral of compensation subject to Section 409A shall be construed to the maximum extent possible, as determined by the Administrator, consistent with the requirements of Section 409A.

7. EFFECT OF CERTAIN TRANSACTIONS

(a) Mergers, etc. Except as otherwise provided in an Award, the following provisions shall apply in the event of a Covered Transaction:

(1) Assumption or Substitution. If the Covered Transaction is one in which there is an acquiring or surviving entity, the Administrator may provide for the assumption of some or all outstanding Awards or for the grant of new awards in substitution therefor by the acquirer or survivor or an affiliate of the acquirer or survivor.

(2) Cash-Out of Awards. If the Covered Transaction is one in which holders of Stock will receive upon consummation a payment (whether cash, non-cash or a combination of the foregoing), the Administrator may provide for payment (a "cash-out"), with respect to some or all Awards, equal in the case of each affected Award to the excess, if any, of (A) the fair market value of one share of Stock (as determined by the Administrator in its reasonable discretion) times the number of shares of Stock subject to the Award, over (B) the aggregate exercise or purchase price, if any, under the Award (in the case of an SAR, the aggregate base price above which appreciation is measured), in each case on such payment terms (which need not be the same as the terms of payment to holders of Stock) and other terms, and subject to such conditions, as the Administrator determines.

(3) Acceleration of Certain Awards. If the Covered Transaction (whether or not there is an acquiring or surviving entity) is one in which there is no assumption, substitution or cash-out, each Award requiring exercise will become fully exercisable, and the delivery of shares of Stock deliverable under each outstanding Award of Stock Units (including Restricted Stock Units and Performance Awards to the extent consisting of Stock Units) will be accelerated and such shares will be delivered, prior to the Covered Transaction, in each case on a basis that gives the holder of the Award a reasonable opportunity, as determined by the Administrator, following exercise of the Award or the delivery of the shares, as the case may be, to participate as a stockholder in the Covered Transaction.

(4) Termination of Awards Upon Consummation of Covered Transaction. Each Award (unless assumed pursuant to Section 7(a)(1) above), other than outstanding shares of Restricted Stock (which shall be treated in the same manner as other shares of Stock, subject to Section 7(a)(5) below), will terminate upon consummation of the Covered Transaction.

(5) Additional Limitations. Any share of Stock delivered pursuant to Section 7(a)(2) or Section 7(a)(3) above with respect to an Award may, in the discretion of the Administrator, contain such restrictions, if any, as the Administrator deems appropriate to reflect any performance or other vesting conditions to which the Award was subject. In the case of Restricted Stock, the Administrator may require that any amounts delivered, exchanged or otherwise paid in respect of such Stock in connection with the Covered Transaction be placed in escrow or otherwise made subject to such restrictions as the Administrator deems appropriate to carry out the intent of the Plan.

(b) Change in and Distributions With Respect to Stock

(1) Basic Adjustment Provisions. In the event of a stock dividend, stock split or combination of shares (including a reverse stock split), recapitalization or other change in the Company's capital structure, the Administrator will make appropriate adjustments to the maximum number of shares specified in Section 4(a) that may be delivered under the Plan and to the maximum share limits described in Section 4(c), and will also make appropriate adjustments to the number and kind of shares of stock or securities subject to Awards then outstanding or subsequently granted, any exercise prices relating to Awards and any other provision of Awards affected by such change.

(2) Certain Other Adjustments. The Administrator may also make adjustments of the type described in Section 7(b)(1) above to take into account distributions to stockholders other than those provided for in Section 7(a) and 7(b)(1), or any other event, if the Administrator determines that adjustments are appropriate to avoid distortion in the operation of the Plan and to preserve the value of Awards made hereunder, having due

regard for the qualification of ISOs under Section 422 of the Code, the requirements of Section 409A of the Code, and for the performance-based compensation rules of Section 162(m), where applicable.

(3) *Continuing Application of Plan Terms.* References in the Plan to shares of Stock will be construed to include any stock or securities resulting from an adjustment pursuant to this Section 7.

