SENESCO TECHNOLOGIES INC
Form 10QSB
May 17, 2004

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

FORM 10-QSB

(Mark One)

[X] Quarterly Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended March 31, 2004

[ ] Tansition Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from to

Commission File No. 001-31326

SENESCO TECHNOLOGIES, INC.
(Exact Name of Small Business Issuer as Specified in Its Charter)

Delaware	84-1368850
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

303 George Street, Suite 420, New Brunswick, New Jersey 08901
(Address of Principal Executive Offices)

(732) 296-8400
(Issuer's Telephone Number, Including Area Code)

Check whether the Issuer: (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes: X No:

State the number of shares outstanding of each of the Issuer's classes of common stock, as of April 30, 2004:

Class	Number of Shares
Common Stock, $0.01 par value	13,732,250

Transitional Small Business Disclosure Format (check one):

Yes: ____ No: X ____

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

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PART I. FINANCIAL INFORMATION.

ITEM 1. FINANCIAL STATEMENTS.

Certain information and footnote disclosures required under generally accepted accounting principles have been condensed or omitted from the following consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission. However, Senesco Technologies, Inc., a Delaware corporation, and its wholly owned subsidiary, Senesco, Inc., a New Jersey corporation (collectively, "Senesco" or the "Company"), believe that the disclosures are adequate to assure that the information presented is not misleading in any material respect.

The results of operations for the interim periods presented herein are not necessarily indicative of the results to be expected for the entire fiscal year.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY
(A DEVELOPMENT STAGE COMPANY)
CONDENSED CONSOLIDATED BALANCE SHEET

	March 31, 2004 (unaudited)
ASSETS	
CURRENT ASSETS:	
Cash and cash equivalents	$ 3,756,260
Short-term investments	800,679
Prepaid expenses and other current assets	67,610
Total Current Assets	4,624,549
Property and equipment, net	56,119
Intangibles, net	773,049
Security deposit	7,187

TOTAL ASSETS	$ 5,460,904

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES:	
Accounts payable	$ 24,790
Accrued expenses	464,258
Deferred revenue	45,833
Total Current Liabilities	534,881
Grant payable	90,150
TOTAL LIABILITIES	625,031
STOCKHOLDERS' EQUITY:	
Preferred stock, $0.01 par value; authorized 5,000,000 shares, no shares issued	--
Common stock, $0.01 par value; authorized 30,000,000 shares, issued and outstanding 13,601,850 and 11,880,045 shares	136,018
Capital in excess of par	16,812,193
Deficit accumulated during the development stage	(12,112,338
Total Stockholders' Equity	4,835,873
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 5,460,904

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(unaudited)

	For the Three Months Ended March 31, 2004	For the Three Months Ended March 31, 2003	For the Nine Months Ended March 31, 2004

Revenue	$ 4,167	$ --	$ 4,167
Operating Expenses:			
General and administrative	294,125	294,403	2,031,044
Research and development	320,559	237,687	893,704
Total Operating Expenses	614,684	532,090	2,924,748
Loss From Operations	(610,517)	(532,090)	(2,920,581)
Sale of state income tax loss	--	--	91,448
Other noncash income	185,627	--	185,627
Interest income, net	7,879	16,407	27,827
Net Loss	$ (417,011)	$ (515,683)	$(2,615,679)
Basic and Diluted Net Loss Per Common Share	$ (0.03)	$ (0.04)	$ (0.21)
Basic and Diluted Weighted Average Number of Common Shares Outstanding	13,137,522	11,880,045	12,319,576

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

FROM INCEPTION ON JULY 1, 1998 THROUGH MARCH 31, 2004

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage
	Shares	Amount		

Common stock outstanding.....	2,000,462	$ 20,005	$ (20,005)	--
Contribution of capital.....	--	--	85,179	--
Issuance of common stock in reverse merger on January 22, 1999 at $0.01 per share.....	3,400,000	34,000	(34,000)	--
Issuance of common stock for cash on May 21, 1999 at $2.63437 per share.....	759,194	7,592	1,988,390	--
Issuance of common stock for placement fees on May 21, 1999 at $0.01 per share.....	53,144	531	(531)	--
Issuance of common stock for cash on January 26, 2000 at $2.867647 per share.....	17,436	174	49,826	--
Issuance of common stock for cash on January 31, 2000 at $2.87875 per share.....	34,737	347	99,653	--
Issuance of common stock for cash on February 4, 2000 at $2.934582 per share.....	85,191	852	249,148	--
Issuance of common stock for cash on March 15, 2000 at $2.527875 per share.....	51,428	514	129,486	--
Issuance of common stock for cash on June 22, 2000 at $1.50 per share.....	1,471,700	14,718	2,192,833	--

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

FROM INCEPTION ON JULY 1, 1998 THROUGH MARCH 31, 2004

(unaudited)

	Common Stock		Capital in Excess of Par Value	Defic Accumul During Develop Stag
	Shares	Amount		
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2000.....	--	--	$ (260,595)	-
Fair market value of options and warrants vested during the year ended June 30, 2000.....	--	--	873,779	-
Fair market value of warrants vested during the year ended June 30, 2001.....	--	--	80,700	-
Issuance of common stock and warrants for cash from November 30, 2001 through April 17, 2002 at $1.75 per unit.....	3,701,430	$ 37,014	6,440,486	-
Issuance of common stock and warrants associated with bridge loan conversion on December 3, 2001.....	305,323	3,053	531,263	-
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2002.....	--	--	(846,444)	-
Fair market value of options and warrants vested during the year ended June 30, 2002.....	--	--	577,708	-
Fair market value of options and warrants vested during the year ended June 30, 2003.....	--	--	97,497	-

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

FROM INCEPTION ON JULY 1, 1998 THROUGH MARCH 31, 2004

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulat During th Developme Stage
	Shares	Amount		
Issuance of common stock and warrants for cash from January 15, 2004 through February 12, 2004 at $2.37 per unit	1,536,922	$ 15,369	$ 3,627,131	
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2004	--	--	(357,304)	
Change in valuation of liability associated with registration of warrant issuances from January 15, 2004 through February 12, 2004	--	--	(185,627)	
Fair market value of options and warrants vested during the nine month period ended March 31, 2004	--	--	1,177,845	
Options and warrants exercised and other transactions during the nine month period ended March 31, 2004	184,883	1,849	315,775	
Net loss	--	--	--	$(12,112,3
Balance at March 31, 2004	13,601,850	$ 136,018	$ 16,812,193	$(12,112,3

See Notes to Condensed Consolidated Financial Statements.

(A DEVELOPMENT STAGE COMPANY)
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(unaudited)

	For the Nine Months March 31,	
	2004	20
Cash flows from operating activities:		
Net loss	$ (2,615,679)	$ (1,
Adjustments to reconcile net loss to net cash used in operating activities:		
Noncash capital contribution	--	
Noncash conversion of accrued expenses into equity	--	
Noncash income related to related filing of registration statement	(185,627)	
Issuance of common stock and warrants for interest	--	
Issuance and vesting of stock options and warrants for services	1,177,845	
Depreciation and amortization	22,820	
(Increase) decrease in operating assets:		
Accounts receivable	--	
Prepaid expense and other current assets	117,925	(
Security deposit	--	
Increase (decrease) in operating liabilities:		
Accounts payable	(31,346)	
Accrued expenses	201,098	
Deferred revenue	45,833	
Net cash used in operating activities	(1,267,131)	(1,
Cash flows from investing activities:		
Patent costs	(196,255)	(
Redemption (purchase) of investments, net	1,298,616	
Purchase of property and equipment	(1,720)	
Net cash provided by (used in) investing activities	1,100,641	
Cash flows from financing activities:		
Proceeds from grant	--	
Proceeds from issuance of bridge notes	--	
Proceeds from issuance of common stock and warrants, net	3,602,820	
Cash provided by financing activities	3,602,820	
Net increase (decrease) in cash and cash equivalents	3,436,330	(
Cash and cash equivalents at beginning of period	319,930	
Cash and cash equivalents at end of period	$ 3,756,260	$

Supplemental disclosure of cash flow information:		
Cash paid during the period for interest.....	$ --	$
Supplemental schedule of noncash financing activity:		
Conversion of bridge notes into stock.....	$ --	$

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(unaudited)

NOTE 1 - BASIS OF PRESENTATION:

The financial statements included herein have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-KSB for the fiscal year ended June 30, 2003.

