

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

**SCHEDULE 14A**  
**(Rule 14a-101)**  
**INFORMATION REQUIRED IN PROXY STATEMENT**  
**SCHEDULE 14A INFORMATION**

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

Filed by the Registrant ☒ x

Filed by a Party other than the Registrant ☐ o

Check the appropriate box:

- ☐ o Preliminary Proxy Statement  
☐ o **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**  
☒ x Definitive Proxy Statement  
☐ o Definitive Additional Materials  
☐ o Soliciting Material Pursuant to §240.14a-12

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SENESCO TECHNOLOGIES, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- ☒ x No fee required.  
☐ o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
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|-----|---|--|
| (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:   |  |
- ☐ o Fee paid previously with preliminary materials.  
☐ o 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.
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|-----|---|--|
| (1) | Amount Previously Paid:                       |  |
| (2) | Form, Schedule or Registration Statement No.: |  |
| (3) | Filing Party:                                 |  |
| (4) | Date Filed:                                   |  |
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SENESCO TECHNOLOGIES, INC.  
303 George Street, Suite 420  
New Brunswick, New Jersey 08901

To Our Stockholders:

You are cordially invited to attend the 2007 Annual Meeting of Stockholders of Senesco Technologies, Inc. at 10:00 A.M., local time, on Thursday, December 13, 2007, at the American Stock Exchange at 86 Trinity Place, New York, New York 10006.

The Notice of Meeting and Proxy Statement on the following pages describe the matters to be presented at the meeting.

It is important that your shares be represented at this meeting to assure the presence of a quorum. Whether or not you plan to attend the meeting, we hope that you will have your stock represented by voting *as soon as possible*, by signing, dating and returning your proxy card in the enclosed envelope, which requires no postage if mailed in the United States. Your stock will be voted in accordance with the instructions you have given in your proxy.

Thank you for your continued support.

Sincerely,

/s/ Rudolf Stalder

Rudolf Stalder  
Chairman of the Board

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**SENESCO TECHNOLOGIES, INC.**  
**303 George Street, Suite 420**  
**New Brunswick, New Jersey 08901**  
**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS**  
**To Be Held December 13, 2007**

The Annual Meeting of Stockholders (the "Meeting") of Senesco Technologies, Inc., a Delaware corporation (the "Company"), will be held at the American Stock Exchange at 86 Trinity Place, New York, New York 10006 on Thursday, December 13, 2007, at 10:00 A.M., local time, for the following purposes:

1. To elect eight (8) Directors to serve until the next Annual Meeting of Stockholders and until their respective successors shall have been duly elected and qualified.
2. To approve the issuance and sale of up to \$2,000,000 of secured convertible debentures of the Company in the third closing of the financing described below and the issuance and sale of up to an additional \$5,000,000 of the secured convertible debentures and warrants of the Company in the second financing described below. The following table sets forth each investor's current and potential ownership of the Company:

Investor	Beneficial Ownership of Investor Prior to Financing(1)		Beneficial Ownership of Shares After Financing(2)	
	Number	Percent	Number	Percent
YA Global Investments, L.P.	0	0%	11,105,555	26.2%
Stanford Venture Capital Holdings	2,470,535	14.1%	16,359,423	38.5%

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(1) Ownership is based upon the number of outstanding shares of common stock as of September 30, 2007.

(2) Ownership is based upon the sum of (a) the number of outstanding shares of common stock as of September 30, 2007 and (b) the total number of shares underlying the convertible debentures and warrants issued, and to be issued, in the financing, assuming full conversion at the fixed conversion price (as defined below) and full exercise at the current applicable exercise price, and excluding interest shares (as defined below) and other additional shares issuable pursuant to potential adjustments to the exercise and conversion prices.

3. To approve the potential issuance of 62,388,888 shares of our common stock resulting from: (i) certain adjustments to the exercise price of the Series B warrants and to the conversion price of the secured convertible debentures pursuant to the antidilution adjustment provisions of the respective securities and the milestone adjustment provision of the secured convertible debentures; and (ii) pursuant to the interest shares provision of the secured convertible debentures.
4. To approve an amendment to the Company's Certificate of Incorporation to increase the total authorized shares of common stock, \$0.01 par value per share, of the Company from 60,000,000 to 100,000,000.
5. To ratify the appointment of McGladrey & Pullen LLP as the Company's independent registered public accounting firm for the fiscal year ending June 30, 2008.
6. To transact such other business as may properly come before the Meeting or any adjournment or adjournments thereof.

The holders (the "Stockholders") of common stock of record at the close of business on October 22, 2007 (the "Record Date"), are entitled to notice of and to vote at the Meeting, or any adjournment or adjournments thereof. A complete list of such Stockholders will be open to the examination of any Stockholder at the Company's principal executive offices at 303 George Street, Suite 420, New Brunswick, New Jersey 08901 for a period of ten (10) days prior to the Meeting and at the American Stock Exchange in New York on the day of the Meeting. The Meeting may be adjourned from time to time without notice other than by announcement at the Meeting; *provided, however*, if the adjournment is for more than thirty (30) days after the date of the Meeting, or if after the adjournment a new Record Date is fixed for the adjourned meeting, a notice of the adjourned meeting is required to be given to each Stockholder.

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**IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED REGARDLESS OF THE NUMBER OF SHARES YOU MAY HOLD. WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING IN PERSON, PLEASE COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD PROMPTLY IN THE ENCLOSED RETURN ENVELOPE. THE PROMPT RETURN OF PROXIES WILL ENSURE A QUORUM AND SAVE THE COMPANY THE EXPENSE OF FURTHER SOLICITATION. EACH PROXY GRANTED MAY BE REVOKED BY THE STOCKHOLDER APPOINTING SUCH PROXY AT ANY TIME BEFORE IT IS VOTED. IF YOU RECEIVE MORE THAN ONE PROXY CARD BECAUSE YOUR SHARES ARE REGISTERED IN DIFFERENT NAMES OR ADDRESSES, EACH PROXY SHOULD BE SIGNED AND RETURNED TO ENSURE THAT ALL OF YOUR SHARES WILL BE VOTED.**

By Order of the Board of Directors  
/s/ Sascha P. Fedyszyn

New Brunswick, New Jersey  
November 2, 2007

**The Company's 2007 Annual Report accompanies the Proxy Statement.**

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**SENESCO TECHNOLOGIES, INC.**  
**303 George Street, Suite 420**  
**New Brunswick, New Jersey 08901**

**PROXY STATEMENT**

This proxy statement is furnished in connection with the solicitation by the board of directors of Senesco Technologies, Inc., a Delaware corporation, referred to herein as Senesco, we, us or our, of proxies to be voted at our annual meeting of stockholders to be held on Thursday, December 13, 2007, referred to herein as the Meeting, at the American Stock Exchange at 86 Trinity Place, New York, New York 10006, at 10:00 A.M., local time, and at any adjournment or adjournments thereof. The holders of record of our common stock, \$0.01 par value per share, also referred to herein as common stock, as of the close of business on October 22, 2007, also referred to herein as the Record Date, will be entitled to notice of and to vote at the Meeting and any adjournment or adjournments thereof. As of the Record Date, there were 17,473,694 shares of our common stock issued and outstanding and entitled to vote. Each share of our common stock is entitled to one vote on any matter presented at the Meeting.

If proxies in the accompanying form are properly voted and received, the shares of our common stock represented thereby will be voted in the manner specified therein. If not otherwise specified, the shares of our common stock represented by the proxies will be voted:

1. FOR the election of the eight (8) nominees named below as directors;
2. FOR a proposal to issue and sell up to \$2,000,000 of our secured convertible debentures in the third closing of the financing described below, referred to herein as the first financing, and to issue and sell up to an additional \$5,000,000 of our secured convertible debentures and warrants in the second financing described below, referred to herein as the second financing;
3. FOR a proposal to approve the potential issuance of 62,388,888 shares of our common stock: (i) resulting from certain adjustments to the exercise price of the Series B warrants and to the conversion price of the secured convertible debentures pursuant to the antidilution adjustment provisions of the respective securities and the milestone adjustment provision of the secured convertible debentures; and (ii) pursuant to the interest shares provision of the secured convertible debentures;
4. FOR a proposal to amend Senesco's Certificate of Incorporation to increase the total authorized shares of common stock, \$0.01 par value per share, of Senesco from 60,000,000 to 100,000,000;
5. FOR the ratification of the appointment of McGladrey & Pullen, LLP., as our independent registered public accounting firm for the fiscal year ending June 30, 2008; and
6. In the discretion of the persons named in the enclosed form of proxy, on any other proposals which may properly come before the Meeting or any adjournment or adjournments thereof. Any stockholder who has submitted a proxy may revoke it at any time before it is voted, by written notice addressed to and received by our Corporate Secretary, by submitting a duly executed proxy bearing a later date or by electing to vote in person at the Meeting. The mere presence at the Meeting of the person appointing a proxy does not, however, revoke the appointment.

The presence, in person or by proxy, of holders of shares of our common stock having a majority of the votes entitled to be cast at the Meeting shall constitute a quorum. The affirmative vote by the holders of a plurality of the shares of our common stock represented at the Meeting is required for the election of directors, provided a quorum is present in person or by proxy. If such a quorum is present, all actions proposed herein, other than the election of directors, may be taken upon the affirmative vote of our stockholders possessing a majority of the voting power represented at the Meeting.

Abstentions are included in the shares present at the Meeting for purposes of determining whether a quorum is present, and are counted as a vote against for purposes of determining whether any of the foregoing proposals are

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approved. Broker non-votes are when shares are represented at the Meeting by a proxy specifically conferring only limited authority to vote on certain matters and no authority to vote on other matters. Brokers may vote on Proposals 1, 4 and 5, but they may not vote on Proposals 2, 3 and 6. Therefore, broker non-votes are included in the determination of the number of shares represented at the Meeting for purposes of determining whether a quorum is present but are not counted for purposes of determining whether a proposal has been approved in matters where the proxy does not confer the authority to vote on such proposal, and thus have no effect on the outcome of Proposals 2, 3 and 6, but are deemed a vote against Proposals 1, 4 and 5.

You may revoke your proxy and reclaim your right to vote up to and including the day of the Annual Meeting by giving written notice to the Secretary of Senesco, by delivering a proxy card dated after the date of the proxy or by voting in person at the Meeting. All written notices of revocation and other communications with respect to revocations of proxies should be addressed to: Secretary, Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901.

On or about November 9, 2007, this proxy statement, together with the related proxy card, is being mailed to our stockholders of record as of the Record Date. Our annual report to our stockholders for the fiscal year ended June 30, 2007, or fiscal 2007, including our financial statements, is being mailed together with this proxy statement to all of our stockholders of record as of the Record Date. In addition, we have provided brokers, dealers, banks, voting

trustees and their nominees, at our expense, with additional copies of our annual report so that our record holders could supply these materials to our beneficial owners as of the Record Date.

Our common stock is listed on the American Stock Exchange under the symbol “SNT”. On October 22, 2007, the closing price for the common stock as reported by AMEX was \$0.48 per share.

## PROPOSAL NO. 1 ELECTION OF DIRECTORS

At the Meeting, eight (8) directors are to be elected, which number shall constitute our entire board of directors, to hold office until the next annual meeting of stockholders and until their successors shall have been duly elected and qualified.

Unless otherwise specified in the proxy, it is the intention of the persons named in the enclosed form of proxy to vote the stock represented thereby for the election as directors, each of the nominees whose names and biographies appear below. All of the nominees whose names and biographies appear below are at present our directors. In the event any of the nominees should become unavailable or unable to serve as a director, it is intended that votes will be cast for a substitute nominee designated by our board of directors. Our board has no reason to believe that the nominees named will be unable to serve if elected. Each nominee has consented to being named in this proxy statement and to serve if elected.

The following are the nominees for election to our board, and all of these nominees are current members of our board:

Name	Age	Served as a Director Since	Position with Senesco
Rudolf Stalder	66	1999	Chairman of the Board and Director
Bruce C. Galton	55	2001	President, Chief Executive Officer and Director
John E. Thompson, Ph.D.	66	2001	Executive Vice President, Chief Scientific Officer and Director
John N. Braca	49	2003	Director
Christopher Forbes	56	1999	Director
Thomas C. Quick	52	1999	Director
David Rector	60	2002	Director
Jack Van Hulst	68	2007	Director

The principal occupations and business experience, for at least the past five (5) years, of each director and nominee is as follows:

**Rudolf Stalder** has been our director since February 1999 and was appointed as our Chairman and Chief Executive Officer on January 10, 2000. On October 4, 2001, Mr. Stalder resigned as our Chief Executive Officer. Mr. Stalder is a former member of the Executive Boards of Credit Suisse Group and Credit Suisse First Boston and former Chief Executive Officer of the Americas Region of Credit Suisse Private Banking. Mr. Stalder joined Credit Suisse in 1980 as a founding member and Deputy Head of the Multinational Services Group. In 1986, he became Executive Vice President. He was named to Credit Suisse’s Executive Board in 1989. In 1990, he became Head of the Commercial Banking Division and a Member of the Executive Committee. From 1991 to 1995, Mr. Stalder was Chief Financial Officer of Credit Suisse First Boston and a Member of the Executive Boards of Credit Suisse Group and Credit Suisse First Boston. He became head of the Americas Region of Credit Suisse Private Banking in 1995 and retired in 1998. Prior to moving to the United States, Mr. Stalder was a member of the Board of Directors for several Swiss subsidiaries of major corporations including AEG, Bayer, BTR, Hoechst, Saint Gobain, Solvay and Sony. He is a fellow of the World Economic Forum and a board member of the Greater Bridgeport Symphony. He was a member of the Leadership Committee of the Consolidated Corporate Fund of Lincoln Center for the Performing Arts, Board of The American Ballet Theatre, and a Trustee of Carnegie Hall. From 1991 through 1998, Mr. Stalder was Chairman of the New York Chapter of the Swiss-American Chamber of Commerce. He continues to serve as an Advisory Board Member of the American-Swiss Foundation. Mr. Stalder received a diploma in advanced finance management at the International Management Development Institute in Lausanne, Switzerland in 1976. He completed the International Senior Managers Program at Harvard University in 1985.

**Bruce C. Galton** has been our director since November 2001, and he was appointed our President and Chief Executive Officer on October 4, 2001. From April 2000 until June 2001, when it was acquired by Transgenomic, Inc., Mr. Galton was President and Chief Operating Officer and a director of Annovis, Inc., a manufacturer of specialty chemicals for DNA synthesis with operations in Pennsylvania and Glasgow, United Kingdom. From January 1985 to May 1999, Mr. Galton held various senior management positions at Cistron Biotechnology, Inc., including President and Chief Operating Officer from 1988 to 1997 and Chairman and Chief Executive Officer from 1997 to 1999. Cistron Biotechnology, Inc. was engaged in the research and development of certain cytokines, which act as key immune regulators. Mr. Galton is a trustee of the Interfaith Food Pantry (Morris County New Jersey) and is a former member of the Borough of Madison, New Jersey Downtown Development Commission and a former trustee of the Museum of Early Trades and Crafts. Mr. Galton had also served as a Councilman from 1996 through 1998 and a member of Madison’s Planning Board from 1994 through 1998. Mr. Galton received a Bachelor of Science in Commerce with a major in accounting from the University of Virginia in 1974 and an M.B.A. in finance from Fairleigh Dickinson University in 1977.

**John E. Thompson, Ph.D.** has been our director since October 2001. Dr. Thompson was appointed our President and Chief Executive Officer in January 1999, and he continued in that capacity until September 1999 when he was appointed Executive Vice President of Research and Development. In July

2004, Dr. Thompson became our Executive Vice President and Chief Scientific Officer. Dr. Thompson is the inventor of the technology that we develop. Since July 2001, he has been the Associate Vice President, Research and, from July 1990 to June 2001, he was the Dean of Science at the University of Waterloo in Waterloo, Ontario, Canada. Dr. Thompson has a Ph.D. in Biology from the University of Alberta, Edmonton, and he is a Fellow of the Royal Society of Canada. Dr. Thompson is also the recipient of a Lady Davis Visiting Fellowship, the Sigma Xi Award for Excellence in Research, the CSPP Gold Medal and the Technion Visiting Fellowship.

**John N. Braca** has been our director since October 2003. Mr. Braca has also served as a director and board observer for other healthcare, technology and biotechnology companies over the course of his career. From April 2006, Mr. Braca has been the managing director of Fountainhead Venture Group, a healthcare information technology venture fund based in the Philadelphia area. From May 2005 through March 2006, Mr. Braca was a consultant and advisor to GlaxoSmithKline management in their research operations. From 1997 to April 2005, Mr. Braca was a general partner and director of business investments for S.R. One, Limited, or S.R. One, the venture capital subsidiary of GlaxoSmithKline. In addition, from January 2000 to July 2003, Mr. Braca was a general partner of Euclid SR Partners Corporation, an independent venture capital partnership. Prior to joining S.R. One, Mr. Braca held various finance and operating positions of increasing responsibility within several subsidiaries and business units of GlaxoSmithKline. Mr. Braca is a licensed Certified Public Accountant in the state of Pennsylvania and is affiliated with the American Institute of Certified Public Accountants and the Pennsylvania Institute of Certified Public Accountants. Mr. Braca received a Bachelor of Science in Accounting from Villanova University and a Master of Business Administration in Marketing from Saint Joseph’s University.

**Christopher Forbes** has been our director since January 1999. Since 1989, Mr. Forbes has been Vice Chairman of Forbes, Inc., which publishes Forbes Magazine and Forbes.com. From 1981 to 1989, Mr. Forbes was Corporate Secretary at Forbes. Prior to 1981, he held the position of Vice President and Associate Publisher. Mr. Forbes has been a director of Forbes, Inc. since 1977. Mr. Forbes is the Chairman of the American Friends of the Louvre, and he also sits on the Boards of The Business Committee for the Arts, The Brooklyn Museum, The Friends of New Jersey State Museum, The New York Academy of Art, The Victorian Society in America and the Prince Wales Foundation. He is also a member of the Board of Advisors of The Princeton University Art Museum. Mr. Forbes received a Bachelor of Arts degree in Art History from Princeton University in 1972. In 1986, he was awarded the honorary degree of Doctor of Humane Letters by New Hampshire College and in 2003 was appointed a Chevalier of the Legion of Honor by the French Government.