8. LEGAL CONDITIONS ON DELIVERY OF STOCK

The Company will not be obligated to deliver any shares of Stock pursuant to the Plan or to remove any restriction from shares of Stock previously delivered under the Plan until: (i) the Company is satisfied that all legal matters in connection with the issuance and delivery of such shares have been addressed and resolved; (ii) if the outstanding Stock is at the time of delivery listed on any stock exchange or national market system, the shares to be delivered have been listed or authorized to be listed on such exchange or system upon official notice of issuance; and (iii) all conditions of the Award have been satisfied or waived. If the sale of Stock has not been registered under the Securities Act of 1933, as amended, the Company may require, as a condition to exercise of the Award, such representations or agreements as counsel for the Company may consider appropriate to avoid violation of such Act. The Company may require that certificates evidencing Stock issued under the Plan bear an appropriate legend reflecting any restriction on transfer applicable to such Stock, and the Company may hold the certificates pending lapse of the applicable restrictions.

9. AMENDMENT AND TERMINATION

The Administrator may at any time or times amend the Plan or any outstanding Award for any purpose which may at the time be permitted by law, and may at any time terminate the Plan as to any future grants of Awards; provided, that except as otherwise expressly provided in the Plan the Administrator may not, without the Participant's consent, alter the terms of an Award so as to affect adversely the Participant's rights under the Award, unless the Administrator expressly reserved the right to do so at the time of the Award. Any amendments to the Plan shall be conditioned upon stockholder approval only to the extent, if any, such approval is required by law (including the Code and applicable stock exchange requirements), as determined by the Administrator.

10. OTHER COMPENSATION ARRANGEMENTS

The existence of the Plan or the grant of any Award will not in any way affect the Company's right to Award a person bonuses or other compensation in addition to Awards under the Plan.

11. MISCELLANEOUS

(a) *Waiver of Jury Trial.* By accepting an Award under the Plan, each Participant waives any right to a trial by jury in any action, proceeding or counterclaim concerning any rights under the Plan and any Award, or under any amendment, waiver, consent, instrument, document or other agreement delivered or which in the future may be delivered in connection therewith, and agrees that any such action, proceedings or counterclaim shall be tried before a court and not before a jury. By accepting an Award under the Plan, each Participant certifies that no officer, representative, or attorney of the Company has represented, expressly or otherwise, that the Company would not, in the event of any action, proceeding or counterclaim, seek to enforce the foregoing waivers.

(b) *Limitation of Liability.* Notwithstanding anything to the contrary in the Plan, neither the Company, any Affiliate, nor the Administrator, nor any person acting on behalf of the Company, any Affiliate, or the Administrator, shall be liable to any Participant or to the estate or beneficiary of any Participant or to any other holder of an Award by reason of any acceleration of income, or any additional tax, asserted by reason of the failure of an Award to satisfy the requirements of Section 422 or Section 409A or by reason of Section 4999 of the Code; provided, that nothing in this Section 11(b) shall limit the ability of the Administrator or the Company to provide by separate express written agreement with a Participant for a gross-up payment or other payment in connection with any such tax or additional tax.

EXHIBIT A

Definition of Terms

The following terms, when used in the Plan, will have the meanings and be subject to the provisions set forth below:

“Administrator”: The Compensation Committee, except that the Compensation Committee may delegate (i) to one or more of its members such of its duties, powers and responsibilities as it may determine; (ii) to one or more officers of the Company the power to grant rights or options to the extent permitted by Section 157(c) of the Delaware General Corporation Law; (iii) to one or more officers of the Company the authority to allocate other Awards among such persons (other than officers of the Company) eligible to receive Awards under the Plan as such delegated officer or officers determine consistent with such delegation; *provided*, that with respect to any delegation described in this clause (iii) the Compensation Committee (or a properly delegated member or members of such Committee) shall have authorized the issuance of a specified number of shares of Stock under such Awards and shall have specified the consideration, if any, to be paid therefor; and (iv) to such Employees or other persons as it determines such ministerial tasks as it deems appropriate. In the event of any delegation described in the preceding sentence, the term “Administrator” shall include the person or persons so delegated to the extent of such delegation.

“Affiliate”: Any corporation or other entity owning, directly or indirectly, 50% or more of the outstanding Stock of the Company, or in which the Company or any such corporation or other entity owns, directly or indirectly, 50% of the outstanding capital stock (determined by aggregate voting rights) or other voting interests. For purposes of determining eligibility for the grant of a Stock Option or SAR by reason of service with an Affiliate, the term Affiliate shall be limited to persons that stand in a relationship to the Company that would result in the Company and such person being treated as one employer under Section 414(b) and Section 414(c) of the Code except that “at least 50%” shall be substituted for “at least 805” under Sections 1563(a)(1), (2), and (3) of the Code and Treas. Reg. Section 1.414(c)-2, all in accordance with the definition of “service recipient” under Section 409A of the Code.