In the opinion of the Company's management, the accompanying unaudited condensed consolidated financial statements contain all adjustments, consisting solely of those which are of a normal recurring nature, necessary to present fairly its financial position as of March 31, 2004, the results of its operations for the three-month periods ended March 31, 2004 and 2003, the results of its operations and cash flows for the nine-month periods ended March 31, 2004 and 2003, and for the period from inception on July 1, 1998 through March 31, 2004.

The Company had previously reported stock-based compensation as a separate category in its consolidated statement of operations. Beginning in fiscal 2004, the Company no longer reports stock-based compensation as a separate category and has included such stock-based compensation in general and administrative and research and development expenses, as applicable. Therefore, certain reclassifications have been made to the prior year consolidated financial statements in order to conform to the current year's classification.

Interim results are not necessarily indicative of results for the full fiscal year.

NOTE 2 - LOSS PER SHARE:

Net loss per common share is computed by dividing the loss by the weighted average number of common shares outstanding during the period. Since September 7, 1999, the Company has had outstanding options and warrants to purchase its common stock, $0.01 par value per share (the "Common Stock"); however, as of

March 31, 2004 and 2003, shares to be issued upon the exercise of options and warrants aggregating 7,077,486 and 5,988,153, respectively, at an average exercise price of $2.81 and $2.61, respectively, are not included in the computation of diluted loss per share as the effect is anti-dilutive.

NOTE 3 - STOCK OPTIONS AND WARRANTS:

The Company applies APB Opinion No. 25 and related interpretations in accounting for its stock option plan. Options to purchase Common Stock have been granted at or above the fair market value of the stock as of the date of grant. Accordingly, no compensation costs have been recognized for the stock option plan. Had compensation cost been determined based on the fair value at the grant dates for those awards consistent with the method of FASB No. 123, the Company's net loss and net loss per share would have been increased to the pro forma amounts indicated below:

THREE MONTH PERIODS ENDED MARCH 31,	2004
Net loss:	
As reported	$ (417,011)
Stock-based employee compensation costs	(170,239)
Pro forma	$ (587,250)
Loss per share:	
As reported	$ (0.03)
Pro forma	$ (0.04)

NINE MONTH PERIODS ENDED MARCH 31,	2004
Net loss:	
As reported	$(2,615,679)
Stock-based employee compensation costs	(478,385)
Pro forma	$(3,094,064)
Loss per share:	
As reported	$ (0.21)
Pro forma	$ (0.25)

The estimated grant date present value reflected in the above table is determined using the Black-Scholes model. The material factors incorporated in the Black-Scholes model in estimating the value of the options reflected in the above table for the three and nine-month periods ended March 31, 2004 and 2003

include the following: (i) an exercise price equal to the fair market value of the underlying stock on the dates of grant; (ii) an option term of 5 and 10 years; (iii) a risk-free rate range of 3.80% to 4.24% and 3.00% to 4.22%, respectively, that represents the interest rate on a U.S. Treasury security with a maturity date corresponding to that of the option term; (iv) volatility of 147.83%; and (v) no annualized dividends paid with respect to a share of Common Stock at the date of grant. The ultimate values of the options will depend on the future price of the Company's Common Stock, which cannot be forecast with reasonable accuracy.

NOTE 4 - REVENUE RECOGNITION:

The Company receives certain nonrefundable upfront fees in exchange for the transfer of its technology to licensees. Upon delivery of the technology, the Company has no further obligations to the licensee with respect to the basic technology transferred and, accordingly, recognizes revenue at that time. The Company may, however, receive additional payments from its licensees in the event such licensees achieve certain development or commercialization milestones in their particular field of use. Other nonrefundable upfront fees and milestone payments, where the milestone payments are a function of time as opposed to achievement of specific achievement-based milestones, are deferred and amortized ratably over the estimated research period of the license.

NOTE 5 - SIGNIFICANT EVENTS:

In February 2004, the Company completed a private placement to certain accredited investors (the "Private Placement") for an aggregate amount of 1,536,922 shares of Common Stock and warrants to purchase 768,459 shares of Common Stock for the aggregate cash consideration of $3,642,500. The Private Placement offered units of one share of Common Stock and a five-year warrant to purchase 0.50 shares of Common Stock at a price equal to $2.37 per unit. The warrants were issued at an exercise price equal to $3.79 per share, with such warrants vesting on the date of grant. The estimated costs associated with the Private Placement totaled approximately $357,000. The Company did not engage a placement agent for the sale of such securities. On March 17, 2004, the Company filed a registration statement with the Securities and Exchange Commission on Form S-3 to register all of the shares and warrants acquired by the purchasers and finders in the Private Placement. The Securities and Exchange Commission declared the registration statement effective on May 14, 2004.

Due to the Company's obligation to file a registration statement to register for resale the shares underlying the warrants under the Securities Act of 1933, as amended, in accordance with EITF 00-19, "Accounting for Derivative Financial Instruments Indexed To, and Potentially Settled In a Company's Own Common Stock", the value of the warrants was recorded as a liability until the filing was made. The decrease in market value of the Common Stock from the closing of its financing to March 17, 2004, the date of filing the registration statement, resulted in non-cash other income to reflect the decrease in Black-Scholes value of the warrants between those two dates. As a result, the Company incurred a decrease in liability and other non-cash income of $185,627 as of March 17, 2004.

Sands Brothers and Stanford Group Company acted as co-managing finders of the Private Placement, and certain consultants to the Company provided financial advisory services in connection with the Private Placement. As consideration for their services to the Company, such finders were issued warrants to purchase an aggregate of 73,682 shares of Common Stock, on the same terms and conditions as

the warrants issued to the purchasers in the Private Placement.

On March 8, 2004, the Company entered into a Development and License Agreement with The Scotts Company (the "Agreement"), which will enable the two companies to incorporate the Company's proprietary Factor 5A and DHS technology into a variety of garden plants, bedding plants and turfgrasses. The Agreement provides for an upfront payment upon execution of the Agreement, milestone payments over the next three years and a one-time fee, as well as royalty payments, upon commercial introduction. Pursuant to the terms of the Agreement and in conjunction with SAB 101, the Company is amortizing the upfront and milestone payments over the term of the estimated development period of the Agreement. As of March 31, 2003, the amount of deferred revenue is $45,833.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and the related notes thereto included in the Quarterly Report on Form 10-QSB. The discussion and analysis may contain forward-looking statements that are based upon current expectations and entail various risks and uncertainties. Our actual results and the timing of events could differ materially from those anticipated in the forward-looking statements as a result of various factors, including those set forth under "Factors That May Affect Our Business, Future Operating Results and Financial Condition" and elsewhere in this report.

OVERVIEW

OUR BUSINESS

We are a development stage biotechnology company whose mission is to utilize its patent-pending genes (primarily DHS and Factor 5A) to: (i) enhance the quality and productivity of fruits, flowers, vegetables and agronomic crops through the control of cell death in plants (senescence); and (ii) develop novel approaches to treat (A) programmed cell death diseases in humans (apoptosis) (e.g., rheumatoid arthritis, macular degeneration, glaucoma, or heart disease), which are the result of premature cell death, and (B) cancer, a group of diseases in which apoptosis is blocked. Agricultural results to date include longer shelf life of perishable produce, increased seed and biomass yield and greater tolerance to environmental stress. Human health results to date include: determining the expression of our patent-pending genes in both ischemic and non-ischemic heart tissue; correlating such genes to certain key immune regulators known as cytokines that have been found to be involved in apoptosis; reducing cytokine induced apoptosis in human optic nerve cell lines and in epithelial cells of the intestine and reducing cytokine expression in human liver cell lines; and inducing apoptosis, while retarding cell proliferation, in human cancer cell lines derived from tumors.

Our preliminary research reveals that DHS and Factor 5A genes regulate apoptosis in human cells. We have shown that Factor 5A encodes for proteins with similar structures but that serve different functions (isoforms). In humans, there are two different isoforms of Factor 5A: the apoptosis isoform, which causes cell death and the growth isoform, which causes cell proliferation.