**Thomas C. Quick** has been our director since February 1999. Since 2003, Mr. Quick has been the President of First Palm Beach Properties, Inc. From 2001 through 2003, Mr. Quick was the Vice Chairman of Quick & Reilly/Fleet Securities, Inc., successor to The Quick & Reilly Group, Inc., a holding company for four (4) major financial services businesses. From 1996 until 2001, Mr. Quick was the President and Chief Operating Officer and a director of Quick & Reilly/Fleet Securities, Inc. From 1985 to 1996, he was President of Quick & Reilly, Inc., a Quick & Reilly subsidiary and a national discount brokerage firm. Mr. Quick serves as a member of the Board of Directors and compensation committee of B.F. Enterprises. He is also a member of the Board of Directors of Best Buddies, The American Ireland Fund, Venetian Heritage, Inc. and serves on the Investment Advisory Board for the St. Jude Children’s Hospital. He is a trustee of the National Corporate Theater Fund, Cold Spring Harbor

Laboratories, the Norton Museum, the Inter-City Scholarship Foundation of New York City, and an advisory board member of Christie, European. Mr. Quick is a graduate of Fairfield University.

**David Rector** has been our director since February 2002. Mr. Rector also serves as a director and member of the compensation and audit committee of the Dallas Gold and Silver Exchange (formerly Superior Galleries, Inc.) and a director and member of the audit committee of Southridge Technology Group, Inc. From May 2004 through December 2006, Mr. Rector had served in senior management positions with Nanoscience Technologies, Inc., a development stage company engaged in the development of DNA Nanotechnology. Also, since 1985, Mr. Rector has been the Principal of The David Stephen Group, which provides enterprise consulting services to emerging and developing companies in a variety of industries. From 1983 until 1985, Mr. Rector served as President and General Manager of Sunset Designs, Inc., a domestic and international manufacturer and marketer of consumer product craft kits, and a wholly-owned subsidiary of Reckitt & Coleman N.A. From 1980 until 1983, Mr. Rector served as the Director of Marketing of Sunset Designs. From 1971 until 1980, Mr. Rector served in progressive roles in both the financial and product marketing departments of Crown Zellerbach Corporation, a multi-billion dollar pulp and paper industry corporation. Mr. Rector received a Bachelor of Science degree in business/finance from Murray State University in 1969.

**Jack Van Hulst** has been our director since January 2007. Mr. Van Hulst also serves as a director and member of the compensation committee of Napo Pharmaceuticals, Inc. He has more than 39 years of international experience in the pharmaceutical industry. He began his career in 1968 at Organon, which was subsequently acquired by AKZO, N.V., the multinational human and animal healthcare company, where he was based in Europe and the US and responsible for establishing AKZO’s position in the US in the manufacturing and sales and marketing of fine chemicals. Mr. Van Hulst later became President of AKZO’s US Pharmaceutical Generic Drug Business and was responsible for establishing AKZO in the US generic drug industry. From 1989 to 1999 Mr. Van Hulst successively owned and led two generic pharmaceutical companies, improving their operations and then selling them to a private equity group and a pharmaceutical company. From 1999 to 2005, he was Executive Vice President at Puerto Rico-based MOVA Pharmaceutical Corporation, a contract manufacturer to the pharmaceutical industry that recently merged with Canadian-based Patheon.

**Our board of directors recommends a vote FOR the election of each of the nominees to the board of directors.**

## Corporate Governance Guidelines

Our board of directors has long believed that good corporate governance is important to ensure that we are managed for the long-term benefit of our stockholders. During the past year, our board has continued to review our governance practices in light of the Sarbanes-Oxley Act of 2002, the new rules and regulations of the Securities and Exchange Commission and the new listing standards, policies and requirements of the American Stock Exchange, LLC, or AMEX.

Our board of directors has adopted corporate governance guidelines to assist it in the exercise of its duties and responsibilities and to serve the best interests of Senesco and its stockholders. These guidelines, which provide a framework for the conduct of our board’s business, include that:

- the principal responsibility of the directors is to oversee the management of Senesco;
- a majority of the members of our board shall be independent directors;
- the independent directors met regularly in executive session;
- directors have full and free access to management and, as necessary and appropriate, independent advisors;
- new directors participate in an orientation program and all directors are expected to participate in continuing director education on an ongoing basis; and
- at least annually, our board and its committees will conduct a self-evaluation to determine whether they are functioning effectively.

### **Board Determination of Independence**

Under the current AMEX rules, a director will, among other things, qualify as an “independent director” if, in the opinion of our board of directors, that person does not have a material relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Our board of directors currently consists of Rudolf Stalder, Bruce C. Galton, John E. Thompson, Ph.D., John N. Braca, Christopher Forbes, Thomas C. Quick, David Rector and Jack Van Hulst. We are currently traded on the AMEX, which requires our board be comprised of a majority of independent directors. Our board of directors has determined that each of Messrs. Stalder, Braca, Forbes, Quick, Rector and Van Hulst is an “independent director” as defined under Sections 121(A) and 802 of the AMEX rules.

### **Committees and Meetings of our Board of Directors**

Our board of directors held seven (7) meetings during fiscal 2007. Throughout this period, each member of our board of directors attended or participated in at least 75% of the aggregate of the total number of meetings of our board held during the period for which such person has been a director, and the total number of meetings held by all committees of our board on which each the director served during the periods the director served, except for Thomas C. Quick, who attended less than 75% of the board meetings. Our board of directors has three standing committees: the Compensation Committee, the Audit Committee and the Nominating and Corporate Governance Committee, each of which operates under a charter that has been approved by our board. Each of these charters are also posted on our website at [www.senesco.com](http://www.senesco.com). Our corporate governance guidelines provide that directors are expected to attend the annual meeting of stockholders. All directors attended the 2006 annual meeting of stockholders.

Compensation Committee. Our Compensation Committee was established in July 1999, pursuant to the Compensation Committee Charter. Our Compensation Committee generally makes recommendations concerning salaries and incentive compensation for our management and our employees. The primary responsibilities of our Compensation Committee, as more fully set forth in the Compensation Committee Charter adopted in July 1999 and amended and restated on July 7, 2004, include:

- annually reviewing and approving corporate goals and objectives relevant to CEO compensation;
- reviewing and approving, or recommending for approval by our board, the salaries and incentive compensation of our executive officers;
- preparing the Compensation Committee report;
- administering our 1998 Stock Incentive Plan, as amended, or our 1998 Stock Plan; and
- reviewing and making recommendations to our board with respect to director compensation.

In addition, our Compensation Committee periodically reviews the potential effect of Section 162(m) and uses its judgment to authorize compensation payments that may be subject to the limit when our Compensation Committee believes such payments are appropriate and in the best interests of Senesco and our stockholders, after taking into consideration changing business conditions and the performance of our employees. Section 162(m) of the Internal Revenue Code of 1986, as amended, generally disallows a tax deduction to public companies for certain compensation in excess of \$1 million paid to a company’s CEO and the four other most highly compensated executive officers. Certain compensation, including qualified performance-based compensation, will not be subject to the deduction limit if certain requirements are met.

Through February 21, 2007, our Compensation Committee was comprised of David Rector, John N. Braca and Rudolf Stalder. From February 21, 2007 through present, our Compensation Committee was comprised of David Rector, John N. Braca and Jack Van Hulst. Mr. Rector currently serves as the chairman of the Compensation Committee. All members of our Compensation Committee are considered independent pursuant to Sections 121(A) and 805 of the AMEX rules. Our Compensation Committee held eight (8) meetings during fiscal 2007.

### Compensation Committee Interlocks and Insider Participation

The members of the Compensation Committee from July 1, 2007, through February 21, 2007, were David Rector, John N. Braca and Rudolf Stalder. From February 21, 2007 through present, our Compensation Committee was comprised of David Rector, John N. Braca and Jack Van Hulst. No member of the Compensation Committee is or has been an officer or employee of our company or any of our subsidiaries. In addition, no member of the Compensation Committee had any relationships with us or any other entity that requires disclosure under the proxy rules and regulations promulgated by the SEC and none of our executive officers served on the Compensation Committee or Board of any company that employed any member of our Board of Directors.

Audit Committee. Our Audit Committee was established in July 1999. On October 8, 2003, our board of directors adopted an Amended and Restated Audit Committee Charter. A copy of our current Audit Committee Charter is attached hereto as Annex A. The primary responsibilities of our Audit Committee include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of certain reports from our independent registered public accounting firm;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk management policies;
- establishing policies regarding hiring employees from our independent registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with independent registered public accounting firm and management; and
- preparing the audit committee report required by SEC rules, which is included on page 9 of this proxy statement.

Our Audit Committee is comprised of John N. Braca, David Rector and Thomas C. Quick. Mr. Braca currently serves as the chairman of the Audit Committee. AMEX currently requires an Audit Committee comprised solely of independent directors. Messrs. Braca, Rector and Quick are “independent” members of our board of directors as defined in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Sections 121(A) and 803 of the AMEX rules. In addition, our board of directors has determined that Mr. Braca satisfies the definition of an audit committee “financial expert” as set forth in Item 401(e) of Regulation S-B promulgated by the SEC. Our Audit Committee held four (4) meetings during fiscal 2007.

#### Review and Approval of Related Person Transactions

Our Audit Committee Charter requires that our Audit Committee review and approve or ratify transactions involving us and any executive officer, director, director nominee, 5% stockholder and certain of their immediate family members, also referred to herein as a related person. The policy and procedures cover any transaction involving a related person, also referred to herein as a related person transaction, in which the related person has a material interest and which does not fall under an explicitly stated exception set forth in the applicable disclosure rules of the SEC.

A related person transaction will be considered approved or ratified if it is authorized by the Audit Committee after full disclosure of the related person’s interest in the transaction. In considering related person transactions, the Audit Committee will consider any information considered material to investors and the following factors:

- the related person’s interest in the transaction;
- the approximate dollar value of the transaction;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that we could have reached with an unrelated third party; and
- the purpose and potential benefit to us of the transaction.

Nominating and Corporate Governance Committee. The primary responsibilities of our Nominating and Corporate Governance Committee, as more fully set forth in the Nominating and Corporate Governance Committee Charter and Corporate Governance Guidelines adopted on October 15, 2004, include:

- identifying individuals qualified to become our board members;
- evaluating and recommending to our board of directors the persons to be nominated for election as directors at any meeting of stockholders and to each of our board’s committees;
- reviewing and making recommendations to our board with respect to management succession planning;
- developing and recommending to our board a set of corporate governance principles applicable to Senesco; and
- overseeing the evaluation of our board.

Our Nominating and Corporate Governance Committee was formed on September 29, 2004, and it is currently comprised of Messrs. Stalder, Forbes and Quick. Mr. Forbes currently serves as the chairman of the Nominating and Corporate Governance Committee. All members of our Nominating and Corporate Governance Committee are independent, as independence for nominating and corporate governance committee members is defined under Sections 121(A) and 804 of the AMEX rules. The Nominating and Corporate Governance Committee had five (5) meetings during fiscal 2007.

Code of Business Ethics and Conduct. Pursuant to the requirements of Section 406 of the Sarbanes-Oxley Act of 2002 and Section 807 of the AMEX rules, on March 17, 2003, our board of directors adopted a Code of Business Ethics and Conduct, which may also be found on our website at [www.senesco.com](http://www.senesco.com). Our Code of Ethics contains written standards designed to deter wrongdoing and to promote:

- honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- full, fair, accurate, timely, and understandable disclosure in reports and documents filed with the SEC;
- compliance with applicable governmental laws, rules and regulations;
- the prompt internal reporting of violations of our Code of Ethics to an appropriate person or persons identified in our Code of Ethics; and
- accountability for adherence to our Code of Ethics.

Each of our employees, officers and directors completed a signed certification to document his or her understanding of and compliance with our Code of Ethics.

## Director Candidates

The process followed by our Nominating and Corporate Governance Committee to identify and evaluate director candidates includes requests to board members and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the committee and the board.

In considering whether to recommend any particular candidate for inclusion in the board's slate of recommended director nominees, our Nominating and Corporate Governance Committee will apply the criteria contained in the committee's charter. These criteria include the candidate's integrity, business acumen, knowledge of our business and industry, age, experience, diligence, conflicts of interest and the ability to act in the interests of all stockholders. Our Nominating and Corporate Governance Committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow the board to fulfill its responsibilities.

Stockholders may recommend individuals to our Nominating and Corporate Governance Committee for consideration as potential director candidates by submitting their names, together with appropriate biographical information and background materials and a statement as to whether the stockholder or group of stockholders making the recommendation has beneficially owned more than 5% of our common stock for at least one year as of the date such recommendation is made, to: Nominating and Corporate Governance Committee, c/o Corporate

Secretary, Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901. Assuming that appropriate biographical and background material has been provided on a timely basis, the committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

## Communicating with our Independent Directors

Our board of directors will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. The Chairman of the Board, with the assistance of our outside counsel, is primarily responsible for monitoring communications from our stockholders and for providing copies or summaries to the other directors as he considers appropriate. Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the Chairman considers to be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we tend to receive repetitive or duplicative communications.

Stockholders who wish to send communications on any topic to our board should address such communications to: Board of Directors, c/o Corporate Secretary, Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901.

## Compensation of Directors

In accordance with a resolution unanimously approved by our board of directors on December 14, 2006, we granted options to purchase shares of our common stock, pursuant to and in accordance with our 1998 Stock Plan, as consideration for their service on our board of directors through June 30, 2006, or fiscal 2006, except for Jack Van Hulst, whose options were granted as an incentive to join our board of directors during the fiscal year ended June 30, 2007, as follows:

Director	Number of Shares Underlying Options Granted	Grant Date	Exercise Price Per Share
Rudolf Stalder	40,000	December 14, 2006	\$ 1.08
Christopher Forbes	30,000	December 14, 2006	\$ 1.08
Thomas Quick	20,000	December 14, 2006	\$ 1.08
John Braca	30,000	December 14, 2006	\$ 1.08
David Rector	30,000	December 14, 2006	\$ 1.08
Jack Van Hulst	10,000	March 20, 2007	\$ 1.05

Options granted to the board of directors have an exercise price equal to the fair market value of our common stock on the date of grant, have a term of ten (10) years, and are exercisable as follows: (i) one-half (1/2) of the options were exercisable as of the date of grant; and (ii) one-half (1/2) of the options shall become exercisable on the first anniversary of the date of grant.



The table below shows the compensation paid or awarded to our independent directors during the fiscal year ended June 30, 2007.

Name (a)	Fees Earned or Paid in Cash (\$) (b)	Stock Awards (\$) (c)	Option Awards (1) (\$) (d)	Non-Equity Incentive Plan Compensation (\$) (e)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$) (f)	All Other Compensation (\$) (g)	Total (\$) (h)
Rudolf Stalder	—	—	\$ 34,000	—	—	—	\$ 34,000
Christopher Forbes	—	—	\$ 25,500	—	—	—	\$ 25,500
Thomas Quick	—	—	\$ 17,000	—	—	—	\$ 17,000
John Braca	—	—	\$ 25,500	—	—	—	\$ 25,500
David Rector	—	—	\$ 25,500	—	—	—	\$ 25,500
Jack Van Hulst	—	—	\$ 10,500	—	—	—	\$ 10,500

(1) Sets forth the black-scholes value, computed in accordance with FAS 123R, of the options on the date of grant.

No director has received cash compensation for his services on our board of directors. We provide reimbursement to directors for reasonable and necessary expenses incurred in connection with attendance at meetings of the board of directors and other Senesco business.

Dr. Thompson has received compensation for providing research and development management services to us. See “Certain Relationships and Related Transactions” which sets forth the details of the compensation for Dr. Thompson.

### Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires a company’s directors, officers and stockholders who beneficially own more than 10% of any class of equity securities of the company registered pursuant to Section 12 of the Exchange Act, collectively referred to herein as the Reporting Persons, to file initial statements of beneficial ownership of securities and statements of changes in beneficial ownership of securities with respect to the company’s equity securities with the SEC. All Reporting Persons are required by SEC regulation to furnish us with copies of all reports that such Reporting Persons file with the SEC pursuant to Section 16(a).

Based solely on our review of the copies of such forms received by us and upon written representations of the Reporting Persons received by us, we believe that there has been compliance with all Section 16(a) filing requirements applicable to our Reporting Persons.

## EXECUTIVE OFFICERS

The following table identifies our current executive officers:

Name	Age	Capacities in Which Served	In Current Position Since
Bruce C. Galton	55	President and Chief Executive Officer	October 2001
John E. Thompson, Ph.D.	66	Executive Vice President and Chief Scientific Officer	July 2004
Sascha P. Fedyszyn (1)	32	Vice President of Corporate Development and Secretary	January 1999
Joel P. Brooks (2)	48	Chief Financial Officer and Treasurer	December 2000
Richard Dondero (3)	57	Vice President of Research and Development	July 2004

(1) Mr. Fedyszyn was appointed our Vice President of Corporate Development in January 1999 and was appointed our Secretary in January 2000. Mr. Fedyszyn has been a Vice President of Senesco since its inception in June 1998. Mr. Fedyszyn was also a Research Associate at the Logistics Management Institute from May 1995 to September 1995. Mr. Fedyszyn received a Bachelor of Arts degree in Biology from Princeton University in June 1997.

(2) Mr. Brooks was appointed our Chief Financial Officer and Treasurer in December 2000. From September 1998 until November 2000, Mr. Brooks was the Chief Financial Officer of Blades Board and Skate, LLC, a retail establishment specializing in the action sports industry. Mr. Brooks was Chief Financial Officer from 1997 until 1998 and Controller from 1994 until 1997 of Cable and Company Worldwide, Inc. He also held the position of Controller at USA Detergents, Inc. from 1992 until 1994, and held various positions at several public accounting firms from 1983 through 1992. Mr. Brooks received his Bachelor of Science degree in Commerce with a major in Accounting from Rider University in February 1983.