“Award”: Any or a combination of the following:

- (i) Stock Options.
- (ii) SARs.
- (iii) Restricted Stock.
- (iv) Unrestricted Stock.
- (v) Stock Units, including Restricted Stock Units.
- (vi) Performance Awards.
- (vii) Cash Awards.
- (viii) Awards (other than Awards described in (i) through (vii) above) that are convertible into or otherwise based on Stock.

“Board”: The Board of Directors of the Company.

“Cash Award”: An Award denominated in cash.

“Code”: The U.S. Internal Revenue Code of 1986 as from time to time amended and in effect, or any successor statute as from time to time in effect.

“Compensation Committee”: The Compensation and Stock Option Committee of the Board.

“Company”: StemCells, Inc.

“Covered Transaction”: Any of (i) a consolidation, merger, or similar transaction or series of related transactions, including a sale or other disposition of stock, in which the Company is not the surviving corporation or which results in the acquisition of all or substantially all of the Company’s then outstanding common stock by a single person or entity or by a group of persons and/or entities acting in concert, (ii) a sale or transfer of all or substantially all the Company’s assets, or (iii) a dissolution or liquidation of the Company. Where a Covered Transaction involves a tender offer that is reasonably expected to be followed by a merger described in clause (i) (as determined by the Administrator), the Covered Transaction shall be deemed to have occurred upon consummation of the tender offer.

“Employee”: Any person who is employed by the Company or an Affiliate.

“Employment”: A Participant’s employment or other service relationship with the Company and its Affiliates. Employment will be deemed to continue, unless the Administrator expressly provides otherwise, so long as the Participant is employed by, or otherwise is providing services in a capacity described in Section 5 to the Company or its Affiliates. If a Participant’s employment or other service relationship is with an Affiliate and that entity ceases to be an Affiliate, the Participant’s Employment will be deemed to have terminated when the entity ceases to be an Affiliate unless the Participant transfers Employment to the Company or its remaining Affiliates.

“ISO”: A Stock Option intended to be an “incentive stock option” within the meaning of Section 422 of the Code. Each option granted pursuant to the Plan will be treated as providing by its terms that it is to be a non-incentive stock option unless, as of the date of grant, it is expressly designated as an ISO.

“Participant”: A person who is granted an Award under the Plan.

“Performance Award”: An Award subject to Performance Criteria. The Committee in its discretion may grant Performance Awards that are intended to qualify for the performance-based compensation exception under Section 162(m) and Performance Awards that are not intended so to qualify.

“Performance Criteria”: Specified criteria, other than the mere continuation of Employment or the mere passage of time, the satisfaction of which is a condition for the grant, exercisability, vesting or full enjoyment of an Award. For purposes of Awards that are intended to qualify for the performance-based compensation exception under Section 162(m), a Performance Criterion will mean an objectively determinable measure of performance relating to any or any combination of the following (measured either absolutely or by reference to an index or indices and determined either on a consolidated basis or, as the context permits, on a divisional, subsidiary, line of business, project or geographical basis or in combinations thereof): sales; revenues; assets; expenses; earnings before or after deduction for all or any portion of interest, taxes, depreciation, or amortization, whether or not on a continuing operations or an aggregate or per share basis; return on equity, investment, capital or assets; one or more operating ratios; borrowing levels, leverage ratios or credit rating; market share; capital expenditures; cash flow; stock price; stockholder return; sales of particular products or services; customer acquisition or retention; acquisitions and divestitures (in whole or in part); joint ventures and strategic alliances; spin-offs, split-ups and the like; reorganizations; or recapitalizations, restructurings, financings (issuance of debt or equity) or refinancings. A Performance Criterion and any targets with respect thereto determined by the Administrator need not be based upon an increase, a positive or improved result or avoidance of loss. To the extent consistent with the requirements for satisfying the performance-based compensation exception under Section 162(m), the Administrator may provide in the case of any Award intended to qualify for such exception that one or more of the Performance Criteria applicable to such Award will be adjusted in an objectively determinable manner to reflect events (for example, but without limitation, acquisitions or dispositions) occurring during the performance period that affect the applicable Performance Criterion or Criteria.

“Plan”: The StemCells, Inc. 2006 Incentive Plan as from time to time amended and in effect.