We believe that our technology downregulating the apoptosis isoforms of Factor 5A may have potential application as a means for controlling a broad range of diseases that are attributable to premature apoptosis. Apoptotic diseases include neurodegenerative diseases, retinal diseases, such as glaucoma

and macular degeneration, heart disease, stroke, Crohn's disease and rheumatoid arthritis, among others. We have commenced preclinical research on diseased heart tissue as well as cell-line studies to determine Factor 5A's ability to regulate key inflammatory cytokines, including interferon gamma, Interleukin-1, Interleukin-18 and TNF-a, which are implicated in numerous apoptotic diseases. In addition, we have initiated cell-line studies with optic nerve, intestine and liver cell-lines. These preclinical tests have shown that Factor 5A appears to control expression of the suite of proteins required for apoptosis. Such proteins include interleukins, caspases, TNF-alpha and interferon gamma. Expression of these cell death proteins is required for the execution of apoptosis.

Conversely, we have also established in preclinical studies that upregulation of the apoptosis Factor 5A gene is able to kill cancer cells through both the p53 and death cell receptor immune pathways. Tumors arise when cells that have been targeted by the immune system to undergo apoptosis are unable to do so because of an inability to activate the apoptotic pathways. Because the Factor 5A gene appears to function at the initiation point of the apoptotic pathways, we believe that our gene technology may have potential application as a means of combating a broad range of cancers and have initiated studies with in vivo cancer models to determine Factor 5A's ability to shrink human tumors grafted onto mice. In addition, we have also shown that suppression of the growth isoform of Factor 5A in cancer cells reduces proliferation of cancer cells. This will allow us to pursue research of cancer treatments which simultaneously cause cancer cells to die and not allow them to divide further.

HUMAN HEALTH APPLICATIONS

Most recently, a preclinical study has shown that Factor 5A induced cell death in lung cancer tumors of mice, while healthy tissue remained unaffected. We conducted this study using mice with the same genetic defect that causes lung cancer in humans. The mice spontaneously develop lung tumors due to this defect. Factor 5A was injected into the blood stream of the mice, and the lung tissue was subsequently analyzed for apoptosis. The data reveal that the lung tumor cells were specifically targeted to undergo cell death, while the surrounding healthy tissue was unaffected. There was no evidence of systemic toxicity in the mice as evidenced by no weight loss, mortality or any signs of abnormal apoptosis in any of the vital organs.

AGRICULTURAL APPLICATIONS

We are currently working with lettuce, melon, tomato, canola, Arabidopsis (a model plant that is similar to canola), banana, alfalfa, bedding plants and certain species of trees, and have obtained proof of concept for the lipase, DHS and Factor 5A genes in several of these plants. Also, we have completed a first round of field trials of lettuce and bananas with our respective partners and are currently in a second round of field trials in banana and in lettuce. The first round of field trials have shown that our technology effectively reduces browning in cut lettuce and extends the shelf life of banana fruit by 100%. Near-term research and development initiatives include (i) silencing or reducing the expression of DHS and Factor 5A genes in these plants and (ii) propagation and testing of plants with our silenced genes.

RESEARCH PROGRAM

We do not expect to generate significant revenues for approximately the next two to three years, during which time we will engage in significant research and development efforts. We expect to spend significant amounts on the

research and development of our technology. We also expect our research and development costs to increase as we continue to develop and ultimately commercialize our technology. However, the successful development and commercialization of our technology is highly uncertain. We cannot reasonably estimate or know the nature, timing and expenses of the efforts necessary to complete the development of our technology, or the period in which material net cash inflows may commence from the commercialization of our technology, including the uncertainty of:

- the scope, rate of progress and expense of our research activities;
- the interim results of our research;

- the expense of additional research that may be required after review of the interim results;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the expense and timing of regulatory approvals;
- the effect of competing technological and market developments; and
- the expense of filing, prosecuting, defending and enforcing any patent claims or other intellectual property rights.

PATENT AND PATENT APPLICATIONS

On March 25, 2003, we were granted Patent No. 6,538,182, entitled "DNA Encoding a Plant Deoxyhypusine Synthase, A Plant Eukaryotic Initiation Factor 5A, Transgenic Plants and A Method For Controlling Senescence and Programmed Cell Death in Plants", from the United States Patent and Trademark Office, or PTO. In addition to this patent, we have a wide variety of patent applications, including divisional applications and continuations-in-part, in process with the PTO and internationally. We intend to continue our strategy of enhancing these new patent applications through the addition of data as it is collected.

COMMERCIALIZATION STRATEGY

In November 2002, we entered into a letter of intent with the Academy of Agricultural Sciences in Tianjin, China in connection with a potential license for the use of our technology in numerous crops. The Academy is a governmental research center, and a commercial enterprise is needed to secure the significant financing necessary to effect the license from Senesco, as well as to market the seeds resulting from our potential collaboration. Since the signing of the letter of intent, we have had contact with the Academy, representatives of the city and central government and potential marketing companies regarding the terms and scope of the proposed agreement. It is not known if we will be successful in bringing all of the elements together to consummate the proposed license. However, we are continuing to pursue the opportunity. Additionally, we are in discussions with other potential licensees in China and Taiwan that would be direct licensees for certain crops without the need for government research institutions and that would also provide for the financing of the proposed license.

On March 8, 2004, we entered into a Development and License Agreement with The Scotts Company, pursuant to which we will work with The Scotts Company to

incorporate our proprietary Factor 5A and DHS technology into a variety of garden plants, bedding plants and turfgrasses. The agreement provides for an upfront payment upon execution of the agreement, milestone payments over the next three years and a one-time fee, as well as royalty payments, upon commercial introduction.

Consistent with our commercialization strategy, we intend to attract other companies interested in strategic partnerships or licensing our technology, which may result in additional license fees, revenues from contract research and other related revenues. Successful future operations will depend on our ability to transform our research and development activities into commercializable technology.

FACTORS THAT MAY AFFECT OUR BUSINESS, FUTURE OPERATING RESULTS AND FINANCIAL CONDITION

The more prominent risks and uncertainties inherent in our business are described below. However, additional risks and uncertainties may also impair our business operations. If any of the following risks actually occur, our business, financial condition or results of operations may suffer.

RISKS RELATED TO OUR BUSINESS

WE HAVE A LIMITED OPERATING HISTORY AND HAVE INCURRED SUBSTANTIAL LOSSES AND EXPECT FUTURE LOSSES.

We are a developmental stage biotechnology company with a limited operating history and limited assets and capital. We have incurred losses each year since inception and have an accumulated deficit of $12,112,338 at March 31, 2004. We have generated minimal revenues by licensing certain of our technology to companies willing to share in our development costs. However, our technology may not be ready for widespread commercialization for several years. We expect to continue to incur losses over the next two to three years because we anticipate that our expenditures on research and development, commercialization and administrative activities will significantly exceed our revenues during that period. We cannot predict when, if ever, we will become profitable.

WE DEPEND ON A SINGLE PRINCIPAL TECHNOLOGY AND, IF OUR TECHNOLOGY IS NOT COMMERCIALLY SUCCESSFUL, WE WILL HAVE NO ALTERNATIVE SOURCE OF REVENUE.

Our primary business is the development and commercial exploitation of technology to identify, isolate, characterize, and silence genes that control the aging and death of cells in plants and humans. Our future revenue and profitability critically depend upon our ability to successfully develop senescence and apoptosis gene technology and later market and license this technology at a profit. We have conducted experiments on certain crops with favorable results and have conducted certain preliminary cell-line experiments, which have provided us with data upon which we have designed additional research programs. However, we cannot give any assurance that our technology will be commercially successful or economically viable for all crops or human health applications.

In addition, we cannot assure you that adverse consequences might not result from the use of our technology such as the development of negative effects on plants or humans or reduced benefits in terms of crop yield or protection. If we fail to obtain market acceptance of our technology or to successfully commercialize our technology or develop a commercially viable

product, we will have no alternative source of revenue.

WE OUTSOURCE ALL OF OUR RESEARCH AND DEVELOPMENT ACTIVITIES AND, IF WE ARE UNSUCCESSFUL IN MAINTAINING OUR ALLIANCES WITH THESE THIRD PARTIES, OUR RESEARCH AND DEVELOPMENT EFFORTS MAY BE DELAYED OR CURTAILED.