(3) Mr. Dondero was appointed our Vice President of Research and Development in July 2004. From July 2002 until July 2004, Mr. Dondero was a Group Leader in the Proteomics Reagent Manufacturing division of Molecular Staging, Inc., a biotech firm engaged in the measurement and discovery of new biomarkers. From 1985 through June 2001, Mr. Dondero served in several roles of increasing responsibility through Vice President of Operations and Product Development at Cistron Biotechnology, Inc. From 1977 through 1985, Mr. Dondero served as a senior scientist at Johnson and Johnson, and from 1975 through 1977, as a scientist at Becton Dickinson. Mr. Dondero received his Bachelor of Arts degree from New Jersey State University in 1972 and his Master of Science degree from Seton Hall University in 1976.

None of our current executive officers are related to any other executive officer or to any of our directors. Our executive officers are elected annually by our board of directors and serve until their successors are duly elected and qualified.

## Compensation Discussion and Analysis

This Compensation Discussion and Analysis explains the principles underlying our compensation policies and decisions and the principal elements of compensation paid to our executive officers during Fiscal 2007. Our Chief Executive Officer, Chief Financial Officer and the other executive officers included in the Summary Compensation Table will be referred to as the “named executive officers” for purposes of this discussion. In general, the compensation principles for our named executive officers are similar to those of all our other executive officers.

### Compensation Objectives and Philosophy

The Compensation Committee, also referred to herein as the Committee, of the Board of Directors is responsible for the following:

- to discharge the Board’s responsibilities relating to compensation of our directors and named executive officers;
- to have overall responsibility for approving and evaluating our director and officer compensation plans, policies and programs;
- to have responsibility for producing an annual report on executive compensation for inclusion in our proxy statement; and
- to review and discuss with Senesco management, the Compensation Discussion & Analysis which is included in Senesco’s annual proxy statement.

As part of this process, the Committee seeks to accomplish the following objectives with respect to our executive compensation programs:

- to motivate, recruit and retain executives capable of meeting our strategic objectives;
- to provide incentives to ensure superior executive performance and successful financial results for us; and
- to align the interests of executives with the long-term interests of our stockholders.

The Committee seeks to achieve these objectives by:

- establishing a compensation structure that is both market competitive and internally fair, taking into account the value of the position in the marketplace;
- linking a substantial portion of compensation to our achievement of long-term and short-term financial objectives and the individual’s contribution to the attainment of those objectives;
- providing risk for underachievement and upward leverage for overachievement of goals; and
- providing long-term equity-based incentives and encouraging direct share ownership by executives with the intention of providing incentive-based compensation to encourage a long-term focus on company profitability and stockholder value.

### Setting Executive Compensation

In Fiscal 2007, the Committee engaged J. Richard and Co., also referred to herein as J. Richard, a nationally recognized compensation consulting firm, to provide competitive compensation data and general advice on our compensation programs and policies for our Chief Executive Officer, and J. Richard was available for consultation with the Committee to discuss the compensation programs for our other named executive officers. During Fiscal 2007, J. Richard performed a market analysis of the compensation paid by comparable companies and provided the Committee with recommended compensation ranges for the Chief Executive Officer based on the competitive data. In addition, the Chief Executive Officer provided recommendations to the Committee with respect to the compensation packages for those other named executive officers for Fiscal 2007, and the Committee also reviewed the Chief Executive Officer’s recommendation against compensation paid by comparable companies.

It is the Committee’s objective to target each component of compensation listed below to be competitive with comparable positions at peer group companies, and to target the total annual compensation of each named executive officer at the appropriate level for comparable positions at the competitive peer group companies. Our list of peer group companies is as follows: Amarillo Biosciences, Inc., A.P.Pharma, Inc., Applied NeuroSolutions, Inc., AutoImmune Inc., Avax Technologies, Inc., Cadus Corporation, Helix BioMedix, Inc., ImmuCell Corporation, Medistem Laboratories, Inc., MicroIslet, Inc., Millennium Biotechnologies Group, Inc., Nanobac Pharmaceuticals, Inc., Neurologix, Inc., Opexa Therapeutics, Inc., Point Therapeutics, Inc., Pro-Pharmaceuticals, Inc., Sanguine Corporation, Symbolion Pharmaceuticals, Inc., Synthetech, Inc., Synthetic Blood International, Inc., and TorreyPines Therapeutics, Inc.

However, in determining the compensation of each named executive officer, the Committee also considers a number of other factors, including Senesco’s recent performance and the named executive officer’s individual performance, the Chief Executive Officer’s recommendations, the importance of the executive’s position and role in relation to execution of the Company’s strategic plan, and the cost of living in the geographic area in which the named executive officer’s office is located. There is no pre-established policy for allocation of compensation between cash and non-cash components or between short-term and long-term components. Instead, the Committee determines the mix of compensation for each named executive officer based on its review of the competitive data and its subjective analysis of that individual’s performance and contribution to our financial performance. For the Chief Executive

Officer, for Fiscal 2008, the Committee set his performance targets and compensation levels based upon the input from the Compensation Committee’s consultant and from the Chief Executive Officer. For other named executive officers, the Committee sets performance targets and compensation levels after receiving recommendations from the Chief Executive Officer.

In selecting companies to survey for such compensation purposes, the Compensation Committee considered many factors not directly associated with the stock price performance of those companies, such as geographic location, development stage, organizational structure and market capitalization. For this reason, there is not a meaningful correlation between the companies included within the peer group identified for comparative compensation purposes and the companies included within the RDG Micro Biotechnology Index.

## Components of Compensation

For Fiscal 2007, our executive compensation program included the following components:

- base salary;
- annual short-term equity incentives; and
- change in control and other severance arrangements.

For Fiscal 2008, our executive compensation program included the following components:

- base salary;
- annual short-term equity incentives;
- long-term equity incentive awards; and
- change in control and other severance arrangements.

The Committee seeks to align the named executive officers’ and shareholders’ interests in a pay for performance environment. On average, a large portion of an executive officer’s total compensation is at risk, with the amount actually paid tied to achievement of pre-established objectives and individual goals.

## Base Salary

**In General** – It is the Committee’s objective to set a competitive rate of annual base salary or consulting fees for each named executive officer. The Committee believes competitive base salaries are necessary to attract and retain top quality executives, since it is common practice for public companies to provide their executive officers with a guaranteed annual component of compensation that is not subject to performance risk. However, the Committee recognizes that Senesco is still a development stage company, with little to no revenue currently.

When compared to comparable positions at the competitive peer group companies, it is the Committee’s objective to target the base compensation level of executive officers below the 50th percentile because of our current financial position. However, historically the compensation levels for our executive officers has been below the 25<sup>th</sup> percentile of competitive peer group companies. However, in determining the compensation of each executive officer, the Committee also considers a number of other factors, including recent Company and individual performance, the CEO’s recommendations and cost of living. There is no pre-established policy for allocation of compensation between cash and non-cash components or between short-term and long-term components. Instead, the Committee determines the mix of compensation for each executive officer based on its review of the competitive data and its subjective analysis of that individual’s performance and contribution to the Company’s financial performance.

**Base Salary for Fiscal 2007** – For Fiscal 2007, each named executive officer’s salary, except for the President and Chief Executive Officer, was increased to cover cost of living increases. The table below shows annual Fiscal 2006 and Fiscal 2007 base salary or consulting rates for each named executive officer:

Name	Title	2006 Salary	2007 Salary (1)	% Increase
Bruce C. Galton	President and Chief Executive Officer	\$ 242,500	\$ 242,500	0.0%
John E. Thompson	Executive Vice-President and Chief Scientific Officer	\$ 62,400(2)	\$ 65,000(2)	4.2%
Sascha P. Fedyszyn	Vice-President of Corporate Development and Secretary	\$ 93,600	\$ 97,500	4.2%
Joel Brooks	Chief Financial Officer and Treasurer	\$ 139,100	\$ 145,000	4.2%
Richard Dondero	Vice-President of Research and Development	\$ 120,000	\$ 125,000	4.2%

(1) Annual salary increases became effective January 1, 2007.

(2) Represents consulting fees paid under a consulting agreement.

**Base Salary for Fiscal 2008** – The Committee has not approved any increases in base salary for Fiscal 2008, but it will consider a cost of living adjustment for the named executive officers for calendar 2008.

**Annual Bonuses for Fiscal 2007 and Fiscal 2008** – Bonuses are determined at the discretion of the Board of Directors based upon the recommendation of the Committee. There were no cash bonuses granted during Fiscal 2007, and it is anticipated that there will be no cash bonuses granted for Fiscal 2008.

## Short Term Incentive Equity Awards

**In General** – A portion of each named officer’s compensation is provided in the form of short-term equity awards. It is the Committee’s belief that properly structured equity awards are an effective method of aligning the short-term interests of our named executive officers with those of our stockholders.

Equity awards were made in the form of incentive stock options. The Committee has followed a grant practice of tying equity awards to its annual calendar year-end review of individual performance, its assessment of our performance and our operational results.

**Incentive Stock Option Fiscal 2007 Awards** – In Fiscal 2007, equity grants to our named executive officers were in the form of incentive stock options, also referred herein as ISO’s. Each ISO entitles the recipient to purchase a stated amount of shares of common stock at a fixed price, which represents the closing market price of the common stock on the day prior to the date of grant.

The President and Chief Executive Officer received ISO’s in the amount of 40,000 shares at an exercise price of \$1.08 on December 14, 2006. The ISO’s vest as follows: one-third on December 14, 2006; one-third on December 14, 2007; and one-third on December 14, 2008.

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The Chief Financial Officer, Executive Vice President, Vice President of Corporate Development and Vice President of Research and Development each received ISO’s in the amount of 25,000 shares at an exercise price of \$1.08 on December 14, 2006. The ISO’s vest as follows: one-third on December 14, 2006; one-third on December 14, 2007; and one-third on December 14, 2008.

**Restricted Stock Unit Short-Term Incentive Plan for Fiscal 2008** – The Company’s Restricted Stock Unit Short-Term Incentive Plan, or STIP, covering Fiscal 2008, equity grants to our named executive officers will be in the form of restricted stock units, also referred to herein as RSU’s. Each RSU entitles the recipient to receive one share of our common stock upon vesting or upon a designated date or event following such vesting. All RSUs will be awarded together and will be available for distribution on or around July-August 2008 upon evaluation of performance objectives that have been identified further below under the heading STIP Performance Objectives, or SPO’s.

The Committee will follow a grant practice of tying equity awards to its annual year-end review of individual performance, its assessment of our performance and our financial results. Accordingly, it is expected that any equity awards to the named executive officers will be made on an annual basis promptly after the release of our financial results. The Committee has established short-term incentive grant guidelines for eligible named executive officers each year based on competitive annual grant data provided by management’s compensation consultant and by J. Richard, the Committee’s compensation consultant.

The total amount of RSU’s in the STIP pool awarded to our named executive officers will be 175,000 shares representing one percent (1%) of the outstanding shares as of July 1, 2007. The specific amount of RSU’s awarded to each individually named executive officer relating to the performance objectives are based on (i) the functional areas assessed by the underlying detailed objectives of each named executive officer, (ii) the weight of each of the functions of each named executive officer, and (iii) the contribution to each function by each named executive officer.

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The amount and percentage of the RSU’s awarded to all the named executive officers as a whole for the their contributions to each of the STIP Performance Objectives will be as follows:

<b>STIP Performance Objective</b>	<b>Percentage of STIP RSU Award Pool</b>	<b>Total Amount of RSUs Awarded As a Whole to All Named Executive Officers per SPO</b>
<b><u>First STIP Performance Objective.</u></b>		
Contributions Relating to Cancer Target	45%	78,750
<b><u>Second STIP Performance Objective.</u></b>		
Contributions Relating to Financing	25%	43,750
<b><u>Third STIP Performance Objective.</u></b>		
Contributions Relating to Licensing and Support	15%	26,250
<b><u>Fourth STIP Performance Objective.</u></b>		
Contributions Relating to Intellectual Property Administration	4%	7,000
<b><u>Fifth STIP Performance Objective.</u></b>		
Contributions Relating to Investor Relations	3%	5,250
<b><u>Sixth STIP Performance Objective.</u></b>		
Contributions Relating to Website Administration	1%	1,750
<b><u>Seventh STIP Performance Objective.</u></b>		
Contributions Relating to Audits and Securities Filings	5%	8,750
<b><u>Eighth STIP Performance Objective.</u></b>		
Contributions Relating to the American Stock Exchange Duties	1%	1,750
<b><u>Ninth STIP Performance Objective.</u></b>		
Contributions Relating to the Future Financing Plan	1%	1,750

Each named executive officer eligible to receive an award pursuant to the STIP is required to be employed by the Company upon vesting date in or around July-August 2008 (the “Vesting Date”). If a named executive officer is no longer employed by the Vesting Date, then such named executive officer’s respective RSU award tied to such STIP Performance Objective will be forfeited. The Committee shall have the sole discretion to reinstate any eliminated

portion or segment of a STIP Performance Objective award or that portion of a STIP Performance Objective award for an award to a successor to the STIP Performance Objectives.

The amount and percentage of RSU's awarded to the named executive officers individually for their contributions to each of the STIP Performance Objectives may be modified, altered and redistributed by the Chief Executive Officer, subject to Committee review, to reflect (i) the actual performance of each named executive officer, (ii) the potential reassignment of duties of each named executive officer, and (iii) the unanticipated accomplishments by any of the named executive officers after the outset of the STIP that contribute significantly to shareholder value during fiscal 2008.

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Subject to the preceding paragraph, the approximate individual amounts and percentages of RSU awards to the named executive officers are as follows:

Name	Bruce C. Galton	John E. Thompson	Sascha P. Fedyszyn	Joel Brooks	Richard Dondero
	President and Chief Executive Officer	Executive Vice-President and Chief Scientific Officer	Vice-President of Corporate Development and Secretary	Chief Financial Officer and Treasurer	Vice-President of Research and Development
<b>Title</b>					
Percentage of 78,750 RSU's Awarded for First SPO	20%	25%	10%	10%	35%
Number of RSU's Awarded for the First SPO	15,750	19,687.5	7,875	7,875	27,562.5
Percentage of 43,750 RSU's Awarded for the Second SPO	45%	0%	5%	45%	5%
Number of RSU's Awarded for the Second SPO	19,687.5	0	2,187.5	19,687.5	2,187.5
Percentage of 26,250 RSU's Awarded for the Third SPO	35%	15%	35%	5%	10%
Number of RSU's Awarded for the Third SPO	9,187.5	3,937.5	9,187.5	1,312.5	2,625
Percentage of 7,000 RSU's Awarded for the Fourth SPO	4%	30%	30%	0%	30%
Number of RSU's Awarded for the Fourth SPO	700	2,100	2,100	0	2,100
Percentage of 5,250 RSU's Awarded for the Fifth SPO	30%	0%	30%	30%	10%
Number of RSU's Awarded for the Fifth SPO	1,575	0	1,575	1,575	525
Percentage of 1,750 RSU's Awarded for the Sixth SPO	10%	0%	70%	10%	10%

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Name	Bruce C. Galton	John E. Thompson	Sascha P. Fedyszyn	Joel Brooks	Richard Dondero
	President and Chief Executive Officer	Executive Vice-President and Chief Scientific Officer	Vice-President of Corporate Development and Secretary	Chief Financial Officer and Treasurer	Vice-President of Research and Development
<b>Title</b>					
Number of RSU's Awarded for the Sixth SPO	175	0	1,225	175	175
Percentage of 8,750 RSU's Awarded for the Seventh SPO	20%	5%	10%	60%	5%
Number of RSU's Awarded for the Seventh SPO	1,750	437.5	875	5,250	437.5
Percentage of 1,750 RSU's Awarded for the Eighth SPO	50%	0%	0%	50%	0%
Number of RSU's Awarded for the Eighth SPO	875	0	0	875	0
Percentage of 1,750 RSU's Awarded for the Ninth SPO	30%	10%	10%	30%	20%
Number of RSU's Awarded for the Ninth SPO	525	175	175	525	350
Total RSU's Awarded	50,225	26,338	25,200	37,275	35,962
Percentage of 175,000 RSU's Awarded for All SPOs	29%	15%	14%	21%	21%

It is the Committee's belief that equity awards are essential to the retention of the named executive officers and crucial to our long-term financial successes. The equity award's have vesting schedules that provide a meaningful incentive for the named executive officer to remain in our service. These equity awards also serve as an important vehicle to achieve the Committee's objective of aligning management and stockholders' interests. Equity awards in the form of ISO's and RSU's promote all of these objectives.

#### Long-Term Incentive Equity Awards

**In General** – A portion of each named executive officer's compensation is provided in the form of long-term incentive equity awards as set forth in the Long-Term Incentive Plan (the "LTIP") discussed below. It is the Committee's belief that properly structured equity awards are an effective method of aligning the long term interests of our named executive officers with those of our stockholders.

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There was no formal LTIP in Fiscal 2007. Beginning with Fiscal 2008, equity awards will be made in the form of restricted stock units. The Committee will follow a grant practice of tying equity awards upon the completion of certain event milestones (“LTIP Event Milestones”) discussed below. Accordingly, it is expected that any equity awards to the named executive officers will be made promptly after the completion of each LTIP Event Milestone. The Committee has established long-term incentive grant guidelines for eligible named executive officers based on competitive annual grant data provided by management’s compensation consultant and by J. Richard, the Committee’s compensation consultant.

**Long-Term Incentive Plan** – Beginning on October 23, 2007 (the “LTIP Effective Date”) and ending on the earlier of (i) the completion of the Third LTIP Event Milestone or (ii) three (3) years from the LTIP Effective Date, LTIP equity grants to our named executive officers will be in the form of RSU’s. Each RSU entitles the recipient to receive one share of our common stock upon vesting or upon a designated date or event following such vesting.

The total RSU’s in the LTIP pool awarded to our named executive officers will be 500,000 shares representing three percent (3%) of the outstanding shares as of July 1, 2007.

