# SENESCO TECHNOLOGIES INC

Class

Form 10QSB February 17, 2004

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

	FORM	10-QSB			
(Mark O	ne)				
[ X ]	Quarterly Report pursuant to Exchange Act of 1934 For the quarterly period ended				
[ ]	Transition Report pursuant to Exchange Act of 1934 For the transition period from	Section 13 or 15(d	) of the Securities		
	Commission Fil	e No. 001-31326			
	SENESCO TECHN	OLOGIES, INC.			
	(Exact Name of Small Business Is	suer as Specified in	Its Charter)		
De	elaware		84-1368850		
•	(State or Other Jurisdiction of Incorporation or Organization)  (I.R.S. Employer Identification No.)				
303 Geo:	rge Street, Suite 420, New Brunsw	ick, New Jersey	08901		
	(Address of Principa	l Executive Offices)			
	(732) 2	96-8400			
	(Issuer's Telephone Numb	er, Including Area C	ode)		
Section months	eck whether the Issuer: (1) fi 13 or 15(d) of the Securities (or for such shorter period that ), and (2) has been subject to s	Exchange Act of 193 the registrant was r	4 during the past 12 equired to file such		
	Yes: X 	No	:		
	ate the number of shares outstan stock, as of February 9, 2004:	ding of each of the	Issuer's classes of		

Number of Shares

Common Stock, \$0.01 par value

13,108,243

Transitional Small Business Disclosure Format (check one):

Yes: No: X

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

# TABLE OF CONTENTS

		Page
PART	I. FINANCIAL INFORMATION.	
	Item 1. Financial Statements	1
	CONDENSED CONSOLIDATED BALANCE SHEET as of December 31, 2003 (unaudited) and June 30, 2003	2
	CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS For the Three Months Ended December 31, 2003 and December 31, 2002, For the Six Months Ended December 31, 2003 and December 31, 2002, and From Inception on July 1, 1998 through December 31, 2003 (unaudited)	3
	CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY From Inception on July 1, 1998 through December 31, 2003 (unaudited)	4
	CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS For the Six Months Ended December 31, 2003 and December 31, 2002, and From Inception on July 1, 1998 through December 31, 2003 (unaudited)	7
	NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (unaudited)	8
	Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	11
	Overview	11
	Factors That May Affect Our Business, Future Operating Results and Financial Condition	12
	Liquidity and Capital Resources	21
	Changes to Critical Accounting Policies and Estimates	23
	Results of Operations	23
	Item 3. Controls and Procedures	26

PART II. OTHER INFORMATION.

Item 2.	Changes in Securities and Small Business Issuer Purchases of Equity Securities	26
Item 4.	Submission of Matters to a Vote of Security Holders	27
Item 6.	Exhibits and Reports on Form 8-K	28
SIGNATURES		30

-i-

# 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.

-1-

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED BALANCE SHEET

	I	December 31, 2003
		(unaudited)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$	280,967
Short-term investments		1,301,095
Prepaid expenses and other current assets		65 <b>,</b> 297
Total Current Assets		1,647,359
Property and equipment, net		62 <b>,</b> 935
Intangibles, net		742 <b>,</b> 342

Security deposit	7 <b>,</b> 187
TOTAL ASSETS	\$ 2,459,823 ======
LIABILITIES AND STOCKHOLDERS' EQUITY	
CURRENT LIABILITIES:	
Accounts payable	27 <b>,</b> 014 402 <b>,</b> 799
Total Current Liabilities	 429,813
Grant payable	90,150
TOTAL LIABILITIES	519,963
STOCKHOLDERS' EQUITY:	
Preferred stock, \$0.01 par value; authorized 5,000,000 shares, no shares issued	
issued and outstanding 11,992,179 and 11,880,045 shares	119,922
Capital in excess of par  Deficit accumulated during the development stage	13,515,265 (11,695,327
Total Stockholders' Equity	 1,939,860
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 2,459,823

See Notes to Condensed Consolidated Financial Statements.