We rely on third parties to perform all of our research and development activities. Our primary research and development efforts take place at the University of Waterloo in Ontario, Canada, where our technology was developed, at the University of Colorado, at two research hospitals in Canada, and with our commercial partners. At this time, we do not have the internal capabilities to perform our research and development activities. Accordingly, the failure of third-party research partners, such as the University of Waterloo, to perform under agreements entered

into with us, or our failure to renew important research agreements with these third parties, may delay or curtail our research and development efforts.

WE HAVE SIGNIFICANT FUTURE CAPITAL NEEDS AND MAY BE UNABLE TO RAISE CAPITAL WHEN NEEDED, WHICH COULD FORCE US TO DELAY OR REDUCE OUR RESEARCH AND DEVELOPMENT EFFORTS.

As of March 31, 2004, we had cash and highly-liquid investments valued at $4,556,939 and working capital of $4,089,668. Using our available reserves as of March 31, 2004, we believe that we can operate according to our current business plan for at least the next twelve months. To date, we have generated minimal revenues and anticipate that our operating costs will exceed any revenues generated over the next several years. Therefore, we may be required to raise additional capital in the future in order to operate according to our current business plan, and this funding may not be available on favorable terms, if at all. In addition, in connection with any funding, if we need to issue more equity securities than our certificate of incorporation currently authorizes, or more than 20% of the shares of our common stock outstanding, we may need stockholder approval. If stockholder approval is not obtained or if adequate funds are not available, we may be required to curtail operations significantly or to obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies, product candidates, products or potential markets. Investors may experience dilution in their investment from future offerings of our common stock. For example, if we raise additional capital by issuing equity securities, such an issuance would reduce the percentage ownership of existing stockholders. In addition, assuming the exercise of all options and warrants granted, as of March 31, 2004, we had 9,320,664 shares of common stock authorized but unissued, which may be issued from time to time by our board of directors without stockholder approval. Furthermore, we may need to issue securities that have rights, preferences and privileges senior to our common stock. Failure to obtain financing on acceptable terms would have a material adverse effect on our liquidity.

Since our inception, we have financed all of our operations through private equity financings. Our future capital requirements depend on numerous factors, including:

- the scope of our research and development;
- our ability to attract business partners willing to share in our development costs;
- our ability to successfully commercialize our technology;
- competing technological and market developments;
- our ability to enter into collaborative arrangements for the

development, regulatory approval and commercialization of other products; and
- the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights.

OUR BUSINESS DEPENDS UPON OUR PATENTS AND PROPRIETARY RIGHTS AND THE ENFORCEMENT OF THESE RIGHTS. OUR FAILURE TO OBTAIN AND MAINTAIN PATENT PROTECTION MAY INCREASE COMPETITION AND REDUCE DEMAND FOR OUR TECHNOLOGY.

As a result of the substantial length of time and expense associated with developing products and bringing them to the marketplace in the agricultural and biotechnology industries, obtaining and maintaining patent and trade secret protection for technologies, products and processes is of vital importance. Our success will depend in part on several factors, including, without limitation:

- our ability to obtain patent protection for our technologies and processes;
- our ability to preserve our trade secrets; and

- our ability to operate without infringing the proprietary rights of other parties both in the United States and in foreign countries.

We have been issued one patent by the U.S. Patent and Trademark Office, or PTO. We have also filed patent applications for our technology in the United States and in several foreign countries, which technology is vital to our primary business, as well as several Continuations in Part on these patent applications. Our success depends in part upon the grant of patents from our pending patent applications.

Although we believe that our technology is unique and will not violate or infringe upon the proprietary rights of any third party, we cannot assure you that these claims will not be made or if made, could be successfully defended against. If we do not obtain and maintain patent protection, we may face increased competition in the United States and internationally, which would have a material adverse effect on our business.

Since patent applications in the United States are maintained in secrecy until patents are issued, and since publication of discoveries in the scientific and patent literature tend to lag behind actual discoveries by several months, we cannot be certain that we were the first creator of the inventions covered by our pending patent applications or that we were the first to file patent applications for these inventions.

In addition, among other things, we cannot assure you that:

- our patent applications will result in the issuance of patents;
- any patents issued or licensed to us will be free from challenge and that if challenged, would be held to be valid;
- any patents issued or licensed to us will provide commercially significant protection for our technology, products and processes;
- other companies will not independently develop substantially equivalent proprietary information which is not covered by our patent rights;
- other companies will not obtain access to our know-how;
- other companies will not be granted patents that may prevent the commercialization of our technology; or
- we will not require licensing and the payment of significant fees or royalties to third parties for the use of their intellectual property in order to enable us to conduct our business.

OUR COMPETITORS MAY ALLEGE THAT WE ARE INFRINGING UPON THEIR INTELLECTUAL PROPERTY RIGHTS, FORCING US TO INCUR SUBSTANTIAL COSTS AND EXPENSES IN RESULTING LITIGATION, THE OUTCOME OF WHICH WOULD BE UNCERTAIN.

Patent law is still evolving relative to the scope and enforceability of claims in the fields in which we operate. We are like most biotechnology companies in that our patent protection is highly uncertain and involves complex legal and technical questions for which legal principles are not yet firmly established. In addition, if issued, our patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products, or provide us with any competitive advantage.

The PTO and the courts have not established a consistent policy regarding the breadth of claims allowed in biotechnology patents. The allowance of broader claims may increase the incidence and cost of patent interference proceedings and the risk of infringement litigation. On the other hand, the allowance of narrower claims may limit the value of our proprietary rights.

The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems and costs in protecting their proprietary rights in these foreign countries.

We could become involved in infringement actions to enforce and/or protect our patents. Regardless of the outcome, patent litigation is expensive and time consuming and would distract our management from other activities. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively that we could because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of any patent litigation could limit our ability to continue our operations.

IF OUR TECHNOLOGY INFRINGES THE INTELLECTUAL PROPERTY OF OUR COMPETITORS OR OTHER THIRD PARTIES, WE MAY BE REQUIRED TO PAY LICENSE FEES OR DAMAGES.

If any relevant claims of third-party patents that are adverse to us are upheld as valid and enforceable, we could be prevented from commercializing our technology or could be required to obtain licenses from the owners of such patents. We cannot assure you that such licenses would be available or, if available, would be on acceptable terms. Some licenses may be non-exclusive and, therefore, our competitors may have access to the same technology licensed to us. In addition, if any parties successfully claim that the creation or use of our technology infringes upon their intellectual property rights, we may be forced to pay damages, including treble damages.

OUR SECURITY MEASURES MAY NOT ADEQUATELY PROTECT OUR UNPATENTED TECHNOLOGY AND, IF WE ARE UNABLE TO PROTECT THE CONFIDENTIALITY OF OUR PROPRIETARY INFORMATION AND KNOW-HOW, THE VALUE OF OUR TECHNOLOGY MAY BE ADVERSELY AFFECTED.

Our success depends upon know-how, unpatentable trade secrets, and the skills, knowledge and experience of our scientific and technical personnel. As a result, we require all employees to agree to a confidentiality provision that prohibits the disclosure of confidential information to anyone outside of our company, during the term of employment and thereafter. We also require all employees to disclose and assign to us the rights to their ideas, developments, discoveries and inventions. We also attempt to enter into similar agreements with our consultants, advisors and research collaborators. We cannot assure you that adequate protection for our trade secrets, know-how or other proprietary

information against unauthorized use or disclosure will be available.

We occasionally provide information to research collaborators in academic institutions and request the collaborators to conduct certain tests. We cannot assure you that the academic institutions will not assert intellectual property rights in the results of the tests conducted by the research collaborators, or that the academic institutions will grant licenses under such intellectual property rights to us on acceptable terms, if at all. If the assertion of intellectual property rights by an academic institution is substantiated, and the academic institution does not grant intellectual property rights to us, these events could limit our ability to commercialize our technology.

AS WE EVOLVE FROM A COMPANY PRIMARILY INVOLVED IN THE RESEARCH AND DEVELOPMENT OF OUR TECHNOLOGY INTO ONE THAT IS ALSO INVOLVED IN THE COMMERCIALIZATION OF OUR TECHNOLOGY, WE MAY HAVE DIFFICULTY MANAGING OUR GROWTH AND EXPANDING OUR OPERATIONS.