The amount and percentage of the RSU’s awarded to all the named executive officers as a whole for the completion of each of the three LTIP Event Milestones are as follows:

<u>LTIP Event Milestone</u>	<u>Percentage of LTIP RSU Award Pool</u>	<u>Total Amount of RSUs Awarded As a Whole to All Named Executive Officers</u>
<u>First LTIP Event Milestone.</u>		
The Execution of a Research Agreement to Conduct Phase I/II Trials at a Research Facility	20%	100,000
<u>Second LTIP Event Milestone.</u>		
The Filing and Acceptance by the U.S. FDA of an investigation new drug application, or IND, by the date set by the Committee	20%	100,000
<u>Third LTIP Event Milestone.</u>		
The Successful Completion of Phase I/II Trials Approved by the FDA by the date set by the Committee	60%	300,000

Each named executive officer eligible to receive an award pursuant to the LTIP is required to be employed by the Company upon the completion of each individual LTIP Event Milestone. If a named executive officer is no longer employed by the Company before the completion of an individual LTIP Event Milestone, then such named executive officer’s respective RSU award tied to such uncompleted LTIP Event Milestone will be forfeited and so will that total portion of the whole LTIP award pool. The Committee shall have the sole discretion to reinstate any eliminated portion or segment of a LTIP Event Milestone award or that portion of a LTIP Event Milestone award for a successor to the LTIP Event Milestones.

The LTIP awards for each named executive officer upon the completion of each individual LTIP Event Milestone shall be as follows:

<u>Name</u>	<u>Title</u>	<u>Percentage of Total RSU’s Awarded Upon Completion of a LTIP Event Milestone</u>	<u>Number of RSU’s Awarded upon Completion of First LTIP Event Milestone</u>	<u>Number of RSU’s Awarded upon Completion of Second LTIP Event Milestone</u>	<u>Number of RSU’s Awarded upon Completion of Third LTIP Event Milestone</u>
Bruce C. Galton	President and Chief Executive Officer	25%	25,000	25,000	75,000
John E. Thompson	Executive Vice-President and Chief Scientific Officer	25%	25,000	25,000	75,000
Sascha P. Fedyszyn	Vice-President of Corporate Development and Secretary	10%	10,000	10,000	30,000
Joel Brooks	Chief Financial Officer and Treasurer	10%	10,000	10,000	30,000
Richard Dondero	Vice-President of Research and Development	30%	30,000	30,000	90,000

It is the Committee’s belief that RSU awards are essential to the retention of the named executive officers, crucial to our long-term financial successes and will help to advance the share ownership guidelines, which may be established by the Committee for the executive officers. The RSU’s have award schedules which provide a meaningful incentive for the named executive officer to remain in our service. These equity awards also serve as an important vehicle to achieve the Committee’s objective of aligning management and stockholder interests. Equity awards in the form of RSU’s promote all of these objectives in a manner which is less dilutive to the stockholders than traditional option grants and provide a more direct correlation between our compensation cost that we must record for financial accounting purposes and the value delivered to the named executive officers.

**Market Timing of Equity Awards.** The Compensation Committee does not engage in any market timing of the equity awards made to the executive officers or other award recipients, and accordingly, there is no established practice of timing our awards in advance of the release of favorable financial results or adjusting the award date in connection with the release of unfavorable financial developments affecting our business.

#### **Executive Benefits and Perquisites**

**In General** – The named executive officers also are provided with certain market competitive benefits. They are currently not provided with any perquisites. It is the Committee’s belief that such benefits are necessary for us to remain competitive and to attract and retain top caliber executive officers, since such benefits are typically provided by companies in the biotechnology industry and with other companies with which we compete for executive talent.

**Retirement Benefits** – The named executive officers may participate in the company-wide 401(k) plan. We do not make any contributions to the 401(k) plan and do not have any additional retirement benefits.



**Other Benefits and Perquisites** – All administrative employees, including the named executive officers, are eligible to receive standard health, disability, and life insurance. We do not provide any additional benefits and perquisites.

## IRC Section 162(m) compliance

As a result of Section 162(m) of the Internal Revenue Code, publicly-traded companies such as us are not allowed a federal income tax deduction for compensation, paid to the Chief Executive Officer and the four other highest paid executive officers, to the extent that such compensation exceeds \$1 million per officer in any one year and does not otherwise qualify as performance-based compensation. Currently, our stock option compensation packages are structured so that compensation deemed paid to an executive officer in connection with the exercise of a stock option should qualify as performance-based compensation that is not subject to the \$1 million limitation. However, other awards, like RSU's, made under that Plan may or may not so qualify. In establishing the cash and equity incentive compensation programs for the executive officers, it is the Committee's view that the potential deductibility of the compensation payable under those programs should be only one of a number of relevant factors taken into consideration, and not the sole governing factor. For that reason the Committee may deem it appropriate to continue to provide one or more executive officers with the opportunity to earn incentive compensation, including cash bonus programs tied to our financial performance and restricted stock units awards, which may be in excess of the amount deductible by reason of Section 162(m) or other provisions of the Internal Revenue Code. It is the Committee's belief that cash and equity incentive compensation must be maintained at the requisite level to attract and retain the executive officers essential to our financial success, even if part of that compensation may not be deductible by reason of the Section 162(m) limitation. For Fiscal 2007, none of our executive officer's compensation reached the \$1 million limitation. The Committee will continue to evaluate such \$1 million limitation in Fiscal 2008.

## Report of the Compensation Committee

The Compensation Committee has reviewed and discussed the Compensation, Discussion and Analysis with management, and based on this review and these discussions, the Compensation Committee recommended to the Board of Directors that the Compensation, Discussion and Analysis be included in the Company's Annual Report on Form 10-K and Proxy Statement.

This report is submitted on behalf of the  
Compensation Committee  
**David Rector, Chairman**  
**John. N Braca**  
**Jack Van Hulst**

## Summary Compensation Table

The following Table sets forth information concerning compensation for services rendered in all capacities during the fiscal year ended June 30, 2007 awarded to, earned by or paid to: (i) each person who served as our Chief Executive Officer at any time during fiscal 2007; (ii) our executive officers other than the Chief Executive Officer who were serving as our executive officers at the end of fiscal 2007; and (iii) those individuals for whom disclosure would have been provided but for the fact that the individual was not serving as our executive officer at the end of fiscal 2007, collectively referred to herein as the Named Executives.

Name and Principal Position (a)	Year (1) (b)	Salary (\$)(2) (c)	Bonus (\$)(3) (d)	Stock Awards (\$)(e)	Option Awards (\$)(4) (f)	Non-Equity Incentive Plan Compensation (\$)(g)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)(h)	All Other Compensation (\$)(i)	Total (\$)(j)
Bruce C. Galton (President and Chief Executive Officer)	2007	\$ 244,722	—	—	\$ 34,000	—	—	—	\$ 278,722
Joel Brooks (Chief Financial Officer and Treasurer)	2007	\$ 143,450	—	—	\$ 21,250	—	—	—	\$ 164,700
Richard Dondero (Vice-President of Research)	2007	\$ 124,500	—	—	\$ 21,250	—	—	—	\$ 145,750
Sascha P. Fedyszyn (Vice-President of Corporate Development and Secretary)	2007	\$ 95,750	—	—	\$ 21,250	—	—	—	\$ 117,000
John E. Thompson Ph.D. (Executive Vice-President and Chief Scientific Officer)	2007	\$ 63,700	—	—	\$ 21,250	—	—	—	\$ 84,950

(1) For the Company's fiscal year ended June 30.

(2) Such amount represents actual salary paid.

(3) There were no bonuses earned or paid during the fiscal year ended June 30, 2007

(4) Such amount represents the black-scholes value of stock options, computed in accordance with FAS 123R, granted during the fiscal year.

## Executive Compensation Agreements

On October 4, 2001, we hired Bruce C. Galton as our new President and Chief Executive Officer. In conjunction with Mr. Galton's appointment, we entered into a three-year employment agreement with Mr. Galton, effective October 4, 2001. The agreement shall automatically renew for successive one-year terms thereafter, unless written notice of termination is provided at least 120 days prior to the end of the applicable term. The term of Mr. Galton's

employment agreement currently runs through October 3, 2008. The agreement provides Mr. Galton with an annual base salary of \$200,000 plus certain benefits, including potential bonuses, equity awards and other perquisites as determined by our board of directors. Our board of directors have since approved several increases in Mr. Galton's annual base salary, which is currently \$255,000. The agreement also provides that Mr. Galton is entitled to a lump sum payment of 1.5 times his base annual salary plus an additional 1.5 times his base salary, payable in common stock in three annual installments, if his employment with us is terminated without cause or with good reason, as defined in his employment agreement. If Mr. Galton's employment with us is terminated pursuant to a change in control, as defined in his employment agreement, he is entitled to receive the difference between the monies actually received upon termination and 1.5 times his annual base salary plus an additional 1.5 times his base salary, payable in common stock.

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On January 21, 1999, Sascha P. Fedyszyn entered into an employment agreement with Senesco for a term of two (2) years, whereby we agreed to pay Mr. Fedyszyn an annual base salary of \$36,000 plus certain benefits, including potential bonuses, equity awards and other perquisites as determined by the board of directors. Our board of directors has since approved several increases in Mr. Fedyszyn's base salary, which is currently \$97,500 per annum. Mr. Fedyszyn's employment contract automatically renews for additional one-year periods, unless terminated by either party before September in the year prior to expiration. The term of Mr. Fedyszyn's employment agreement currently runs through January 21, 2009. The agreement also provides that Mr. Fedyszyn is entitled to a lump sum payment of 2.0 times his base annual salary if his employment with us is terminated without cause or with good reason, as defined in his employment agreement. If Mr. Fedyszyn's employment with us is terminated pursuant to a change of control, as defined in his employment agreement, he is entitled to receive the difference between the monies actually received upon termination and 2.99 times his annual base salary.

On July 1, 2003, Joel Brooks entered into an employment agreement with Senesco for a term of three (3) years. The agreement shall automatically renew for successive one-year terms thereafter, unless written notice of termination is provided at least 120 days prior to the end of the applicable term. The term of Mr. Brooks employment agreement currently runs through June 30, 2008. The agreement provides Mr. Brooks with an annual base salary of \$122,000 plus certain benefits, including potential bonuses, equity awards and other perquisites as determined by the board of directors. Our board of directors has since approved several increases in Mr. Brooks' base salary, which is currently \$145,000. The agreement also provides that Mr. Brooks is entitled to a lump sum payment of 1.0 times his base annual salary if his employment with us is terminated without cause or with good reason or pursuant to a change in control, as defined in his employment agreement.

On July 19, 2004, we hired Richard Dondero as our new Vice President of Research and Development. In conjunction with Mr. Dondero's appointment, we entered into a three-year employment agreement with Mr. Dondero, effective July 19, 2004. The agreement shall automatically renew for successive one-year terms thereafter, unless written notice of termination is provided at least 120 days prior to the end of the applicable term. The term of Mr. Dondero's employment agreement currently runs through July 19, 2008. The agreement provides Mr. Dondero with an annual base salary of \$110,000 plus certain benefits, including potential bonuses, equity awards and other perquisites as determined by our board of directors. Our board of directors has since approved several increases in Mr. Dondero's base salary, which is currently \$125,000. The agreement also provides that Mr. Dondero is entitled to a lump sum payment of 1.0 times his base annual salary if his employment with us is terminated without cause or with good reason, as defined in his employment agreement. If Mr. Dondero's employment with us is terminated pursuant to a change in control, as defined in his employment agreement, he is entitled to receive the difference between the monies actually received upon termination and 1.0 times his annual base salary.

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## Grants of Plan-Based Awards

The following Grants of Plan Based Awards table provides additional information about stock and option awards and equity incentive plan awards granted to our named executive officers during the fiscal year ended June 30, 2007.

Name (a)	Grant Date (b)	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units (#) (i)	All Other Option Awards: Number of Securities Underlying Options (#) (j)(1)	Exercise or Base Price of Option Awards (\$/Sh) (k)(2)	Grant Date Fair Value of Equity Awards (\$) (l)(3)
		Threshold (\$) (c)	Target (\$) (d)	Maximum (\$) (e)	Threshold (#) (f)	Target (#) (g)	Maximum (#) (h)				
Bruce C. Galton	12/14/2006	—	—	—	—	—	—	—	40,000	\$ 1.08	\$ 34,000
Joel Brooks	12/14/2006	—	—	—	—	—	—	—	25,000	\$ 1.08	\$ 21,250
Richard Dondero	12/14/2006	—	—	—	—	—	—	—	25,000	\$ 1.08	\$ 21,250
Sascha P. Fedyszyn	12/14/2006	—	—	—	—	—	—	—	25,000	\$ 1.08	\$ 21,250
John E. Thompson Ph.D.	12/14/2006	—	—	—	—	—	—	—	25,000	\$ 1.08	\$ 21,250

(1) One-third of such options were exercisable on the date of grant, one-third of such options will become exercisable on December 14, 2007 and one-third of such options will become exercisable on December 14, 2008.

(2) Represents the closing market price on December 13, 2007.

(3) Represents the black-sholes value, computed in accordance with FAS 123R, of such options on the date of grant.

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## Outstanding Equity Awards at Year-End

The following table summarizes the equity awards we have made to our named executive officers which are outstanding as of June 30, 2007.

Option Awards	Stock Awards
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Name (a)	Number of Securities Underlying Unexercised Options (#) Exercisable (b)	Number of Securities Underlying Unexercised Options (#) Unexercisable (c)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) (d)	Option Exercise Price (\$) (e)	Option Expiration Date (f)	Number of Shares or Units of Stock That Have Not Vested (#) (g)	Market Value of Shares or Units of Stock That Have Not Vested (\$) (h)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#) (i)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units of Other Rights That Have Not Vested (\$) (j)
Bruce C. Galton	130,000	—	—	\$ 2.10	10/05/2011	—	—	—	—
	300,000	—	—	\$ 2.05	12/01/2011	—	—	—	—
	50,000	—	—	\$ 2.16	06/19/2013	—	—	—	—
	30,000	—	—	\$ 3.15	12/16/2013	—	—	—	—
	35,000	—	—	\$ 3.45	12/16/2014	—	—	—	—
	40,000	13,334	—	\$ 1.40	12/14/2015	—	—	—	—
	40,000	26,666	—	\$ 1.08	12/14/2016	—	—	—	—
Joel Brooks	25,000	—	—	\$ 2.25	12/01/2010	—	—	—	—
	15,000	—	—	\$ 2.15	11/01/2011	—	—	—	—
	12,500	—	—	\$ 1.65	10/09/2012	—	—	—	—
	20,000	—	—	\$ 2.16	06/19/2013	—	—	—	—
	15,000	—	—	\$ 3.15	12/16/2013	—	—	—	—
	20,000	—	—	\$ 3.45	12/16/2014	—	—	—	—
	25,000	8,333	—	\$ 1.40	12/14/2015	—	—	—	—
	25,000	16,667	—	\$ 1.08	12/14/2016	—	—	—	—
Richard Dondero	10,000	—	—	\$ 3.45	12/16/2014	—	—	—	—
	25,000	8,333	—	\$ 1.40	12/14/2015	—	—	—	—
	25,000	16,667	—	\$ 1.08	12/14/2016	—	—	—	—
Sascha P. Fedyszyn	30,000	—	—	\$ 3.50	09/07/2019	—	—	—	—
	35,000	—	—	\$ 2.25	12/01/2010	—	—	—	—
	10,000	—	—	\$ 2.15	11/01/2011	—	—	—	—
	10,000	—	—	\$ 1.65	10/09/2012	—	—	—	—
	20,000	—	—	\$ 2.16	06/19/2013	—	—	—	—
	15,000	—	—	\$ 3.15	12/16/2013	—	—	—	—
	20,000	—	—	\$ 3.45	12/16/2014	—	—	—	—
	20,000	6,667	—	\$ 1.40	12/14/2015	—	—	—	—
	25,000	16,666	—	\$ 1.08	12/14/2016	—	—	—	—
John E. Thompson Ph.D.	80,000	—	—	\$ 2.05	12/01/2011	—	—	—	—
	20,000	—	—	\$ 2.35	01/07/2013	—	—	—	—
	20,000	—	—	\$ 3.15	12/16/2013	—	—	—	—
	55,000	—	—	\$ 3.45	12/16/2014	—	—	—	—
	20,000	6,667	—	\$ 1.40	12/14/2015	—	—	—	—
	25,000	16,666	—	\$ 1.08	12/14/2016	—	—	—	—

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## Employment Contracts, Termination of Employment, and Change-in-Control Arrangements

**Executive Severance.** Certain of our named executive officer’s have employment agreements which contain severance provisions. The following table shows the potential incremental payments to our named executive officers in the event of their termination or termination in connection with a change of control of our company as of June 30, 2007.

Benefit	Bruce C. Galton		Joel Brooks		Richard Dondero		Sasha Fedyszyn	
	Without Cause \$	Change in Control \$	Without Cause \$	Change in Control \$	Without Cause \$	Change in Control \$	Without Cause \$	Change in Control \$
Cash Severance(2)	\$ 386,025	\$ 386,025	\$ 146,400	\$ 146,400	\$ 127,000	\$ 127,000	\$ 195,400	\$ 292,123
# of Months	18	18	12	12	12	12	24	36
Equity								
Unvested Restricted Stock	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Unvested RSU’s	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Unvested Options(3)	\$ 7,213	\$ 7,213	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Common Stock(4)	\$ 386,025	\$ 386,025	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Other Benefits								
Health, Disability and Life Insurance	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Total	\$ 779,263	\$ 779,263	\$ 146,400	\$ 146,400	\$ 127,000	\$ 127,000	\$ 195,400	\$ 292,123

(1) John E. Thompson Ph.D. is not included on this table as he does not have an employment contract or any termination or change in control arrangements.

(2) Such amounts are payable as a lump sum.

(3) Calculated using the black sholes value, computed in accordance with FAS 123R, of unvested options at June 30, 2007. The assumptions used were a market price of \$1.15, which was the closing price of our common stock on June 29, 2007, volatility of 80%, a term of 90 days, a risk-free interest rate of 4.68% and a dividend yield of zero. Unvested options at June 30, 2007 were 13,334 at an exercise price of \$1.40 and 26,666 at an exercise price of \$1.08.