“Restricted Stock”: Stock subject to restrictions requiring that it be redelivered or offered for sale to the Company if specified conditions are not satisfied.

“Restricted Stock Unit”: A Stock Unit that is, or as to which the delivery of Stock or cash in lieu of Stock is, subject to the satisfaction of specified performance or other vesting conditions.

“Section 162(m)”: Section 162(m) of the Code.

“SAR”: A right entitling the holder upon exercise to receive an amount (payable in shares of Stock of equivalent value or, at the election of the Administrator, in cash or a combination of shares of Stock and cash) equal to the excess of the fair market value of the shares of Stock subject to the right over the fair market value of such shares at the date of grant.

“Stock”: Common Stock of the Company, par value \$0.01 per share.

“Stock Option”: An option entitling the holder to acquire shares of Stock upon payment of the exercise price.

“Stock Unit”: An unfunded and unsecured promise, denominated in shares of Stock, to deliver Stock or cash measured by the value of Stock in the future.

“Unrestricted Stock”: Stock not subject to any restrictions under the terms of the Award.

PROXY

STEMCELLS, INC.

ANNUAL MEETING OF STOCKHOLDERS, JUNE 21, 2006

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned stockholder, by completing this proxy card, hereby appoints Martin McGlynn and Iris Brest, or either of them, with power of substitution to each, proxies of the undersigned to vote at the Annual Meeting of Stockholders of StemCells, Inc. to be held on June 21, 2006 at 3155 Porter Drive, Palo Alto, California at 2:00 p.m., local time, or at any adjournments thereof, all of the shares of Common Stock, par value \$.01 per share, of StemCells, Inc. that the undersigned would be entitled to vote if personally present. The undersigned instructs such proxies or their substitutes to act on the matters listed on the reverse side as specified by the undersigned, and to vote in such manner as they may determine on any other matter that may properly come before the meeting.

Address Changes: _____

(If you noted any Address Changes above, please mark corresponding box on the reverse side.)

**SEE REVERSE
SIDE**

CONTINUED AND TO BE SIGNED ON REVERSE SIDE

**SEE REVERSE
SIDE**

[Table of Contents](#)

STEMCELLS, INC.
C/O COMPUTERSHARE
P.O. BOX 8694
EDISON, NJ 08818-8694

VOTE BY INTERNET — www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE STOCKHOLDER COMMUNICATIONS

If you would like to reduce the costs incurred by StemCells, Inc. in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access stockholder communications electronically in future years.

VOTE BY PHONE — 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to StemCells, Inc., c/o ADP, 51 Mercedes Way, Edgewood, NY 11717.

 TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS: STMCEL KEEP THIS PORTION FOR YOUR RECORDS

 DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

STEMCELLS, INC.
THE BOARD OF DIRECTORS OF STEMCELLS, INC.
RECOMMENDS A VOTE FOR THE NOMINEES FOR
DIRECTOR LISTED BELOW AND A VOTE FOR
PROPOSALS 2 AND 3.

Vote on Directors

1. To elect the following nominees as Class III directors:

Nominees:

- (01) Martin McGlynn
- (02) Roger Perlmutter, M.D., Ph.D.

For All	Withhold All	For All Except	
o	o	o	

(INSTRUCTION: To withhold authority to vote for any individual nominee, mark "For All Except" and write that nominee's name in the space provided below.)

Vote on Proposals

- 2. To ratify the selection of Grant Thornton LLP as independent public accountants of the company for the fiscal year ending December 31, 2006.
- 3. To adopt the 2006 Equity Incentive Plan as proposed.
- 4. By my signature below, I confer to the named proxies discretionary authority to vote upon such other business as may properly come before the meeting or any continuations and adjournments thereof.

For	Against	Abstain
o	o	o
o	o	o

This proxy when properly executed will be voted in the manner specified by the undersigned stockholder(s). If no contrary direction is made, this proxy will be voted FOR the election of the nominees for director named below and FOR proposals 2 and 3, and in the discretion of the named proxies as to any other matter that may come before the meeting.

For address changes, please check this box and write them on the back where indicated. o

Note: Please sign exactly as name appears on this card. All joint owners should sign. When signing as an executor, administrator, attorney, or guardian or as a custodian for a minor, please give full title as such. If a corporation, please sign in full corporate name and indicate the signer's title. If a partner, sign in partnership name.

 Signature [PLEASE SIGN WITHIN BOX]

 Date

 Signature (Joint Owners)

 Date