As our business grows, we may need to add employees and enhance our management, systems and procedures. We will need to successfully integrate our internal operations with the

operations of our marketing partners, manufacturers, distributors and suppliers to produce and market commercially viable products. We may also need to manage additional relationships with various collaborative partners, suppliers and other organizations. Although we do not presently intend to conduct research and development activities in-house, we may undertake those activities in the future. Expanding our business will place a significant burden on our management and operations. We may not be able to implement improvements to our management information and control systems in an efficient and timely manner and we may discover deficiencies in our existing systems and controls. Our failure to effectively respond to changes may make it difficult for us to manage our growth and expand our operations.

WE HAVE NO MARKETING OR SALES HISTORY AND DEPEND ON THIRD-PARTY MARKETING PARTNERS. ANY FAILURE OF THESE PARTIES TO PERFORM WOULD DELAY OR LIMIT OUR COMMERCIALIZATION EFFORTS.

We have no history of marketing, distributing or selling biotechnology products and we are relying on our ability to successfully establish marketing partners or other arrangements with third parties to market, distribute and sell a commercially viable product both here and abroad. Our business plan also envisions creating strategic alliances to access needed commercialization and marketing expertise. We may not be able to attract qualified sub-licensees, distributors or marketing partners, and even if qualified, these marketing partners may not be able to successfully market agricultural products or human health applications developed with our technology. If we fail to successfully establish distribution channels, or if our marketing partners fail to provide adequate levels of sales, our commercialization efforts will be delayed or limited and we will not be able to generate revenue.

WE WILL DEPEND ON JOINT VENTURES AND STRATEGIC ALLIANCES TO DEVELOP AND MARKET OUR TECHNOLOGY AND, IF THESE ARRANGEMENTS ARE NOT SUCCESSFUL, OUR TECHNOLOGY MAY NOT BE DEVELOPED AND THE EXPENSES TO COMMERCIALIZE OUR TECHNOLOGY WILL INCREASE.

In its current state of development, our technology is not ready to be marketed to consumers. We intend to follow a multi-faceted commercialization strategy that involves the licensing of our technology to business partners for the purpose of further technological development, marketing and distribution. We

are seeking business partners who will share the burden of our development costs while our technology is still being developed, and who will pay us royalties when they market and distribute products incorporating our technology upon commercialization. The establishment of joint ventures and strategic alliances may create future competitors, especially in certain regions abroad where we do not pursue patent protection. If we fail to establish beneficial business partners and strategic alliances, our growth will suffer and the continued development of our technology may be harmed.

COMPETITION IN THE AGRICULTURAL AND HUMAN HEALTH BIOTECHNOLOGY INDUSTRIES IS INTENSE AND TECHNOLOGY IS CHANGING RAPIDLY. IF OUR COMPETITORS MARKET THEIR TECHNOLOGY FASTER THAN WE DO, WE MAY NOT BE ABLE TO GENERATE REVENUES FROM THE COMMERCIALIZATION OF OUR TECHNOLOGY.

Many agricultural and human health biotechnology companies are engaged in research and development activities relating to senescence and apoptosis. The market for plant protection and yield enhancement products is intensely competitive, rapidly changing and undergoing consolidation. We may be unable to compete successfully against our current and future competitors, which may result in price reductions, reduced margins and the inability to achieve market acceptance for products containing our technology. Our competitors in the field of plant senescence gene technology are companies that develop and produce transgenic plants and include major international agricultural companies, specialized biotechnology companies,

research and academic institutions and, potentially, our joint venture and strategic alliance partners. These companies include: Paradigm Genetics; Aventis Crop Science; Mendel Biotechnology; Renessen LLC; Exelixis Plant Sciences, Inc.; PlantGenix, Inc.; and Eden Bioscience, among others. Some of the companies involved in apoptosis research include: Cell Pathways, Inc.; Trevigen, Inc.; Idun Pharmaceuticals; Novartis; Introgen Therapeutics, Inc.; Genta, Inc.; and Oncogene, Inc. Many of these competitors have substantially greater financial, marketing, sales, distribution and technical resources than us and have more experience in research and development, clinical trials, regulatory matters, manufacturing and marketing. We anticipate increased competition in the future as new companies enter the market and new technologies become available. Our technology may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors, which will prevent or limit our ability to generate revenues from the commercialization of our technology.

OUR BUSINESS IS SUBJECT TO VARIOUS GOVERNMENT REGULATIONS AND, IF WE ARE UNABLE TO OBTAIN REGULATORY APPROVAL, WE MAY NOT BE ABLE TO CONTINUE OUR OPERATIONS.

At present, the U.S. federal government regulation of biotechnology is divided among three agencies:

- the USDA regulates the import, field testing and interstate movement of specific types of genetic engineering that may be used in the creation of transgenic plants;
- the EPA regulates activity related to the invention of plant pesticides and herbicides, which may include certain kinds of transgenic plants; and
- the FDA regulates foods derived from new plant varieties.

The FDA requires that transgenic plants meet the same standards for safety that are required for all other plants and foods in general. Except in the case of additives that significantly alter a food's structure, the FDA does not

require any additional standards or specific approval for genetically engineered foods, but expects transgenic plant developers to consult the FDA before introducing a new food into the marketplace.

Use of our technology, if developed for human health applications, will also be subject to FDA regulation. The FDA must approve any drug or biologic product before it can be marketed in the United States. In addition, prior to being sold outside of the U.S., any products resulting from the application of our human health technology must be approved by the regulatory agencies of foreign governments. Prior to filing a new drug application or biologics license application with the FDA, we would have to perform extensive clinical trials, and prior to beginning any clinical trial, we need to perform extensive preclinical testing which could take several years and may require substantial expenditures.

We believe that our current activities, which to date have been confined to research and development efforts, do not require licensing or approval by any governmental regulatory agency. However, federal, state and foreign regulations relating to crop protection products and human health applications developed through biotechnology are subject to public concerns and political circumstances, and, as a result, regulations have changed and may change substantially in the future. Accordingly, we may become subject to governmental regulations or approvals or become subject to licensing requirements in connection with our research and development efforts. We may also be required to obtain such licensing or approval from the governmental regulatory agencies described above, or from state agencies, prior to the commercialization of our genetically transformed plants and human health technology. In addition, our marketing partners

who utilize our technology or sell products grown with our technology may be subject to government regulations. If unfavorable governmental regulations are imposed on our technology or if we fail to obtain licenses or approvals in a timely manner, we may not be able to continue our operations.

CLINICAL TRIALS ON OUR HUMAN HEALTH APPLICATIONS MAY BE UNSUCCESSFUL IN DEMONSTRATING EFFICACY AND SAFETY, WHICH COULD DELAY OR PREVENT REGULATORY APPROVAL.

Clinical trials may reveal that our human health technology is ineffective or harmful, which would significantly limit the possibility of obtaining regulatory approval for any drug or biologic product manufactured with our technology. The FDA requires submission of extensive preclinical, clinical and manufacturing data to assess the efficacy and safety of potential products. Furthermore, the success of preliminary studies does not ensure commercial success, and later-stage clinical trials may fail to confirm the results of the preliminary studies.

EVEN IF WE RECEIVE REGULATORY APPROVAL, CONSUMERS MAY NOT ACCEPT OUR TECHNOLOGY, WHICH WILL PREVENT US FROM BEING PROFITABLE SINCE WE HAVE NO OTHER SOURCE OF REVENUE.

We cannot guarantee that consumers will accept products containing our technology. Recently, there has been consumer concern and consumer advocate activism with respect to genetically engineered consumer products. The adverse consequences from heightened consumer concern in this regard could affect the markets for products developed with our technology and could also result in increased government regulation in response to that concern. If the public or potential customers perceive our technology to be genetic modification or

genetic engineering, agricultural products grown with our technology may not gain market acceptance.

WE DEPEND ON OUR KEY PERSONNEL AND, IF WE ARE NOT ABLE TO ATTRACT AND RETAIN QUALIFIED SCIENTIFIC AND BUSINESS PERSONNEL, WE MAY NOT BE ABLE TO GROW OUR BUSINESS OR DEVELOP AND COMMERCIALIZE OUR TECHNOLOGY.

We are highly dependent on our scientific advisors, consultants and third-party research partners. Dr. Thompson is the inventor of our technology and the driving force behind our current research. The loss of Dr. Thompson would severely hinder our technological development. Our success will also depend in part on the continued service of our key employees and our ability to identify, hire and retain additional qualified personnel in an intensely competitive market. Although we have employment agreements with several of our key employees and a research agreement with Dr. Thompson, these agreements may be terminated upon no or short notice. We do not maintain key person life insurance on any member of management. The failure to attract and retain key personnel could limit our growth and hinder our research and development efforts.