(4) Mr. Galton is entitled to receive an amount equal to one and one-half times his base salary, payable in the form of common stock in three annual installments, commencing on the date of termination, to be calculated based upon the market price of the common stock at each installment date.

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## Equity Compensation Plans

The following table reflects information relating to equity compensation plans as of June 30, 2007.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Stock Option plans approved by security holders	2,646,000(1)	\$ 2.33	3,264,000(2)
Equity compensation plans not approved by security holders	—	—	—
Total	2,646,000(1)	\$ 2.33	3,264,000(2)

(1) Issued pursuant to our 1998 Stock Plan.

(2) Available for future issuance pursuant to our 1998 Stock Plan.

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## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Our common stock is the only class of stock entitled to vote at the Meeting. Only our stockholders of record as of the close of business on the Record Date are entitled to receive notice of and to vote at the Meeting. As of the Record Date, there were 295 holders of record of our common stock, and we had outstanding 17,473,694 shares of our common stock and each outstanding share is entitled to one (1) vote at the Meeting. The following table sets forth certain information, as of the Record Date, with respect to holdings of our common stock by (i) each person known by us to be the beneficial owner of more than 5% of the total number of shares of our common stock outstanding as of such date; (ii) each of our directors, which includes all nominees, and our Named Executives; and (iii) all of our directors and our current executive officers as a group.

Name and Address of Beneficial Owner (1)	Amount and Nature of Beneficial Ownership(2)	Percent of Class(3)
(i) Certain Beneficial Owners:		
YA Global Investments, L.P. 101 Hudson Street Jersey City, NJ 07302	6,108,333(4)	25.9
Stanford International Bank Limited No 11 Pavilion Drive St. John's Antigua, West Indies	2,470,535(5)	13.6
Heartland Advisors, Inc. 789 North Water Street Milwaukee, WI 53202	1,329,925(6)	7.6
(ii) Directors (which includes all nominees), Named Executives and Chief Executive Officer:		
Rudolf Stalder	794,323(7)	4.4
Bruce C. Galton	718,005(8)	4.0
John E. Thompson, Ph.D	783,667(9)	4.4
Christopher Forbes	2,189,895(10)	12.1
Thomas C. Quick	717,085(11)	4.0
David Rector	146,000(12)	*
Jack Van Hulst	5,000(13)	*
John N. Braca	113,000(14)	*
Sascha P. Fedyszyn	215,027(15)	1.2
Joel P. Brooks	153,167(16)	*
Richard Dondero	51,667(17)	*
(iii) All Directors and current executive officers as a group (10 persons)	5,886,836(18)	28.7

\* Less than 1%

(1) Unless otherwise provided, all addresses should be care of Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901.

(2) Except as otherwise indicated, all shares are beneficially owned and sole investment and voting power is held by the persons named.

(3) Applicable percentage of ownership is based on 17,473,694 shares of our common stock outstanding as of the Record Date, plus any common stock equivalents and options or warrants held by such holder which are presently or will become exercisable within sixty (60) days after the Record Date.

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- (4) Includes 3,333,333 shares of common stock issuable upon conversion of secured convertible debentures and 2,775,000 shares of common stock issuable under warrants, one-half of which are exercisable after March 21, 2008 and one-half of which are exercisable after April 16, 2008. Does not include 250,000 shares of common stock purchased on October 22, 2007, but the trade had not been settled as of October 22, 2007.
- (5) Includes 750,000 shares issuable pursuant to presently exercisable warrants issued to Stanford Venture Capital Holdings, Inc. and 6,248 shares issuable pursuant to presently exercisable warrants issued to Stanford Group Company.
- (6) Represents 1,279,925 shares held by Heartland Advisors, Inc. and its affiliates and 50,000 shares issuable pursuant to presently exercisable warrants issued to Heartland Advisors, Inc.
- (7) Includes 582,552 shares issuable pursuant to presently exercisable warrants and options or options which will become exercisable within sixty (60) days after the Record Date.
- (8) Includes 644,780 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 13,334 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.
- (9) Represents 572,000 shares held by 2091794 Ontario Ltd. and 211,667 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date issued to John E. Thompson, Ph.D. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.
- (10) Includes 657,324 shares issuable pursuant to presently exercisable warrants and options or options which will become exercisable within sixty (60) days after the Record Date.
- (11) Represents 264,901 shares and 132,450 shares issuable pursuant to warrants issued to Thomas C. Quick Charitable Foundation. Represents 139,734 shares and 180,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date issued to Thomas C. Quick.
- (12) Includes 125,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date.
- (13) Includes 5,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 5,000 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.
- (14) Includes 95,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date.
- (15) Includes 176,667 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.
- (16) Includes 149,167 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.
- (17) Represents 51,667 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.
- (18) See Notes 9 through 17.

## CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

### Contractual Relationships

#### Service Agreements

Christopher Forbes, our director, is also Vice Chairman of Forbes, Inc., which publishes Forbes Magazine. Forbes, Inc. has provided and will continue to provide us with advertising, introductions to strategic alliance partners and, from time to time, use of its office space, entertainment facilities and various other support services. In recognition of these past services and services to be provided in the future, during the last two fiscal years, we granted to Forbes, Inc., warrants to purchase shares of our common stock as follows:

Date of Grant	# of Warrant Shares	Exercise Price	Value of Services on Date of Grant	# of Warrant Shares Vested
December 14, 2006	2,500	\$ 1.08	\$ 48,450	833
December 14, 2005	5,000	\$ 1.40	\$ 6,550	3,334

The exercise price of the warrants granted to Forbes, Inc. represented the fair market value of our common stock on the dates of grant.

Verge 180, Inc., a marketing communications firm, is 50% owned by Alan Brooks, a brother of Joel Brooks, our Chief Financial Officer and Treasurer. Verge 180, Inc. has provided and will continue to provide various services to us. We paid Verge 180, Inc. \$64,575 in fiscal 2007 for services in connection with the design and printing of our annual report and proxy for fiscal 2006, and the design of our new corporate logo, web site and stationery. Alan Brooks Design, Inc., a marketing communications firm, was also owned by Alan Brooks. Alan Brooks Design, Inc. had provided various services to us. We paid Alan Brooks Design, Inc. \$51,374 in fiscal 2006 for services in connection with the design and printing of our annual report and proxy for fiscal 2005,

and the design and printing of a new print ad for us. Neither we nor Joel Brooks receives any remuneration from these services, and we believe that such services were provided on terms at least as favorable as we would have received from a third party.

#### Research and Development Agreements

Effective September 1, 1998, we entered into a three-year research and development agreement, which has been extended for successive periods through August 31, 2008, with John E. Thompson, Ph.D. and the University of Waterloo in Waterloo, Ontario, Canada, referred to as the University. Dr. Thompson is our director and officer and beneficially owns approximately 4.4% of our common stock. Dr. Thompson is the Associate Vice President, Research and former Dean of Science of the University. Dr. Thompson and the University will provide research and development under our direction. Research and development expenses under this agreement for the years ended June 30, 2007 and 2006 aggregated US \$568,872 and US \$629,982, respectively. Effective September 1, 2007, we, Dr. Thompson and the University extended the agreement for an additional one-year period through August 31, 2008 in the amount of CAN \$652,600. As of October 1, 2007, such amount represented approximately US \$650,000.

#### Consulting Agreement

Effective May 1, 1999, we entered into a three-year consulting agreement, which has been extended for successive periods through June 30, 2009, for research and development with Dr. Thompson. This agreement provided for monthly payments of \$3,000 through June 2004. However, effective January 1, 2003, 2006 and 2007, the agreement was amended to increase the monthly payments from \$3,000 to \$5,000, from \$5,000 to \$5,200, and from \$5,200 to \$5,417, respectively.

## Debt / Equity Transactions

#### 2006 Private Placement

In connection with a private placement in October 2006, we sold shares of our common stock and warrants to purchase our common stock to certain institutions, accredited investors and certain directors as follows:

	Amount	# of Shares	# of Warrants
Christopher Forbes	\$ 1,000,000	883,002	441,501
Thomas C. Quick Charitable Foundation	\$ 300,000	264,901	132,450
Rudolf Stalder	\$ 105,841	93,458	46,729
Bruce C. Galton	\$ 75,000	66,225	33,113
John N. Braca	\$ 11,325	10,000	5,000
David Rector	\$ 11,325	10,000	5,000

All of such warrants will become exercisable six months from the closing date at an exercise price equal to \$1.18 and have a term of five (5) years.

#### 2004 Private Placement

In connection with a private placement, commencing in January 2004 and ending in February 2004, we sold shares of our common stock and warrants to purchase our common stock to certain accredited investors and directors, including Seneca Capital L.P. and its affiliates, Rudolf Stalder and Christopher Forbes. On January 15, 2004, Seneca Capital L.P. and its affiliates purchased 421,941 shares of our common stock and warrants to purchase 210,970 shares of our common stock for the aggregate cash consideration of \$1,000,000. On January 15, 2004, Ruedi Stalder and Christopher Forbes each purchased 31,616 shares of our common stock and warrants to purchase 15,823 shares of our common stock for the aggregate cash consideration of \$75,000 each. All of such warrants were exercisable as of the date of grant at an exercise price equal to \$3.79 and have a term of five (5) years.

## PROPOSAL NO. 2 APPROVAL AND RATIFICATION OF THE THIRD CLOSING OF THE FIRST FINANCING AND THE SECOND FINANCING

The American Stock Exchange, referred to herein as the AMEX, requires stockholder approval of the sale, issuance, or potential issuance in a transaction or related transactions by a listed company of shares of common stock and shares issuable upon conversion or exercise of other securities which amount to at least 20% of the then presently outstanding shares of common stock for a consideration which is less than the greater of book or market value of a share of common stock, referred to herein as the 20% rule. AMEX interprets the 20% rule to include issuances of common stock as dividends and issuances of common stock upon conversion or exercise of other securities issued in connection with a transaction.

In the private placement transaction described below, the number of shares of common stock issuable upon conversion of the convertible debentures at the fixed conversion price (defined below) and exercise of warrants issued, and to be issued, to the investors and the placement agent represents, in the aggregate, 25,772,220 shares (plus an additional 2,000,000 shares for the payment of interest in stock under the convertible debentures), or more than 20% of the shares of our common stock, outstanding on the first signing date (defined below) and the second signing date (defined below), on an as converted basis. The convertible debentures convert into shares of our common stock at a fixed price of \$0.90 per share subject to certain adjustments, referred to herein as the fixed conversion price, for a period of two years immediately following each respective signing date, provided that we have achieved the following milestones by January 31, 2008:

- (1) successful completion of animal studies, other than toxicology studies, necessary for the advancement of Factor 5A-1 in human clinical trials;
- (2) the engagement of a contract research organization for human clinical studies for Factor 5A-1; and

- (3) the signing of at least one (1) corporate partnership or license agreement after August 1, 2007 with agricultural companies utilizing our proprietary platform.

After the second anniversary of each respective signing date, or if we do not achieve the foregoing milestones by January 31, 2008, the convertible debentures may convert into shares of our common stock at the lower of the fixed conversion price or 80% of the lowest daily volume-weighted average price, referred to herein as the VWAP, of the common stock during the five trading days prior to the conversion date, referred to herein as the market conversion price. As a result, in the future, the conversion price of the convertible debentures may be less than the closing sales price of a share of common stock on AMEX. The convertible debentures issued and to be issued and the Series B warrants to be issued, pursuant to the private placement transaction have antidilution rights which could, in the future, result in the adjusted applicable conversion price or exercise price being less than the closing sales price of a share of common stock on AMEX. The occurrence of any of the above scenarios could result in AMEX deeming the private placement transaction in violation of the 20% rule. To date, we have issued convertible debentures in the private placement transaction that can be converted into the aggregate of 3,333,333 shares or 19.1% of the shares of our common stock. We believe that this issuance is in compliance with the 20% rule. Pursuant to the rules of the AMEX, the Series A warrants previously issued are excluded from this threshold because they were issued at an exercise price in excess of the market price of the common stock on the date of signing and are not exercisable for a period of six months and one day from the date of issuance. However, issuing convertible debentures and warrants in the third closing of the first financing and the second financing will cause us to exceed the number of shares that we can issue under the 20% rule in the absence of stockholder approval. Accordingly, we must obtain stockholder approval in order to complete the third closing of the first financing and the second financing.

## Description of Securities

### Convertible Debentures

On August 1, 2007, referred to herein as the first signing date, and August 29, 2007, referred to herein as the second signing date, we entered into binding Securities Purchase Agreements to sell, in a private placement through H.C. Wainwright & Co., Inc., the placement agent, up to \$10,000,000 of secured convertible debentures, referred to herein as the convertible debentures, convertible into shares of our common stock at either the fixed conversion price or the market conversion price. The maturity date of each of the convertible debentures issued, and to be issued, to a certain investor, referred to herein as the first investor, is December 30, 2010. The maturity date of each of the convertible debentures to be issued to another investor, referred to herein as the second investor, is December 31, 2010. Pursuant to a Securities Purchase Agreement, we have issued \$3,000,000 of convertible debentures and accompanying warrants to the first investor and to the placement agent with a cap on the number of shares of common stock that can be issued upon conversion or exercise of these instruments. The cap of 3,493,000 shares was equal to 19.99% of our outstanding common stock on the signing dates. We have agreed to obtain stockholder approval prior to issuing convertible debentures and warrants in the third closing of the first financing and the second financing. In the third closing of the first financing, we will issue and sell a convertible debenture in the principal amount of \$2,000,000 to the first investor. The third closing of the first financing will take place on the later of (A) the date the registration statement is declared effective by the Securities and Exchange Commission, referred to herein as the SEC, or (B) the date we obtain stockholder approval for the financing. We will sell up to \$5,000,000 of the convertible debentures and warrants in the second financing to the second investor, as follows:

- (1) we will issue a convertible debenture in the amount of \$2,000,000 and warrants within two business days of the later of (a) the date stockholders approve the transaction or (b) the date that the initial registration statement relating to the first financing is filed with the SEC;
- (2) we will issue a convertible debenture in the amount of \$1,500,000 on the date that we enter into a supply agreement with a third party manufacturer for sufficient quantity and quality of nano-particle for encapsulation of Factor 5A gene to be used in toxicology and proof of concept human studies under a United States Food and Drug Administration, referred to herein as FDA, accepted Investigational New Drug application, referred to herein as IND application; and
- (3) we will issue a convertible debenture in the amount of \$1,500,000 on the date that we enter into a supply agreement with a third party manufacturer to provide sufficient quantity and quality of Factor 5A DNA to carry out toxicology and proof of concept human studies under a FDA accepted IND application.

Pursuant to the Securities Purchase Agreements, the convertible debentures and warrants are subject to a cap on the maximum number of shares of common stock that can be issued upon the conversion of the convertible debentures and exercise of the warrants. A maximum of 30,500,000 shares can be issued pursuant to the first financing and a maximum of 31,888,888 shares can be issued pursuant to the second financing.

The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. We have the option to pay interest in cash or, upon certain conditions, shares of common stock. If we pay interest in shares of common stock, the stock will be valued at a 10% discount to the average daily VWAP for the five day trading period prior to the interest payment date, referred to herein as interest shares.

At our option, we can redeem a portion of, or all of, the principal owed under the convertible debentures by providing an investor with at least 30 business days' written notice; provided that, at the time of receipt of the notice, either: (A)(i) the VWAP of the common stock exceeds 130% of the fixed conversion price for at least 20 of 30 prior trading days and (ii) there is an effective registration statement for the resale of the common stock that will be issued under the redemption; or (B) we redeem a portion, or all, of the principal owed at a 20% premium above the principal then outstanding and any accrued interest thereupon. If we redeem all or any of the principal outstanding under the convertible debentures, we will pay an amount equal to the principal being redeemed plus accrued interest.

If there is an effective registration statement for the resale of the shares underlying the convertible debentures or if such shares become 144(K) eligible, we will have the option to force an investor to convert 50% and 100% of our then-outstanding convertible debentures if our common stock price exceeds 150% and 175% of the fixed conversion price, respectively, for any 20 out of 30 trading days; provided that such forced conversion meets certain conditions, referred to herein as the call option. If we exercise our call option prior to the third anniversary of the applicable signing date, we will issue

additional warrants to the investor equal to 50% of the number of shares underlying the convertible debenture subject to the forced conversion. These warrants will be exercisable at the fixed conversion price and will have the same maturity as the other warrants issued under the private placement.

Our obligations under the convertible debentures are secured by all of our and our subsidiary's assets and intellectual property, as evidenced by the Security Agreements and the Patent Security Agreements.

The first investor was issued warrants, and the second investor will be issued warrants, to purchase our common stock, exercisable six months and one day from the date of issuance until their expiration on the date that is five years from the date of issuance. The warrants represent the right to purchase the aggregate of 13,888,888 shares of our common stock. The warrants are issued in two series. Generally, Series A warrants may be issued prior to stockholder approval, while Series B warrants will only be issued after we receive stockholder approval for the financing. The exercise price of the Series A warrants is \$1.01 per share, and the exercise price of the Series B warrants is \$0.90 per share, subject to certain adjustments. The warrants provide a right of cashless exercise if, at the time of exercise, there is no effective registration statement registering the resale of the shares underlying the warrants.

The conversion rate of each convertible debenture and the exercise price of the Series B warrants are subject to adjustment for certain events, including dividends, stock splits, combinations and the sale of our common stock or securities convertible into or exercisable for our common stock at a price less than the then applicable conversion or exercise price.

An investor cannot convert the convertible debentures, exercise the warrants or receive interest shares, to the extent that, after giving effect to such conversion, exercise or receipt, such investor would beneficially own in excess of 4.99% of our outstanding shares of common stock unless it provides us with at least 65-days' prior written notice; provided, however, that this provision does not apply to the exercise of a warrant within 60 days of its expiration. We are permitted to force an investor to convert its convertible debenture into common stock, or receive interest shares, up to an amount not to exceed 9.99% of the number of shares of common stock outstanding immediately after giving effect to such conversion or receipt of interest shares.