CERTAIN PROVISIONS OF OUR CHARTER, BY-LAWS AND DELAWARE LAW COULD MAKE A TAKEOVER DIFFICULT.

Certain provisions of our certificate of incorporation and by-laws could make it more difficult for a third party to acquire control of us, even if the change in control would be beneficial to stockholders. Our certificate of incorporation authorizes our board of directors to issue, without stockholder approval, except as may be required by the rules of the American Stock Exchange, 5,000,000 shares of preferred stock with voting, conversion and other rights and preferences that could adversely affect the voting power or other rights of the holders of our common stock. Similarly, our by-laws do not restrict our board of directors from issuing preferred stock without stockholder approval.

In addition, we are subject to the Business Combination Act of the Delaware General Corporation Law which, subject to certain exceptions, restricts certain transactions and business combinations between a corporation and a stockholder owning 15% or more of the corporation's outstanding voting stock for a period of three years from the date such stockholder becomes a 15% owner. These provisions may have the effect of delaying or preventing a change of control of us without action by our stockholders and, therefore, could adversely affect the value of our common stock.

Furthermore, in the event of our merger or consolidation with or into another corporation, or the sale of all or substantially all of our assets in which the successor corporation does not assume outstanding options or issue equivalent options, our board of directors is required to provide accelerated vesting of outstanding options.

INCREASING POLITICAL AND SOCIAL TURMOIL, SUCH AS TERRORIST AND MILITARY ACTIONS, INCREASE THE DIFFICULTY FOR US AND OUR STRATEGIC PARTNERS TO FORECAST ACCURATELY AND PLAN FUTURE BUSINESS ACTIVITIES.

Recent political and social turmoil, including the terrorist attacks of September 11, 2001, the conflict in Iraq and the current crisis in the Middle East, can be expected to put further pressure on economic conditions in the United States and worldwide. These political, social and economic conditions may make it difficult for us to plan future business activities. Specifically, if the current crisis in Israel continues to escalate, our joint venture with Rahan

Meristem Ltd. could be adversely affected.

RISKS RELATED TO OUR COMMON STOCK

OUR MANAGEMENT AND OTHER AFFILIATES HAVE SIGNIFICANT CONTROL OF OUR COMMON STOCK AND COULD SIGNIFICANTLY INFLUENCE OUR ACTIONS IN A MANNER THAT CONFLICTS WITH OUR INTERESTS AND THE INTERESTS OF OTHER STOCKHOLDERS.

As of March 31, 2004, our executive officers, directors and affiliated entities together beneficially own approximately 34.3% of the outstanding shares of our common stock, assuming the exercise of options and warrants which are currently exercisable, held by these stockholders. As a result, these stockholders, acting together, will be able to exercise significant influence over matters requiring approval by our stockholders, including the election of directors, and may not always act in the best interests of other stockholders. Such a concentration of ownership may have the effect of delaying or preventing a change in control of us, including transactions in which our stockholders might otherwise receive a premium for their shares over then current market prices.

OUR STOCKHOLDERS MAY EXPERIENCE SUBSTANTIAL DILUTION AS A RESULT OF THE EXERCISE OF OUTSTANDING OPTIONS AND WARRANTS TO PURCHASE OUR COMMON STOCK.

As of March 31, 2004, we have granted options outside of our stock option plan to purchase 10,000 shares of our common stock and outstanding warrants to purchase 5,127,586 shares of our common stock. In addition, as of March 31, 2004, we have reserved 3,000,000 shares of our common stock for issuance upon the exercise of options granted pursuant to our stock option plan, 1,946,000 of which have been granted and 1,054,000 of which may be granted in the future. The exercise of these options and warrants will result in dilution to our existing stockholders and could have a material adverse effect on our stock price.

A SIGNIFICANT PORTION OF OUR TOTAL OUTSTANDING SHARES OF COMMON STOCK MAY BE SOLD IN THE MARKET IN THE NEAR FUTURE, WHICH COULD CAUSE THE MARKET PRICE OF OUR COMMON STOCK TO DROP SIGNIFICANTLY.

As of March 31, 2004, we had 13,601,850 shares of our common stock issued and outstanding, of which approximately 8,000,000 shares are registered pursuant to a registration statement on Form S-3, which was declared effective on June 28, 2002, and the remainder of which are in the public float. In addition, we have registered 3,000,000 shares of our common stock underlying options granted or to be granted under our stock option plan. Pursuant to the terms of our equity offering that was consummated on February 12, 2004, on March 18, 2004, we filed a registration statement on Form S-3 to register 1,536,922 shares of common stock and warrants to purchase 877,141 shares of common stock. Consequently, sales of substantial amounts of our common stock in the public market, or the perception that such sales could occur, may have a material adverse effect on our stock price.

OUR COMMON STOCK HAS A LIMITED TRADING MARKET, WHICH COULD LIMIT YOUR ABILITY TO RESELL YOUR SHARES OF COMMON STOCK AT OR ABOVE YOUR PURCHASE PRICE.

Our common stock is quoted on the American Stock Exchange and currently has a limited trading market. We cannot assure you that an active trading market will develop or, if developed, will be maintained. As a result, our stockholders may find it difficult to dispose of shares of our common stock and, as a result,

may suffer a loss of all or a substantial portion of their investment.

THE MARKET PRICE OF OUR COMMON STOCK MAY FLUCTUATE AFTER THIS OFFERING AND MAY DROP BELOW THE PRICE YOU PAID.

We cannot assure you that you will be able to resell the shares of our common stock at or above your purchase price. The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control. These factors include:

- quarterly variations in operating results;
- the progress or perceived progress of our research and development efforts;
- changes in accounting treatments or principles;
- announcements by us or our competitors of new technology, product and service offerings, significant contracts, acquisitions or strategic relationships;
- additions or departures of key personnel;
- future offerings or resales of our common stock or other securities;
- stock market price and volume fluctuations of publicly-traded companies in general and development companies in particular; and
- general political, economic and market conditions.

BECAUSE WE DO NOT INTEND TO PAY, AND HAVE NOT PAID, ANY CASH DIVIDENDS ON OUR SHARES OF COMMON STOCK, OUR STOCKHOLDERS WILL NOT BE ABLE TO RECEIVE A RETURN ON THEIR SHARES UNLESS THE VALUE OF OUR COMMON STOCK APPRECIATES AND THEY SELL THEIR SHARES.

We have never paid or declared any cash dividends on our common stock and we intend to retain any future earnings to finance the development and expansion of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Therefore, our stockholders will not be able to receive a return on their investment unless the value of our common stock appreciates and they sell their shares.

IF OUR COMMON STOCK IS DELISTED FROM THE AMERICAN STOCK EXCHANGE, IT MAY BE SUBJECT TO THE "PENNY STOCK" REGULATIONS WHICH MAY AFFECT THE ABILITY OF OUR STOCKHOLDERS TO SELL THEIR SHARES.

In general, regulations of the SEC define a "penny stock" to be an equity security that is not listed on a national securities exchange or the NASDAQ Stock Market and that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. If the American Stock Exchange delists our common stock, it could be deemed a penny stock, which imposes additional sales practice requirements on broker-dealers that sell such securities to persons other than certain qualified investors. For transactions involving a penny stock, unless exempt, a broker-dealer must make a special suitability determination for the purchaser and receive the purchaser's written consent to the transaction prior to the sale. In addition, the rules on penny stocks require delivery, prior to and after any penny stock transaction, of disclosures required by the SEC.

If our common stock were subject to the rules on penny stocks, the market liquidity for our common stock could be severely and adversely affected. Accordingly, the ability of holders of our common stock to sell their shares in the secondary market may also be adversely affected.

LIQUIDITY AND CAPITAL RESOURCES

OVERVIEW

As of March 31, 2004, our cash balance and investments totaled $4,556,939, and we had working capital of $4,089,668. As of March 31, 2004, we had a federal tax loss carry-forward of approximately $9,000,000 and a state tax loss carry-forward of approximately $3,771,000 to offset future taxable income. There can be no assurance, however, that we will be able to take advantage of any or all of such tax loss carry-forwards, if at all, in future fiscal years.

CONTRACTUAL OBLIGATIONS

The following table lists our cash contractual obligations as of March 31, 2004:

Contractual Obligations	Payments Due by Period			
	Total	Less than 1 year	1 - 3 years	4 - 5
Research and Development Agreements (1)	$ 271,784	$ 271,784	$ --	$
Facility, Rent and Operating Leases (2)	$ 70,950	$ 34,056	$ 36,894	$
Employment, Consulting and Scientific Advisory Board Agreements (3)	$ 704,979	$ 410,604	$ 279,375	$ 15,
Total Contractual Cash Obligations	$ 1,047,713	$ 716,444	$ 316,269	$ 15,

(1) Certain of our research and development agreements disclosed herein provide that payment is to be made in Canadian dollars and, therefore, the contractual obligations are subject to fluctuations in the exchange rate.

(2) The lease for our office space in New Brunswick, New Jersey is subject to certain escalations for our proportionate share of increases in the building's operating costs.

(3) Certain of our employment and consulting agreements provide for automatic renewal (which is not reflected in the table), unless terminated earlier by the parties to the respective agreements.

We expect our capital requirements to increase significantly over the next several years as we commence new research and development efforts, increase our business and administrative infrastructure and embark on developing in-house business capabilities and facilities. Our future liquidity and capital funding requirements will depend on numerous factors, including, but not limited to, the levels and costs of our research and development initiatives and the cost and

timing of the expansion of our business development and administrative staff.

CAPITAL RESOURCES

Since inception, we have generated revenues of $214,167 in connection with the initial fees received under our license and development agreements. We have not been profitable since inception, we will continue to incur additional operating losses in the future, and we will require additional financing to continue the development and subsequent commercialization of our technology. While we do not expect to generate significant revenues from the licensing of our technology in the near future, we may enter into additional licensing or other agreements with marketing and distribution partners that may result in additional license fees. We may also receive revenues from contract research, or other related revenue.

In February 2004, we completed a private placement to certain accredited investors for an aggregate amount of 1,536,922 shares of common stock and warrants to purchase 768,459 shares of common stock for the aggregate cash consideration of $3,642,500. The private placement offered units of one share of common stock and a five-year warrant to purchase 0.50 shares of common stock at a price equal to $2.37 per unit. The warrant was offered with an exercise price equal to $3.79 per share, with such warrant vesting on the date of grant. The estimated costs associated with the private placement totaled approximately $357,000.

We anticipate that, based upon our current cash and investments, we will be able to fund operations for at least the next twelve months. Over the next twelve months, we plan to fund our research and development and commercialization activities by (i) utilizing our current cash balance and investments, (ii) achieving some of the milestones set forth in our current licensing agreements, and (iii) through the execution of additional licensing agreements for our technology.

CHANGES TO CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our critical accounting policies and estimates are set forth in our Annual Report on Form 10-KSB for the fiscal year ended June 30, 2003. There have been the following changes to such critical accounting policies and estimates.

REVENUE RECOGNITION

We record revenue under technology license and development agreements related to the following. Actual license fees received may vary from the recorded estimated revenues.

- Nonrefundable upfront license fees that are received in exchange for the transfer of our technology to licensees, for which no further obligations to the licensee exist with respect to the basic technology transferred, are recognized as revenue on the earlier of when payments are received or collection is assured.

- Nonrefundable upfront license fees that are received in connection with agreements that include time-based payments are, together with the time-based payments, deferred and amortized ratably over the estimated research period of the license.

- Milestone payments, which are contingent upon the achievement of certain research goals, are recognized as revenue when the milestones,

as defined in the particular agreement, are achieved.

The effect of any change in revenues from technology license and development agreements would be reflected in revenues in the period such determination was made. Historically, no such adjustments have been made.

ESTIMATES OF EXPENSES

Our research and development agreements with third parties provide for an estimate of our expenses and costs, which are variable and are based on the actual services performed by the third party. We estimate the aggregate amount of the expenses based upon the projected amounts that are set forth in the agreements, and accrue the expenses for which we have not yet been invoiced. In estimating the expenses, we consider, among other things, the following factors:

- the existence of any prior relationship between us and the third party provider;
- the past results of prior research and development services performed by the third party provider; and
- the scope and timing of the research and development services set forth in the agreement with the third party provider.

After the research services are performed and we are invoiced, we make any adjustments that are necessary to accurately report research and development expense for the period.

RESULTS OF OPERATIONS

Three Months Ended March 31, 2004 and Three Months Ended March 31, 2003

The net loss for the three-month periods ended March 31, 2004 and March 31, 2003 was $417,011 and $515,683, respectively, a decrease of $98,672, or 19.1%. This decrease was primarily the result of an increase in other noncash income, which was partially offset by an increase in other research and development expenses.

We had revenue of $4,167 during the three-month period ended March 31, 2004 from the amortized portion of the initial fee on a development and license agreement. We had no revenue during the three-month period ended March 31, 2003.

Operating expenses consist of general and administrative expenses, research and development expenses and stock-based compensation. Operating expenses for the three-month periods ended March 31, 2004 and March 31, 2003 were $614,684 and $532,090, respectively, an increase of $82,594, or 15.5%. This increase in operating expenses was primarily the result of an increase in stock-based compensation and research and development expenses, which was partially offset by a decrease in other general and administrative expenses. We expect operating expenses to increase over the next twelve months as we continue to expand our research and development activities.

General and administrative expenses consist primarily of stock-based compensation and other general and administrative costs, which include payroll and benefits, professional services, investor relations, office rent and corporate insurance. General and administrative expenses for the three-month periods ended March 31, 2004 and March 31, 2003 were $294,125 and $294,403,

respectively, a decrease of $278, or 0.1%.

	Three months ended March 31, 2004	2003
Stock-based compensation	$ 50,700	$ --
Other general and administrative expenses	243,425	294,403
Total general and administrative expenses	$ 294,125	$ 294,403

The increase in stock-based compensation was primarily the result of previously issued options and warrants that became exercisable during the three-month period ended March 31, 2004. The decrease in other general and administrative expenses was primarily the result of a decrease in investor relations expenses and professional fees, which were partially offset by an increase in payroll and benefits. The decrease in investor relations expenses during the three-month period ended March 31, 2004 was primarily the result of decreases in financial consulting costs and listing fees for the American Stock Exchange. Professional fees decreased during the three-month period ended March 31, 2004, primarily as a result of fees incurred during the three-month period ended March 31, 2003 in connection with filing a registration statement for our incentive stock option plan, which were not incurred during the three month period ended March 31, 2004, as well as decreases in legal fees related to general corporate and securities matters. Payroll and benefits increased during the three-month period ended March 31, 2004, primarily as a result of an adjustment during the three month period ended March 31, 2003 to reduce the amount of accrued wages due to a terminated employee as well as salary increases. We expect general and administrative expenses to modestly increase over the next twelve months as several of the above mentioned costs will probably increase primarily due to inflation.

Research and development expenses are incurred in connection with our agricultural and human health research programs and consist primarily of fees associated with a research and development agreement with the University of Waterloo, costs associated with the research being performed at the University of Colorado and other institutions, amortization of the initial fee in connection with a research agreement with Anawah, Inc., consulting fees to the Scientific Advisory Board and other consultants and stock-based compensation. Research and development expenses for the three-month periods ended March 31, 2004 and March 31, 2003 were $320,559 and $237,687, respectively, an increase of $82,872, or 34.9%. This increase was primarily the result of an increase in stock-based compensation, which was due to previously issued options and warrants becoming exercisable during the three-month period ended March 31, 2004, as well as an increase in the research and development costs incurred in connection with the expanded

research undertaken by the University of Waterloo and other institutions as well as the expansion of our mammalian cell research programs.

	Three months ended March 31, 2004	2003
Stock-based compensation	$ 42,257	$ --

Other research and development expenses	278,302	237,687
Total research and development expenses	$ 320,559	$ 237,687

The breakdown of our research and development expenses between our agricultural and human research programs are as follows:

	Three months ended March 31, 2004	2003
Agricultural research programs	$ 199,354	$ 109,088
Human health research programs	121,205	128,599
Total research and development expenses	$ 320,559	$ 237,687

Nine Months Ended March 31, 2004 and Nine Months Ended March 31, 2003

The net loss for the nine-month periods ended March 31, 2004 and March 31, 2003 was $2,615,679 and $1,592,725, respectively, an increase of $1,022,954 or 64.2%. This increase was primarily the result of an increase in stock-based compensation and research and development expenses, which was partially offset by a decrease in other general and administrative expenses and an increase in other noncash income.