Each investor has a right of first refusal on any future funding that involves the issuance of our capital stock for so long as a portion of the convertible debentures is outstanding.

Under the Registration Rights Agreements, we have agreed to file an initial registration statement with the SEC to register the resale of common stock issuable to the first investor (including interest shares), referred to herein as registrable shares, within 30 days of the first signing date. Also, we have agreed to respond to all SEC comment letters as promptly as reasonably possible and to use our best efforts to have the registration statement declared effective within 120 days of the first signing date. The initial registration statement covering the first investor's shares shall include up to 33% of the public float. If registrable shares remain outstanding after all shares under the initial registration statement have been sold, we may be required to file additional registration statements for those registrable shares. These registration rights will cease once the registrable shares are eligible for sale by the first investor without restriction under Rule 144(K). Upon certain events, we have agreed to pay as partial liquidated damages an amount equal to 1.0% of the aggregate purchase price paid by an investor for any convertible debentures then held by such investor, but such payments may not exceed 12% per investor of the aggregate purchase price paid by such investor.

Each purchaser of the convertible debentures represented that such purchaser is an "accredited investor" and agreed that the securities issued in the private placement bear a restrictive legend against resale without registration under the Securities Act. The convertible debentures and warrants were sold pursuant to the exemption from registration afforded by Section 4(2) of the Securities Act and Regulation D thereunder.

The gross proceeds of the sale will be \$10,000,000 before payment of 3.25% of the purchase price in commissions to the placement agent. The net proceeds of this private placement will be used for research and development and working capital purposes. We have issued, and agreed to issue, to the placement agent warrants to purchase 7% of the purchase price, or 777,777 shares, of our common stock with similar terms to the warrants that have been issued to the first investor. We paid each investor a non-refundable structuring/ due diligence fee of \$30,000. We have also agreed to pay the first investor and the second investor a commitment fee of 5% and 7%, respectively, of such investor's purchase price, which is paid proportionately at each closing.

### Common Stock

Our authorized capital stock includes 60 million shares of common stock, 17,473,694 of which were issued and outstanding as of the record date. The following briefly summarizes the material terms of our common stock. You should read the more detailed provisions of our certificate of incorporation and by-laws for provisions that may be important to you.

Each holder of common stock is entitled to one vote per share for the election of directors and for all other matters to be voted on by stockholders. Except as otherwise provided by law, the holders of common stock vote as one class together with holders of our preferred stock (if they have voting rights), none of which was outstanding as of the record date. Holders of common stock may not cumulate their votes in the election of directors, and are entitled to share equally in the dividends that may be declared by the board of directors, but only after payment of dividends required to be paid on outstanding shares of preferred stock. Our voluntary or involuntary liquidation, dissolution or winding up, holders of common stock share ratably in the assets remaining after payments to creditors and provision for the preference of any preferred stock. There are no preemptive or other subscription rights, conversion rights or redemption or scheduled installment payment provisions relating to shares of our common stock. All of the outstanding shares of our common stock are fully paid and nonassessable. The transfer agent and registrar for the common stock is American Stock Transfer & Trust Company. The common stock is listed on AMEX under the symbol "SNT."

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the business combination, the corporation's board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; or
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the outstanding voting stock of the corporation at the time the transaction commenced, excluding for the purpose of determining the number of

shares outstanding those shares owned by the corporation's officers and directors and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- at or subsequent to the time the business combination is approved by the corporation's board of directors, it is authorized at an annual or special meeting of its stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of its outstanding voting stock which is not owned by the interested stockholder.

A business combination includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An interested stockholder is a person who, together with affiliates and associates, owns (or within three years did own) 15% or more of the corporation's voting stock.

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The following table summarizes (1) the number of shares of common stock that will be issued and outstanding upon full conversion of the convertible debentures at the fixed conversion price and full exercise of the warrants at the current applicable exercise price, (2) the number of shares each investor will be issued pursuant to the financing, and (3) the percentage of outstanding shares the investors' shares represent after all securities anticipated by the financing are issued.

Investor	Total Number of Shares Outstanding Upon Conversion and Exercise(1)	Total Number of Shares Underlying Warrants and Convertible Debentures Issued to Investors(2)	Underlying Shares as a Percent of Outstanding Shares(3)
YA Global Investments, L.P.	42,468,137	11,105,555	26.2%
Stanford Venture Capital Holdings	42,468,137	13,888,888	32.7%

\* Less than 1%

- This amount represents the sum of (a) the number of outstanding shares of common stock as of September 30, 2007 and (b) the total number of shares underlying the convertible debentures and warrants issued, and to be issued, as part of the financing, assuming full conversion at the fixed conversion price and full exercise at the current applicable exercise price held by the investors (does not include outstanding convertible securities not held by the investors), and excluding interest shares and other additional shares that may be issued pursuant to potential adjustments to the exercise and conversion prices.
- This amount represents the number of shares underlying the convertible debentures and warrants issued, and to be issued, in the financing, assuming full conversion at the fixed conversion price and full exercise at the current applicable exercise price. Pursuant to the terms of the convertible debentures, if the conversion is after the second anniversary of the signing date, or if we do not achieve certain milestones by January 31, 2008, the convertible debentures may convert into shares of our common stock at the market conversion price. This amount does not include interest shares or any shares that are issuable pursuant to potential adjustments to the conversion price and exercise price of these instruments. The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. If we were to pay such interest in interest shares, we would issue approximately 2,000,000 shares. The maximum number of shares which can be issued to YA Global Investments, L.P. is 30,500,000 and the maximum number of shares which can be issued to Stanford Venture Capital Holdings is 31,888,888.
- This represents the percentage of outstanding shares that the investors could potentially own after all securities anticipated by the financing are issued, excluding interest shares and other additional shares that may be issued pursuant to adjustments to the exercise and conversion prices.

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The following table sets forth the beneficial ownership of the investors prior to the financing and after the financing.

Investor	Beneficial Ownership of Investor Prior to Financing(1)		Beneficial Ownership of Shares After Financing(2)	
	Number	Percent	Number	Percent
YA Global Investments, L.P.	0	0%	11,105,555	26.2%
Stanford Venture Capital Holdings	2,470,535	14.1%	16,359,423	38.5%

- Ownership is based upon the number of outstanding shares of common stock as of September 30, 2007.
- Ownership is based upon the sum of (a) the number of outstanding shares of common stock as of September 30, 2007 and (b) the total number of shares underlying the convertible debentures and warrants issued, and to be issued, in the financing, assuming full conversion at the fixed conversion price and full exercise at the current applicable exercise price, and excluding interest shares and other additional shares issuable pursuant to potential adjustments to the exercise and conversion prices.

Senesco plans on using the proceeds from the financing to advance a certain cancer target with the goal of ultimately initiating a Phase I clinical trial, as well as other human health and agricultural research and general corporate purposes. In connection with the potential clinical trial, Senesco has engaged a clinical research organization to assist Senesco through the process, and will be working towards completing a pre-clinical animal model of the disease and evaluating potential delivery systems for Senesco's technology in the animal model, contracting for the supply of pharmaceutical grade materials to be used in toxicology and human studies and ultimately filing an investigational new drug application with the U.S. Food and Drug Administration for its review and consideration in order to initiate a clinical trial. We believe that the proceeds of the financing may be used as follows:

- an estimated \$3.0 million to \$3.5 million to advance the cancer target to the IND stage;



- an estimated \$1.0 million to \$1.5 million to fund additional pre-clinical human health research and development;
- an estimated \$0.5 million to \$1.0 million to fund agricultural research and development;
- an estimated \$3.5 million to \$3.0 million to pay general corporate and administrative costs; and
- an estimated \$1.0 to \$1.5 million to obtain and maintain patents.

However, as these projects entail certain biologic and immunologic research studies yet to be performed; actual spending may differ from these projections in response to the data derived from each research study.

**OUR BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS VOTE “FOR” THE PROPOSAL TO APPROVE THE THIRD CLOSING OF THE FIRST FINANCING AND THE SECOND FINANCING OF THE PRIVATE PLACEMENT TRANSACTION AND ALL TRANSACTIONS CONTEMPLATED THEREBY, INCLUDING THE ISSUANCE OF MORE THAN 62,388,888 SHARES OF COMMON STOCK UPON CONVERSION AND EXERCISE OF THE CONVERTIBLE DEBENTURES AND WARRANTS.**

**PROPOSAL NO. 3      APPROVAL OF THE POTENTIAL ISSUANCE OF 62,388,888 SHARES OF OUR COMMON STOCK: (1) RESULTING FROM CERTAIN ADJUSTMENTS TO THE EXERCISE PRICE OF THE SERIES B WARRANTS AND TO THE CONVERSION PRICE OF THE CONVERTIBLE DEBENTURES PURSUANT TO THE ANTIDILUTION ADJUSTMENT PROVISIONS OF THE RESPECTIVE SECURITIES AND THE MILESTONE ADJUSTMENT PROVISION OF THE CONVERTIBLE DEBENTURES; AND (2) PURSUANT TO THE INTEREST SHARES PROVISION OF THE CONVERTIBLE DEBENTURES**

In August 2007, we entered into a private placement transaction (described in Proposal 2) pursuant to which we agreed to issue and sell \$10,000,000 of convertible debentures and warrants. Under the terms of the private placement transaction, the convertible debentures will convert into shares of our common stock at the market conversion price if we do not achieve certain milestones by January 31, 2008, or if two years have passed since the applicable signing date, referred to herein as the milestone adjustment provision. In addition, the conversion price of the convertible debentures and the exercise price of the Series B warrants will be subject to the antidilution adjustment provisions set forth in the respective securities, referred to herein as the antidilution adjustment provisions. Furthermore, the convertible debentures provide that we can pay interest, upon certain conditions, in shares of our common stock, referred to herein as the interest shares provision.

If the convertible debentures are converted into shares of our common stock pursuant to the milestone adjustment provision, they will convert at the lower of (A) the fixed conversion price or (B) 80% of the lowest daily VWAP of the common stock during the five trading days prior to the conversion date. As a result, the conversion price of the convertible debentures, in the future, may be less than the closing sales price of a share of common stock on AMEX, referred to herein as the market price of our common stock. In addition, if the conversion price is lowered, a greater number of shares of our common stock may be issued upon conversion of the convertible debentures.

The antidilution adjustment provisions provide that if we sell common stock (or the right to acquire common stock) for a consideration per share that is less than the conversion price or exercise price in effect immediately prior to such sale, referred to herein as a dilutive issuance, then immediately after such dilutive issuance, the conversion price of the convertible debentures and the exercise price of the Series B warrants will be reduced, pursuant to a formula. These antidilution adjustment provisions do not apply to certain “excluded securities,” including securities issued in connection with employee benefit plans, upon conversion of the convertible debentures or the exercise of the Series B warrants, upon the conversion, exchange or exercise of any right, option, obligation or security outstanding prior to the date of the Securities Purchase Agreements, and issuances in connection with strategic business arrangements. These antidilution adjustment provisions could, in the future, result in the adjusted applicable conversion price or exercise price being less than the market price of our common stock. In addition, if the exercise price of the Series B warrants or the conversion price of the convertible debentures is lowered, a greater number of shares of our common stock may be issued upon exercise of the Series B warrants or conversion of the convertible debentures.

The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. Pursuant to the interest shares provision, we have the option to pay interest in cash or, upon certain conditions, shares of common stock. If we pay interest in shares of common stock, the stock will be valued at a 10% discount to the average daily VWAP for the five day trading period prior to the interest payment date.

In order to comply with the 20% Rule, the number of shares of our common stock that can be issued as part of the private placement transaction is restricted to 19.99% of our issued and outstanding common stock until we receive stockholder approval for larger issuances, referred to herein as the 19.99% cap. As a result, issuances of common stock pursuant to the antidilution adjustment provisions, the milestone adjustment provision, and the interest shares provision are currently subject to the 19.99% cap.

We are seeking stockholder approval so that we can proceed with the private placement transaction in the event that greater than 20% of the issued and outstanding shares of our common stock are to be issued at a price that is lower than the market price due to the antidilution adjustment provisions, the milestone adjustment provision or the interest shares provision. Absent such stockholder approval, we may be precluded from completing the private placement transaction.

If our stockholders approve this Proposal, then the number of shares issuable pursuant to the antidilution provisions, the milestone adjustment provision and the interest shares provision will no longer be subject to the 19.99% cap. Accordingly, we would be permitted to issue a larger number of shares upon the conversion of the convertible debenture and upon the exercise of the Series B warrants than if the 19.99% cap remained. The issuance of a larger number of shares will be dilutive to our existing stockholders because it will reduce the existing stockholders’ equity per share as well as the percentage ownership of common stock by existing stockholders. In addition, if we were to issue all 62,388,888 shares of our common stock, it may be deemed a change of control under AMEX rules and under the Delaware General Corporation Law, which would also require stockholder approval.



For your reference, the financial statements contained in our Annual Report on Form 10-K for the year ended June 30, 2007 are incorporated by reference into this Proposal 3.

Investor	Total Number of Shares Underlying Convertible Debentures(1)	Total Number of Shares Underlying Warrants(2)	Estimated Number of Interest Shares(3)	Maximum Number of Shares that may be Issued Pursuant to the Financing(4)
YA Global Investments, L.P.	5,555,555	5,550,000	1,000,000	30,500,000
Stanford Venture Capital Holdings	5,555,555	8,333,333	1,000,000	31,888,888

- (1) This represents the number of shares issuable upon conversion of the convertible debentures at the fixed conversion price. Pursuant to the terms of the convertible debentures, if the conversion is after the second anniversary of the signing date, or if we do not achieve certain milestones by January 31, 2008, the convertible debentures may convert into shares of our common stock at the market conversion price. This amount does not include interest shares and other additional shares that may be issued pursuant to potential adjustments to the conversion price.
- (2) This represents the number of shares issuable upon exercise of the warrants at the current applicable exercise price. This amount does not include additional shares that may be issued pursuant to potential adjustments to the exercise price.
- (3) This represents the estimated amount of interest shares that may be issued upon conversion of the convertible debentures. The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. We have the option to pay interest in cash or, upon certain conditions, common stock. If we pay interest in common stock, the stock will be valued at a 10% discount to the average daily VWAP for the five day trading period prior to the interest payment date.
- (4) This represents the maximum number of shares that may be issued to the investor if we fail to meet our milestones and/ or other adverse adjustments are made under the financing documents.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THE PROPOSAL TO APPROVE THE POTENTIAL ISSUANCE OF 62,388,888 SHARES OF OUR COMMON STOCK: (1) RESULTING FROM CERTAIN ADJUSTMENTS TO THE EXERCISE PRICE OF THE SERIES B WARRANTS AND TO THE CONVERSION PRICE OF THE CONVERTIBLE DEBENTURES PURSUANT TO THE ANTIDILUTION ADJUSTMENT PROVISIONS OF THE RESPECTIVE SECURITIES AND THE MILESTONE ADJUSTMENT PROVISION OF THE CONVERTIBLE DEBENTURES; AND (2) PURSUANT TO THE INTEREST SHARES PROVISION OF THE CONVERTIBLE DEBENTURES.**

#### **PROPOSAL No. 4      APPROVAL OF AMENDMENT TO SENESCO’S CERTIFICATE OF INCORPORATION TO INCREASE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK**

Stockholders are being asked to approve an amendment to our Amended and Restated Certificate of Incorporation, as amended to date, referred to herein as our Certificate of Incorporation, to increase the number of authorized shares of our common stock from 60,000,000 to 100,000,000. On July 11, 2007, in connection with the private placement, our board of directors, referred to herein as the board, adopted resolutions approving and authorizing the amendment and directing that the amendment be submitted to a vote of the stockholders at the meeting.

The board determined that the amendment is in the best interests of Senesco and its stockholders and unanimously recommends approval by the stockholders. If the proposed amendment is approved by the stockholders, the board currently intends to file, with the Secretary of State of the State of Delaware, a Certificate of Amendment to the Certificate of Incorporation, referred to herein as the Certificate of Amendment, reflecting such amendment as soon as practicable following stockholder approval. The following summary is qualified in its entirety by reference to the Certificate of Incorporation. Attached hereto as Annex B to this proxy statement is the proposed Certificate of Amendment.

Our Certificate of Incorporation currently authorizes the issuance of up to 60,000,000 shares of common stock and 5,000,000 shares of preferred stock, par value \$0.01 per share, referred to herein as the preferred stock. No shares of preferred stock are currently issued and outstanding. The proposed amendment will not, if adopted, result in an increase in the number of authorized shares of preferred stock.

Of the 60,000,000 shares of common stock currently authorized, as of the close of business on the record date, there were 17,473,694 shares of common stock issued and outstanding. Furthermore, we have reserved for future issuance:

- a. 6,000,000 shares of common stock upon the exercise of outstanding options granted under the 1998 Stock Plan;
- b. 10,000 shares of common stock upon exercise of options granted outside the 1998 Stock Plan;
- c. 5,134,815 shares of common stock upon the exercise of warrants issued outside of the private placement transaction described in Proposal 2 above;
- d. 14,661,110 shares of common stock upon the exercise of warrants issued, and to be issued, pursuant to the private placement transaction described in Proposal 2;
- e. 11,111,111 shares of common stock upon conversion of the convertible debentures issued, and to be issued, pursuant to the private placement transaction described in Proposal 2; and
- f. an estimated 2,000,000 shares of common stock, which may be issued as interest shares pursuant to the private placement transaction described in Proposal 2.

If the proposed amendment is approved, then after the meeting, there will still be 17,473,694 shares of common stock issued and outstanding.

Our board has proposed this increase in authorized shares of common stock to ensure that we have sufficient shares of common stock available for general corporate purposes including, without limitation, sufficient shares available underlying the securities issued in the financings, equity financings, acquisitions, establishing strategic relationships with corporate and other partners, providing equity incentives to employees, and payments of stock dividends, stock splits or other recapitalizations. As of the date of this proxy statement, we expect to issue additional equity pursuant to the private placement transaction described in Proposal 2 and potentially pursuant to the antidilution adjustment provisions and the milestone adjustment provision described in Proposal 3.