We had revenue of $4,167 during the nine-month period ended March 31, 2004 from the amortized portion of the initial fee on a development and license agreement. We had no revenue during the nine-month period ended March 31, 2003.

Operating expenses for the nine-month periods ended March 31, 2004 and March 31, 2003 were $2,924,748 and $1,791,367, respectively, an increase of $1,133,381, or 63.3%. This increase in operating expenses was primarily the result of an increase in stock-based compensation and research and development expenses, which was partially offset by a decrease in other general and administrative expenses. We expect operating expenses to decrease over the next twelve months as we anticipate that stock-based compensation will significantly decrease. We expect that the decrease in stock-based compensation will be partially offset by an increase in research and development expenses as we continue to expand our research and development activities.

General and administrative expenses for the nine-month periods ended March 31, 2004 and March 31, 2003 were $2,031,044 and $1,178,714, respectively, an increase of $852,330, or 72.3%.

	Nine months ended March 31, 2004	2003
Stock-based compensation	$1,083,920	$ 122,297
Other general and administrative expenses	947,124	1,056,417
Total general and administrative expenses	$2,031,044	$ 1,178,714

The increase in stock-based compensation was primarily the result of a warrant being granted, in connection with a financial advisory agreement, to a financial advisor during the nine-month period ended March 31, 2004. The decrease in other general and administrative expenses was primarily from a decrease in investor relations expenses and professional fees, which was partially offset by an increase in payroll and benefits and corporate insurance. Investor relations expenses were higher during the nine-month period ended March 31, 2003, primarily as a result of the listing fees in connection with listing on the American Stock Exchange additional shares of our common stock underlying stock options. Professional fees decreased during the nine-month period ended March 31, 2004, primarily as a result of a decrease in legal fees. During the nine-month period ended March 31, 2003, we had incurred additional professional fees related to our filing of registration statements with the Securities and Exchange Commission on Forms S-3 and S-8, as well as a decrease in professional fees associated with our Form 10-KSB, Forms 10-QSB and proxy statement. Payroll and benefits increased during the nine-month period ended March 31, 2004, primarily as a result of salary increases. Insurance costs increased during the nine-month period ended March 31, 2004 primarily because we increased the policy limit on our directors' and officers' liability insurance policy. We expect general and administrative expenses to decrease over the next twelve months as we anticipate that stock-based compensation will significantly decrease. We expect that the decrease in stock-based compensation will be partially offset by a modest increase in other general and administrative expenses primarily due to inflation.

Research and development expenses for the nine-month periods ended March 31, 2004 and March 31, 2003 were $893,704 and $612,654, respectively, an increase of $281,050, or 45.9%. This increase was primarily the result of an increase in stock-based compensation, which was due to options and warrants being issued or becoming exercisable during the nine-month period ended March 31, 2004, as well as an increase in the research and development costs incurred in connection with the expanded research undertaken by the University of Waterloo and other institutions as well as the expansion of our mammalian cell research programs.

	Nine months ended March 31,	
	2004	2003
Stock-based compensation	$ 93,925	$ 14,880
Other research and development expenses	799,779	597,774
Total research and development expenses	$ 893,704	$ 612,654

The breakdown of our research and development expenses between our agricultural and human research programs are as follows:

	Nine months ended March 31,	
	2004	2003
Agricultural research programs	$ 471,358	$ 286,130
Human health research programs	422,346	326,524
Total research and development expenses	$ 893,704	$ 612,654

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Period From Inception on July 1, 1998 through March 31, 2004

From inception of operations on July 1, 1998 through March 31, 2004, we had revenues of $214,167, which consisted of the initial license fees in connection with our various development and license agreements.

We have incurred losses each year since inception and have an accumulated deficit of $12,112,338 at March 31, 2004. We expect to continue to incur losses as a result of expenditures on research, product development and administrative activities.

ITEM 3. CONTROLS AND PROCEDURES.

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of March 31, 2004. Based on this evaluation, our chief executive officer and chief financial officer concluded that as of March 31, 2004, our disclosure controls and procedures were (1) designed to ensure that material information relating to us, including our consolidated subsidiaries, is made known to our chief executive officer and chief financial officer by others within those entities, particularly during the period in which this report was being prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

No change in our internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended March 31, 2004 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION.

ITEM 2. CHANGES IN SECURITIES AND SMALL BUSINESS ISSUER PURCHASES OF EQUITY SECURITIES.

In February 2004, we completed a private placement to certain accredited investors for an aggregate amount of 1,536,922 shares of common stock and warrants to purchase 768,459 shares of common stock for the aggregate cash consideration of $3,642,500. The private placement offered units of one share of common stock and a five-year warrant to purchase 0.50 shares of common stock at a price equal to $2.37 per unit. The warrants were issued at an exercise price equal to $3.79 per share, with such warrants vesting on the date of grant. The estimated costs associated with the private placement totaled approximately $357,000. We did not engage a placement agent for the sale of such securities.

In addition, we entered into a registration rights agreement with these purchasers, which required us to file a registration statement on Form S-3 by March 18, 2004, to register the securities acquired by the purchasers in the private placement. On March 17, 2004, we filed a registration statement with the Securities and Exchange Commission on Form S-3 to register all of the shares and warrants acquired by the purchasers and finders in the private placement. The Securities and Exchange Commission declared the registration statement effective on May 14, 2004.

Sands Brothers and Stanford Group Company acted as co-managing finders of such private placement and certain consultants provided financial advisory services in connection with such private placement. As consideration for their services, we issued warrants to such finders to purchase an aggregate of 73,682 shares of our common stock, on the same terms and conditions as the warrants issued to the purchasers in the private placement.

We did not employ an underwriter in connection with the issuance of the securities described above. We believe that the issuance of the foregoing securities was exempt from registration under Section 4(2) of the Securities Act of 1933, as amended, as transactions not involving a public offering. Each of the recipients was an accredited investor, acquired the securities for investment purposes only and not with a view to distribution and had adequate information about our company.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits.

4.1	Form of Warrant issued to certain accredited investors (with attached schedule of parties and terms thereto). Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed on February 3, 2004.
10.1*+	Development and License Agreement dated as of March 8, 2004, by and between Senesco Technologies, Inc. and The Scotts Company.
10.2*	Amendment dated March 11, 2004, to the Research Agreement by and among Senesco, Inc., Dr. John E. Thompson and the University of Waterloo effective September 1, 1998.

10.3	Form of Securities Purchase Agreement by and between the Company and certain accredited investors (with attached schedule of parties and terms thereto). Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on February 3, 2004.
10.4	Form of Registration Rights Agreement by and between the Company and certain accredited investors (with attached schedule of parties and terms thereto). Incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K, filed on February 3, 2004.
10.5	Amendment No. 1 to the Securities Purchase Agreement by and between the Company and Crestview Capital Master, L.L.C. Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on February 13, 2004.

10.6	Amendment No. 1 to the Registration Rights Agreement by and between the Company and Crestview Capital Master, L.L.C. Incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K, filed on February 13, 2004.
31.1*	Certification of principal executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of principal financial and accounting officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of principal executive officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.
32.2*	Certification of principal financial and accounting officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.

(b) Reports on Form 8-K.

On February 3, 2004, we filed a Current Report on Form 8-K under Items 5 and 7, reporting the closing of the private placement to accredited investors.

On February 13, 2004, we filed a Current Report on Form 8-K under Item 5, reporting the additional closing of the private placement to accredited investors.

* Filed herewith.
+ Confidential Treatment has been requested for portions of this exhibit.

SIGNATURES

In accordance with the requirements of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SENESCO TECHNOLOGIES, INC.

DATE: May 17, 2004 By: /s/ Bruce C. Galton

Bruce C. Galton, President
and Chief Executive Officer
(Principal Executive Officer)

DATE: May 17, 2004 By: /s/ Joel Brooks

Joel Brooks, Chief Financial Officer
and Treasurer

(Principal Financial and Accounting Officer)