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As is the case with the current authorized but unissued shares of common stock, the additional shares of common stock authorized by this proposed amendment could be issued upon approval by our board without further vote of our stockholders except as may be required in particular cases by our Certificate of Incorporation, applicable law, regulatory agencies or the AMEX rules. Under our Certificate of Incorporation, stockholders do not have preemptive rights to subscribe to additional securities that may be issued by Senesco, which means that current stockholders do not have a prior right to purchase any new issue of common stock in order to maintain their proportionate ownership interest in Senesco. In addition, if we issue additional shares of common stock or securities convertible into or exercisable for common stock, such issuance would have a dilutive effect on the voting power and could have a dilutive effect on the earnings per share of Senesco's currently outstanding shares of common stock.

#### Anti-takeover Effects

The proposed amendment to the Certificate of Incorporation could also, under certain circumstances, have an anti-takeover effect. The proposed increase in the number of authorized shares of common stock may discourage or make it more difficult to effect a change in control of Senesco. For example, we could issue additional shares to dilute the voting power of, create voting impediments for, or otherwise frustrate the efforts of persons seeking to take over or gain control of Senesco, whether or not the change in control is favored by a majority of our unaffiliated stockholders. We could also privately place shares of common stock with purchasers who would side with our board in opposing a hostile takeover bid. The board is not aware of any plans for or attempt to take control of Senesco.

If approved, the amendment would amend and restate the first section of the fourth paragraph of the Certificate of Incorporation, as follows:

**FOURTH:** The total number of shares of all classes of stock which the Corporation shall have authority to issue is One Hundred and Five Million (105,000,000) shares. The Corporation is authorized to issue two classes of stock designated "Common Stock" and "Preferred Stock," respectively. The total number of shares of Common Stock authorized to be issued by the Corporation is One Hundred Million (100,000,000), each such share of Common Stock having a \$0.01 par value. The total number of shares of Preferred Stock authorized to be issued by the Corporation is Five Million (5,000,000), each such share of Preferred Stock having \$0.01 par value.

The Certificate of Amendment, which contains the above amendment, is attached to this proxy statement as Annex B. The affirmative vote of a majority of the outstanding shares of common stock is required for approval of the proposed amendment. Therefore, abstentions and broker non-votes will have the same effect as votes against this proposal.

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The following table sets forth the total number of: (1) authorized shares of our common stock, (2) outstanding shares of our common stock, (3) reserved shares of our common stock, (4) shares of our common stock available for issuance, (5) authorized shares of our common stock if Proposal 4 is approved, and (6) shares of our common stock that would be available for issuance if Proposal 4 is approved.

Authorized Shares (1)	Outstanding Shares (1)	Shares Reserved for Issuance (1)	Shares Available for Issuance (1)	Proposed Authorized Shares (2)	Shares Potentially Available for Issuance(3)
60,000,000	17,473,694	38,917,036	3,609,270	100,000,000	43,609,270

(1) As of September 30, 2007.

(2) The number of authorized shares of our common stock, if this Proposal 4 is approved by the stockholders.

(3) The number of shares of our common stock available for issuance, if this Proposal 4 is approved by the stockholders.

Senesco has no plans to issue the common stock authorized pursuant to Proposal 4 other than in connection with the financing.

**THE BOARD RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THE PROPOSAL TO AMEND SENESCO'S CERTIFICATE OF INCORPORATION.**

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#### **PROPOSAL NO. 5      RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

On October 24, 2007, we filed a Form 8-K disclosing that, on October 22, 2007, we were notified that the partners of Goldstein Golub Kessler LLP, or G GK, became partners of McGladrey & Pullen, LLP in a limited asset purchase agreement and that its position as our independent registered public

accounting firm will cease upon completion of its procedures regarding the following: (i) the unaudited interim financial statements of the Company as of September 30, 2007 and for the three month period ending September 30, 2007 and (ii) the Form 10-Q of the Company for the quarter ending September 30, 2007. We will file a Form 8-K/A once such procedures are completed.

The audit committee of our board of directors intends to, subject to stockholder ratification, retain McGladrey & Pullen, LLP as our independent registered public accounting firm for the fiscal year ending June 30, 2008. Neither the firm nor any of its directors has any direct or indirect financial interest in or any connection with us in any capacity other than as auditors.

Although stockholder ratification of the selection of McGladrey & Pullen, LLP, is not required by law, our board of directors believes that it is desirable to give our stockholders the opportunity to ratify this selection. If this proposal is not approved at the Meeting, our board of directors will reconsider the selection of McGladrey & Pullen, LLP

**Our board of directors recommends a vote FOR the ratification of the appointment of McGladrey & Pullen, LLP as our independent registered public accounting firm for the fiscal year ending June 30, 2008.**

One or more representatives of McGladrey & Pullen, LLP and Goldstein Golub Kessler LLP are expected to attend the Meeting and have an opportunity to make a statement and/or respond to appropriate questions from our stockholders.

#### **Independent Registered Public Accounting Firm Fees and Other Matters**

##### *Leased Employees*

Through September 30, 2005, G GK, our independent registered public accounting firm, had a continuing relationship with American Express Tax and Business Services, Inc., or TBS, from which it leased auditing staff who were full time, permanent employees of TBS and through which its partners provide non-audit services. Subsequent to September 30, 2005, the relationship ceased and the firm established a similar relationship with RSM McGladrey, Inc., or RSM. G GK has no full-time employees and therefore, none of the audit services performed were provided by permanent full-time employees of G GK. G GK manages and supervises the audit and audit staff, and is exclusively responsible for the opinion rendered in connection with its examination.

Other services, which do not include Financial Information System Design and Implementation fees, have been provided by TBS or RSM.

The following table summarizes the fees G GK, TBS, or RSM billed us for each of the last two fiscal years for audit services and other services:

Fee Category	2007	2006
Audit Fees (1)	\$ 70,596	\$ 59,330
Audit-Related Fees (2)	13,796	4,442
Tax Fees (3)	2,250	3,092
All Other Fees	—	—
Total Fees	\$ 86,642	\$ 66,864

- (1) Consists of fees for professional services rendered in connection with the audit of our financial statements for the years ended June 30, 2007 and 2006, respectively, and the reviews of the financial statements included in each of our Quarterly Reports on Form 10-Q during the years ended June 30, 2007 and 2006, respectively, and fees for professional services rendered in connection with documents filed with the Securities and Exchange Commission for the years ended June 30, 2007 and 2006, respectively.
- (2) Consists of fees relating to the review of our documents in connection with an equity offering, fees in connection with correspondence with the SEC and the AMEX, fees in connection with the implementation of SOX 404, and fees in connection with attending the annual shareholders meeting.
- (3) Consists of fees relating to our tax compliance, tax planning and tax return review for the years ended June 30, 2007 and 2006 provided by TBS and / or RSM.

##### *Financial Information Systems Design and Implementation Fees*

G GK, RSM or TBS did not bill us for any professional services rendered to us and our affiliates during the fiscal year ended June 30, 2007 in connection with financial information systems design or implementation, the operation of our information system or the management of our local area network.

##### *Pre-Approval Policies and Procedures*

None of the audit-related fees billed in fiscal 2007 and 2006 related to services provided under the de minimis exception to the audit committee pre-approval requirements.

The Audit Committee has adopted policies and procedures relating to the pre-approval of all audit and non-audit services that are to be performed by our independent registered public accounting firm. This policy generally provides that we will not engage our independent registered public accounting firm to render audit or non-audit services unless the service is specifically approved in advance by the Audit Committee or the engagement is entered into pursuant to one of the pre-approval procedures described below.

From time to time, the Audit Committee may pre-approve specified types of services that are expected to be provided to us by our independent registered public accounting firm during the next 12 months. Any such pre-approval is detailed as to the particular service or type of services to be provided and is also generally subject to a maximum dollar amount.

The Audit Committee has also delegated to the chairman of the Audit Committee the authority to approve any audit or non-audit services to be provided to us by our independent registered public accounting firm. Any approval of services by a member of the Audit Committee pursuant to this delegated authority is reported on at the next meeting of the Audit Committee.

## Audit Committee Report

The Audit Committee oversees our financial reporting process on behalf of the Board of Directors. The Audit Committee consists of three members of the Board of Directors who meet the independence and experience requirements of the AMEX.

On October 8, 2003, we amended and restated our Audit Committee Charter, which was originally adopted on July 26, 1999.

The Audit Committee held four meetings during fiscal 2007.

Management is responsible for our financial reporting process including its system of internal controls and for the preparation of consolidated financial statements in accordance with generally accepted accounting principles. Our independent registered public accounting firm is responsible for auditing those financial statements. The Audit Committee's responsibility is to monitor and review these processes. As appropriate, the Audit Committee reviews and evaluates, and discusses with our management and our independent registered public accounting firm, the following:

- the plan for, and the independent registered public accounting firm's report on, each audit of our financial statements;
- the independent registered public accounting firm's review of our unaudited interim financial statements;
- our financial disclosure documents, including all financial statements and reports filed with the Securities and Exchange Commission or sent to stockholders;
- our management's selection, application and disclosure of critical accounting policies;
- changes in our accounting practices, principles, controls or methodologies;
- significant developments or changes in accounting rules applicable to us; and
- the adequacy of our internal controls and accounting and financial personnel.

The Audit Committee reviewed and discussed with our management our audited financial statements for the year ended June 30, 2007. The Audit Committee also reviewed and discussed the audited financial statements and the matters required by Statement on Auditing Standards No. 61, 89 and 90, titled Communication with Audit Committees, with our independent registered public accounting firm. These standards require our independent registered public accounting firm to discuss with our Audit Committee, among other things, the following:

- methods used to account for significant unusual transactions;
- the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus;
- the process used by management in formulating particularly sensitive accounting estimates and the basis for the auditors' conclusions regarding the reasonableness of those estimates; and
- disagreements with management over the application of accounting principles, the basis for management's accounting estimates and the disclosures in the financial statements.

Our independent registered public accounting firm also provided the Audit Committee with the written disclosures and the letter required by Independence Standards Board Standard No. 1, titled Independence Discussions with Audit Committees. Independence Standards Board Standard No. 1 requires auditors annually to disclose in writing all relationships that, in the auditor's professional opinion, may reasonably be thought to bear on independence, confirm their perceived independence and engage in a discussion of independence. In addition, the Audit Committee discussed with our independent registered public accounting firm their independence from Senesco. The Audit Committee also considered whether our independent registered public accounting firm's provision of certain other non-audit related services to Senesco is compatible with maintaining our auditors' independence.

Based on our discussions with management and our independent registered public accounting firm, and our review of the representations and information provided by our management and our independent registered public accounting firm, the Audit Committee recommended to our board of directors that the audited financial statements be included in our annual report on Form 10-K for the year ended June 30, 2007.

By the Audit Committee of the Board of Directors of  
Senesco Technologies, Inc.

**John N. Braca, Chairman**  
**Thomas C. Quick**  
**David Rector**

## STOCKHOLDERS' PROPOSALS

Stockholders who wish to submit proposals for inclusion in our proxy statement and form of proxy relating to our 2008 annual meeting of stockholders must advise our Secretary of such proposals in writing by July 7, 2008.

Stockholders who wish to present a proposal at our 2008 annual meeting of stockholders without inclusion of such proposal in our proxy materials must advise our Secretary of such proposals in writing by September 19, 2008.

If we do not receive notice of a stockholder proposal within this timeframe, our management will use its discretionary authority to vote the shares they represent, as our board of directors may recommend. We reserve the right to reject, rule out of order, or take other appropriate action with respect to any proposal that does not comply with these requirements.

## HOUSEHOLDING OF ANNUAL MEETING MATERIALS

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" proxy statements and annual reports. This means that only one copy of our proxy statement or annual report may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you if you call or write us at the following address or phone number: Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901, (732) 296-8400. If you want to receive separate copies of the annual report and proxy statement in the future or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker, or other nominee record holders, or you may contact us at the above address and phone number.

## OTHER MATTERS

Our board of directors is not aware of any matter to be presented for action at the Meeting other than the matters referred to above and does not intend to bring any other matters before the Meeting. However, if other matters should come before the Meeting, it is intended that holders of the proxies will vote thereon in their discretion.

## GENERAL

The accompanying proxy is solicited by and on behalf of our board of directors, whose notice of meeting is attached to this proxy statement, and the entire cost of such solicitation will be borne by us.

In addition to the use of the mails, proxies may be solicited by personal interview, telephone and telegram by our directors, officers and other employees who will not be specially compensated for these services. We will also request that brokers, nominees, custodians and other fiduciaries forward soliciting materials to the beneficial owners of shares held of record by such brokers, nominees, custodians and other fiduciaries. We will reimburse such persons for their reasonable expenses in connection therewith.

Certain information contained in this proxy statement relating to the occupations and security holdings of our directors and officers is based upon information received from the individual directors and officers.

**WE WILL FURNISH, WITHOUT CHARGE, A COPY OF OUR REPORT ON FORM 10-K FOR THE YEAR ENDED JUNE 30, 2007, INCLUDING FINANCIAL STATEMENTS AND SCHEDULES THERETO, BUT NOT INCLUDING EXHIBITS, TO EACH OF OUR STOCKHOLDERS OF RECORD ON OCTOBER 22, 2007 AND TO EACH BENEFICIAL STOCKHOLDER ON THAT DATE UPON WRITTEN REQUEST MADE TO OUR SECRETARY. A REASONABLE FEE WILL BE CHARGED FOR COPIES OF REQUESTED EXHIBITS.**

**PLEASE DATE, SIGN AND RETURN THE PROXY CARD AT YOUR EARLIEST CONVENIENCE IN THE ENCLOSED RETURN ENVELOPE. A PROMPT RETURN OF YOUR PROXY CARD WILL BE APPRECIATED AS IT WILL SAVE THE EXPENSE OF FURTHER MAILINGS.**

By Order of the Board of Directors

/s/ Sascha P. Fedyszyn

Sascha P. Fedyszyn  
Secretary

New Brunswick, New Jersey  
November 2, 2007

## ANNEX A

SENE스코 TECHNOLOGIES, INC.

## AMENDED AND RESTATED AUDIT COMMITTEE CHARTER

### A. Purpose

The purpose of the Audit Committee is to assist the Board of Directors' (the "Board") oversight of:

- the quality and integrity of the Company's financial statements, financial reporting process and internal operating controls;
- the Company's compliance with legal and regulatory requirements;
- the independent auditor's qualifications and independence; and
- the performance of the Company's internal audit function and independent auditors.

### B. Structure and Membership

1. Number. The Audit Committee shall consist of at least two members of the Board.
  2. Independence. Except as otherwise permitted by the applicable rules of any national securities exchange or any association of securities dealers on which the Company lists any class of its capital stock (the "Listing Exchange") and Section 301 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") (and the applicable rules thereunder), each member of the Audit Committee shall be "independent" as defined by such rules and Act. To insure compliance with this provision, the Audit Committee shall:
    - a. monitor the Audit Committee's members throughout the year to confirm that they all remain independent as required by the listing exchange rules; and
    - b. consider whether any members of the Audit Committee have relationships with the Company that may create the appearance of a lack of independence, even though such relationships do not technically disqualify the person from being "independent".
  3. Financial Literacy. Each member of the Audit Committee shall be able to read and understand fundamental financial statements, including the Company's balance sheet, income statement, and cash flow statement, at the time of his or her appointment to the Audit Committee. As of December 15, 2003, at least one member of the Audit Committee shall meet the requirements of an "audit committee financial expert" (as defined by applicable Listing Exchange and SEC rules). All members of the Audit Committee shall participate in continuing education programs if and as required by the rules and regulations of any Listing Exchange.
  4. Chair. Unless the Board elects a Chair of the Audit Committee, the Audit Committee shall elect a Chair by majority vote.
  5. Compensation. The compensation of Audit Committee members shall be as determined by the Board. No member of the Audit Committee may receive any compensation from the Company other than director's fees.
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6. Selection and Removal. The Board shall appoint members of the Audit Committee and the Board may remove members of the Audit Committee from such committee, with or without cause.

### C. Authority and Responsibilities

#### **General**

The Audit Committee shall discharge its responsibilities, and shall assess the information provided by the Company's management and the independent auditor, in accordance with its business judgment. Management is responsible for the preparation, presentation, and integrity of the Company's financial statements and for the appropriateness of the accounting principles and reporting policies that are used by the Company. The independent auditors are responsible for auditing the Company's financial statements, for reviewing the Company's unaudited interim financial statements, and for such other audit functions as outlined in the independent auditor's letter of engagement.

#### **Oversight of Independent Auditors**

1. Selection. The Audit Committee shall be solely and directly responsible for annually appointing the independent auditors to be proposed for stockholder approval. The Audit Committee is solely responsible for evaluating the independent auditor and, when necessary, terminating the independent auditor. The Audit committee may authorize the CEO to sign the engagement letter but only after the engagement has been reviewed and approved by the Audit Committee.
2. Independence. The Audit Committee shall directly take, or recommend that the full Board take, appropriate action to oversee the independence of the independent auditor. In connection with this responsibility, the Audit Committee shall annually obtain and review a formal written statement from the independent auditor describing all relationships between the independent auditor and the Company, including the disclosures required by Independence Standards Board Standard No. 1. The Audit Committee shall actively engage in dialogue with the independent auditor concerning any disclosed relationships or services that might influence the objectivity and independence of the auditor. In addition, the Audit Committee shall:
  - a. confirm the regulator rotation of the lead audit partner and reviewing partner as required by Section 203 of the Sarbanes-Oxley Act;
  - b. confirm that the Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), Controller and Chief Accounting Officer (or other persons serving in similar capacities) were not employed by the independent auditor, or if employed, did not participate in any capacity in the audit of the Company, in each case, during the one-year period preceding the date of initiation of the audit, as required by Section 206 of the Sarbanes-Oxley Act; and

- c. annually consider whether, in order to assure continuing auditor independence, there should be regular rotation of the independent audit firm.

3. Compensation. The Audit Committee shall have sole and direct responsibility for setting the compensation of the independent auditor. The Audit Committee shall inform the Board of any significant auditor fees to be incurred beyond the fees from the ordinary audit and tax services. The Audit Committee is empowered, without further action by the Board, to cause the Company to pay the compensation of the independent auditor established by the Audit Committee.

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4. Engagement and Pre-approval of Services. The Audit Committee is responsible for the independent auditor engagement and shall pre-approve all audit services (which may entail providing comfort letters in connection with securities underwritings), and non-audit services (other than de minimus non-audit services as defined by the Sarbanes-Oxley Act and the applicable rules thereunder) to be provided to the Company by the independent auditor. The Audit Committee shall cause the Company to disclose in its SEC periodic reports the approval by the Audit Committee of any non-audit services performed by the independent auditor.

5. Prohibited Services. The Audit Committee shall oversee the Company's compliance with Section 201 of the Sarbanes-Oxley Act and shall not permit the engagement of the independent auditor for prohibited non-audit services, thereunder, including the following:

- a. bookkeeping or other services related to the accounting records or financial statements of the audit client;
- b. financial information systems design and implementation;
- c. appraisal or valuation services, fairness opinions or contribution-in-kind reports;
- d. actuarial services;
- e. internal audit outsourcing services;
- f. management functions or human resources;
- g. broker or dealer, investment adviser or investment banking services;
- h. legal services and expert services unrelated to the audit; and
- i. any other service that the Board determines, by regulation, is impermissible.

6. Direct Report. The independent auditor shall report directly to the Audit Committee and the Audit Committee shall have sole and direct responsibility for overseeing the independent auditor, including resolution of disagreements between Company management and the independent auditor regarding financial reporting. In connection with its oversight role:

- a. The Audit Committee shall, from time to time, as appropriate, obtain and review the reports required to be made by the independent auditor pursuant to paragraph (k) of Section 10A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), regarding:
  - (i) critical accounting policies and practices;
  - (ii) alternative treatments of financial information within generally accepted accounting principles that have been discussed with Company management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor; and
  - (iii) other material written communications between the independent auditor and Company management.
- b. The Audit Committee shall also review with the independent auditor:
  - (i) planning and staffing of the audit;

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- (ii) the letter of management representations given to the outside auditor and inquire of the auditor whether any difficulties were encountered in obtaining the letter;
  - (iii) audit problems or difficulties the independent auditor encountered in the course of the audit work and management's response, including any restrictions on the scope of the independent auditor's activities or on access to requested information and any significant disagreements with management;
  - (iv) major issues as to the adequacy of the Company's internal controls and any special audit steps adopted in light of material control deficiencies;
  - (v) analyses prepared by management and/or the independent auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of alternative GAAP methods on the financial statements; and

- (vi) the effect of regulatory and accounting initiatives on the financial statements of the Company.
  - c. The Audit Committee will review with the independent auditors, from time to time, as and when appropriate:
    - (i) significant risks and/or uncertainties with respect to the quality, accuracy or fairness of presentation of the Company's financial statements;
    - (ii) recently disclosed problems with respect to the quality, accuracy or fairness of presentation of the financial statements of companies similarly situated to the Company and recommended actions which might be taken to prevent or mitigate the risk of problems at the Company arising from such matters;
    - (iii) any accounting adjustments that were noted or proposed by the auditor but were "passed" (as immaterial or otherwise);
    - (iv) any communications between the audit team and the audit firm's national office respecting auditing or accounting issues presented by the engagement;
    - (v) accounting for unusual transactions;
    - (vi) adjustments arising from audits that could have a significant impact on the Company's financial reporting process; and
    - (vii) any recent SEC comments on the Company's SEC reports, including, in particular, any unresolved or future-compliance comments.
  - d. The Audit Committee shall inquire of the independent auditor concerning the quality, not just the acceptability, of the Company's accounting determinations, particularly with respect to revenue, earnings, significant items subject to estimate, and other judgmental areas. The Audit Committee shall also ask the independent auditor whether management's choices of accounting principles and policies are, as a whole, in accordance with GAAP and whether there are other acceptable alternatives to the principles and policies applied by management.
  - e. The Audit Committee shall promptly notify the Board of any significant issues brought to the attention of the Audit Committee by the independent auditor.
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- f. The Audit Committee shall inform the independent auditor, Company management (including the CFO, and Controller) and the head of internal auditing that they should promptly contact the Audit Committee or its Chair about any significant issue or disagreement concerning the Company's accounting practices or financial statements that is not resolved to their satisfaction. If the Audit Committee Chairperson is contacted about such an issue, he or she shall: (i) confer with the independent auditor about the issue; (ii) notify the other members of the Audit Committee; and (iii) decide whether it is necessary for the Audit Committee to meet before its next scheduled meeting.
  - g. The Audit Committee shall obtain and review a copy of the most recent independent auditor inspection report as issued by the Public Company Accounting Oversight Board pursuant to Section 104 of the Sarbanes-Oxley Act.
  - h. The Audit Committee shall obtain from the independent auditor assurance that, if the independent auditor detects or becomes aware of any illegal act, the independent auditor will immediately and adequately inform the Audit Committee directly and provide the Audit Committee with a written report detailing the such illegal acts detected and any specific conclusions or recommendations for change with respect to such illegal acts.
  - i. The Audit Committee shall discuss with management and the independent auditor any correspondence with regulators or governmental agencies and any published reports that raise material issues regarding the Company's financial statements or accounting policies.

#### **Review of Audited Financial Statements**

- 7. Discussion of Audited Financial Statements. The Audit Committee shall review and discuss with the Company's management and independent auditor the Company's audited financial statements, including the matters about which Statement on Auditing Standards No. 61, "Communications with Audit Committees" - requires discussion.
- 8. Recommendation to Board Regarding Financial Statements. The Audit Committee shall consider whether it will recommend to the Board that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K or Form 10-KSB, as applicable.
- 9. Audit Committee Report. The Audit Committee shall prepare for inclusion where necessary in a proxy or information statement of the Company relating to an annual meeting of security holders at which directors are to be elected (or special meeting or written consents in lieu of such meeting), the report described in Item 306 of Regulation S-B or S-K, as applicable. The Audit Committee shall therein report to the stockholders, in such proxy or information statement, whether it has:
  - (i) reviewed and discussed the audited financial statements with management;
  - (ii) discussed with the independent auditors the matters required to be discussed under Statement on Auditing Standards No. 61, as may be modified or supplemented;
  - (iii) received written disclosures from the outside auditor regarding independence as required by Independence Standards Board Standard No. 1, as may be modified and supplemented, and has discussed with the independent auditors the



- (iv) based on the discussions referred to in Section 9(i)-(iii) above, recommended to the Board that the audited financial statements be included in the Company's Annual Report on Form 10-K or Form 10-KSB, as applicable, for the last fiscal year for filing with the Securities and Exchange Commission.

#### Review of Other Financial Disclosures

10. Independent Auditor Review of Interim Financial Statements. The Audit Committee shall direct the independent auditor to perform all reviews of interim financial information prior to disclosure by the Company of such information and to discuss promptly with the Audit Committee and the CFO any matters identified in connection with the auditor's review of interim financial information which are required to be discussed by Statement on Auditing Standards Nos. 61, 71 and 90. The Audit Committee shall direct management to seek Audit Committee consent in the event that the Company proposes to disclose interim financial information before completion of the independent auditor's review of interim financial information.
11. Earnings Release and Other Financial Information. The Audit Committee shall review and discuss generally Company policy as to the type of information to be disclosed in the Company's earnings press releases and other presentations (including any use of "pro forma" or "adjusted" non-GAAP, information), as well as in financial information and earnings guidance provided to analysts, rating agencies and others to facilitate fair accurate and transparent financial disclosure and compliance with applicable statutory and regulatory requirements. In addition, the Audit Committee shall review earnings releases before their issuance.
12. Quarterly Financial Statements. The Audit Committee shall discuss the results of the SAS 71 "Interim Financial Information" review performed by the independent auditor. The Audit Committee shall also discuss with the Company's management and independent auditor the Company's quarterly financial statements, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations". This discussion and review shall take place before the filing of the Form 10-Q or 10-QSB, as applicable.
13. Tax Reporting The Audit Committee shall inquire as to: (i) the status of the Company's tax returns; (ii) whether there are any significant items that have been or might be disputed by the respective jurisdictional taxing authorities; and (iii) inquire about the status of related tax reserves.

#### Controls and Procedures

14. Oversight. The Audit Committee shall coordinate the Board of Director's oversight of the Company's internal accounting controls, the Company's disclosure controls and procedures and the Company's code of conduct. The Audit Committee shall therefore:
- a. receive and review the reports of the CEO and CFO required by Section 302 of the Sarbanes-Oxley Act (and the applicable rules there under) and Rule 13a-14 of the Exchange Act. Section 302 of the Sarbanes-Oxley Act requires, among other things, that the CEO and CFO to certify that they have disclosed to the Audit Committee:
    - (i) all significant deficiencies in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data and have identified for the Company's auditors any material weaknesses in internal controls; and
    - (ii) any fraud, whether material or not material, that involves management or other employees who have a significant role in the Company's internal controls.
  - b. Receive and review the reports on internal accounting controls contemplated by Sections 103 and 404 of the Sarbanes-Oxley Act.
  - c. Obtain reports from management and the Company's senior internal auditing executive, that the Company is in conformity with applicable legal requirements and the Company's code of conduct. To the extent applicable, inquiries shall be made of the independent auditor regarding the independent auditor's awareness, if any, of violations of applicable legal requirements or violations of the Company's code of conduct.
  - d. Review reports and disclosures of insider and affiliated party transactions.
  - e. Advise the Board with respect to the Company's policies and procedures regarding compliance with applicable laws and regulations and with the Company's code of conduct.
  - f. Discuss with the Company's General Counsel, if applicable, and, where appropriate, outside counsel, legal matters, regulatory proceedings, and current and pending litigation that may have a material impact on the Company's financial statements, compliance policies, or corporate governance.
  - g. Review in-house policies and procedures for regular review of officers' expenses and perquisites, including use of corporate assets.
  - h. Review any unusual accounting issues that the Company intends to discuss with the SEC's accounting staff prior to when management contacts the SEC so as to provide the SEC with the Audit Committee's position on the Company's proposed accounting treatment as directed in the SEC's "Guidance for Consulting with the Office of the Chief Accountant".
15. Procedures for Complaints. The Audit Committee shall establish procedures for:

- a. the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters;
  - b. the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters; and
  - c. periodically reviewing the complaint procedures to confirm that they can operate effectively.
16. Related-Party Transactions. The Audit Committee shall review all related party transactions on an ongoing basis and all such transactions must be approved by the Audit Committee.
17. Quality-Control Report. At least annually, the Audit Committee shall obtain and review a report by the independent auditor describing:
  - a. the firm's internal quality control procedures; and
  - b. any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues.
18. Risk Management. The Audit Committee shall discuss the Company's policies with respect to risk assessment and risk management, including guidelines and policies to govern the process by which the Company's exposure to risk is handled, the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures.
19. Additional Powers. The Audit Committee shall have the authority to utilize additional outside accountants, attorneys, or other advisors to assist the Audit Committee in special circumstances. The Audit Committee shall have such other duties as may be delegated from time to time by the Board.

**D. Procedures and Administration**

1. Meetings. The Audit Committee shall meet as necessary to discharge its responsibilities but it shall meet at least quarterly, prior to the filing of the interim quarterly reports and annual report. The Audit Committee shall meet quarterly, in private sessions with the independent auditors to discuss pertinent matters, including the quality of management and financial personnel, and any management restrictions on the scope of the audit examination, or other matters that should be discussed with the Audit Committee. The Audit Committee, at least annually, shall meet separately with (i) Company management and (ii) as applicable, the Company personnel comprising the internal audit. The Audit Committee shall keep minutes of its meetings as it shall deem appropriate to accurately describe the issues considered by the Audit Committee and the Audit Committee's final due care determination of how to proceed.
  2. Subcommittees. The Audit Committee may form and delegate authority to one or more subcommittees (including a subcommittee consisting of a single member), as it deems appropriate from time to time under the circumstances. Any decision of a subcommittee to pre-approve audit or non-audit services shall be presented to the full Audit Committee at its next scheduled meeting.
  3. Reports to Board. The Audit Committee shall report regularly to the Board and review with the Board any issues that arise with respect to the quality or integrity of the Company's financial statements, the Company's compliance with legal or regulatory requirements, the performance and independence of the Company's independent auditors or the performance of the internal audit function.
  4. Independent Advisors. The Audit Committee shall have the authority to engage and determine funding for such independent legal, accounting, and other advisors as it deems necessary or appropriate to carry out its responsibilities. Such independent advisors may be the regular advisors to the Company. The Audit Committee is empowered, without further action by the Board, to cause the Company to pay the compensation of such advisors as established by the Audit Committee.
  5. Investigations. The Audit Committee shall have the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it shall deem appropriate, including the authority to request any officer, employee or advisor of the Company to meet with the Audit Committee or any advisors engaged by the Audit Committee.
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6. Funding. The Audit Committee is empowered, without further action by the Board, to cause the Company to pay the ordinary administrative expenses of the Audit Committee that are necessary or appropriate in carrying out its duties.
  7. Annual Self-Evaluation. At least annually, the Audit Committee shall evaluate its own performance and composition.
  8. Charter. The Audit Committee shall provide to management and the outside auditors a copy of the Audit Committee charter to communicate the intended responsibilities and relationships between the Company's outside auditors, management, the Audit Committee and the Board as representatives of the stockholders. At least annually, the Audit Committee shall review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.
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CERTIFICATE OF AMENDMENT  
OF THE  
AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
SENESCO TECHNOLOGIES, INC.

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*Pursuant to Sections 228 and 242  
of the  
Delaware General Corporation Law*

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Senesco Technologies, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL");

DOES HEREBY CERTIFY THAT:

FIRST: The name of the corporation (hereinafter, the "Corporation") is:

**Senesco Technologies, Inc.**

SECOND: The Amended and Restated Certificate of Incorporation of the Corporation was filed with the office of the Secretary of State of Delaware on January 22, 2007 (as amended, the "Charter").

THIRD: The Charter is hereby amended as follows:

(a) The first section of Article FOURTH of the Charter is hereby deleted in its entirety and replaced by the following new paragraph:

"The total number of shares of all classes of stock which the Corporation shall have authority to issue is One Hundred and Five Million (105,000,000) shares. The Corporation is authorized to issue two classes of stock designated "Common Stock" and "Preferred Stock," respectively. The total number of shares of Common Stock authorized to be issued by the Corporation is One Hundred Million (100,000,000), each such share of Common Stock having a \$0.01 par value. The total number of shares of Preferred Stock authorized to be issued by the Corporation is Five Million (5,000,000), each such share of Preferred Stock having a \$0.01 par value."

FOURTH: That the foregoing amendments have been duly adopted in accordance with the provisions of Sections 228 and 242 of the DGCL.

FIFTH: This Certificate of Amendment shall be deemed effective upon its filing with the Secretary of State of the State of Delaware.

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IN WITNESS WHEREOF, this Certificate of Amendment of Certificate of Incorporation has been duly executed by the undersigned officer of the Corporation this      day of      , 2007.

**SENESCO TECHNOLOGIES, INC.**

By: \_\_\_\_\_  
Name: Bruce C. Galton  
Title: President and Chief Executive Officer

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**SENESCO TECHNOLOGIES, INC.**

**PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS  
OF THE CORPORATION FOR THE ANNUAL MEETING OF STOCKHOLDERS**

The undersigned hereby constitutes and appoints Rudolf Stalder and Sascha P. Fedyszyn, and each of them, his or her true and lawful agent and proxy with full power of substitution in each, to represent and to vote on behalf of the undersigned all of the shares of Senesco Technologies, Inc. (the "Company") which the undersigned is entitled to vote at the Annual Meeting of Stockholders of the Company to be held at the American Stock Exchange, 86 Trinity Place, New York, NY 10006 on December 13, 2007, at 10:00 A.M, and at any adjournment or adjournments thereof, upon the following proposals more fully described in the Notice of Annual Meeting of Stockholders and Proxy Statement for the Meeting (receipt of which is hereby acknowledged).

**This proxy when properly executed will be voted in the manner directed herein by the undersigned stockholder. If no direction is made, this proxy will be voted FOR proposals 1, 2, 3, 4 and 5.**

(Continued and to be signed on the reverse side)

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ANNUAL MEETING OF STOCKHOLDERS OF  
SENESCO TECHNOLOGIES, INC.

December 13, 2007

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

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

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE x

1. Election of Directors:

☐ FOR ALL NOMINEES

☐ WITHHOLD AUTHORITY  
FOR ALL NOMINEES

☐ FOR ALL EXCEPT  
(See instructions below)

NOMINEES:

☐ Rudolf Stalder  
☐ Bruce C. Galton  
☐ John E. Thompson, Ph.D.  
☐ Christopher Forbes  
☐ Thomas C. Quick  
☐ David Rector  
☐ John N. Braca  
☐ Jack Van Hulst

- |  | FOR                   | AGAINST               | ABSTAIN               |
|--|-----------------------|-----------------------|-----------------------|
| 2. To approve the issuance and sale of up to \$2,000,000 of secured convertible debentures of the Company in the third closing of the financing and the issuance and sale of up to an additional \$5,000,000 of the secured convertible debentures and warrants of the Company in the second financing.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. To approve the potential issuance of 62,388,888 shares of our common stock resulting from: (i) certain adjustments to the exercise price of the Series B warrants and to the conversion price of the secured convertible debentures pursuant to the antidilution adjustment provisions of the respective securities and the milestone adjustment provision of the secured convertible debentures; and (ii) pursuant to the interest shares provision of the secured convertible debentures. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. To approve an amendment to the Company's Certificate of Incorporation to increase the total authorized shares of common stock, \$0.01 par value per share, of the Company from 60,000,000 to 100,000,000.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. Approval of proposal to ratify the appointment of McGladrey & Pullen LLP as the independent registered public accounting firm of the Company for the fiscal year ending June 30, 2008.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. In his discretion, the proxy is authorized to vote upon other matters as may properly come before the Meeting.  |                       |                       |                       |

MARK "X" HERE IF YOU PLAN TO ATTEND THE MEETING O

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

☐

Signature of Stockholder

Date:

Signature of Stockholder

Date:

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