-2-

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY \_\_\_\_\_ (A DEVELOPMENT STAGE COMPANY) CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (unaudited)

For the Three For the Three For the Six
Months Ended Mont

\_\_\_\_\_

Revenue	\$	\$	\$
Operating Expenses: General and administrative Research and development	301,144	496,286 215,803	1,736,919 573,145
Total Operating Expenses	898 <b>,</b> 671	712,089	2,310,064
Loss From Operations	(898,671)	(712 <b>,</b> 089)	(2,310,064)
Sale of state income tax loss Interest income, net	91,448 9,037	130,952 18,727	91,448 19,948
Net Loss	\$ (798,186) =======	\$ (562,410) =======	
Basic and Diluted Net Loss Per Common Share	\$ (0.07) ======	\$ (0.05)	\$ (0.18) ======
Basic and Diluted Weighted Average Number of Common Shares Outstanding	11,950,053	11,880,045	11,915,049

See Notes to Condensed Consolidated Financial Statements.

-3-

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

FROM INCEPTION ON JULY 1, 1998 THROUGH DECEMBER 31, 2003

(unaudited)

Deficit
Accumulate
Capital in During the
Excess of Development S
Common Stock Par Value

Shares Amount

5

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 <b>,</b> 194	7 <b>,</b> 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 <b>,</b> 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.

-4-

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

FROM INCEPTION ON JULY 1, 1998 THROUGH DECEMBER 31, 2003

(unaudited)

	Common	Stock	Capital in Excess of Par Value	Accumulate During th Developmen Stage
	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	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.

-5-

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

FROM INCEPTION ON JULY 1, 1998 THROUGH DECEMBER 31, 2003

Deficit

(unaudited)

	Common Stock		Capital in Excess of Par Value	_
	Shares	Amount		
Fair market value of options and warrants vested during the six month period ended December 31, 2003			\$ 1,084,888	
Options and warrants exercised and other transactions during the six month period ended December 31, 2003	112,134	\$ 1 <b>,</b> 122	196,004	
Net loss				\$ (11,695,3
Balance at December 31, 2003	11,992,179	\$ 119,922 ======	\$ 13,515,265 ======	\$ (11,695,3

See Notes to Condensed Consolidated Financial Statements.

-6-

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

(unaudited)

	For tl 2003		Decemb	e Six Months December 31,	
Cash flows from operating activities: Net loss	\$	(2,198	.,668)	\$	(1,0
to net cash used in operating activities:					

Noncash capital contribution	  	
for services  Depreciation and amortization	1,084,888 15,331	1
Accounts receivable  Prepaid expense and other current assets	 120 <b>,</b> 238	(1
Security deposit		,
Accounts payable	(29,122) 139,639	
Net cash used in operating activities	(867,694)	(1,0
Cash flows from investing activities:		
Patent costs  Redemption (purchase) of investments, net	(164,876) 798,200	( 7
Purchase of property and equipment	(1,719)	
Net cash provided by (used in) investing activities	631,605	6 
Cash flows from financing activities:		
Proceeds from grant  Proceeds from issuance of bridge notes		
Proceeds from issuance of common stock and warrants, net	197,126	
Cash provided by financing activities	197 <b>,</b> 126	
Net increase (decrease) in cash and cash equivalents	(38,963)	(3
Cash and cash equivalents at beginning of period	319,930	7
Cash and cash equivalents at end of period	\$ 280,967	\$ 4 =====
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.

-7-

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 December 31, 2003, the results of its operations for the three-month periods ended December 31, 2003 and 2002, the results of its operations and cash flows for the six-month periods ended December 31, 2003 and 2002, and for the period from inception on July 1, 1998 through December 31, 2003.

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 December 31, 2003 and 2002, shares to be issued upon the exercise of options and warrants aggregating 6,308,094 and 5,840,653, respectively, at an average exercise price of \$2.67 and \$2.62, 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 DECEMBER 31,	2003	2002	
Net loss: As reported	\$ (798, 186)	\$ (562,410)	
Stock-based employee compensation costs	(164,645)	(200,789)	
Pro forma	\$(962,831) 	\$(763,199) =========	
Loss per share: As reported	\$ (0.07)	\$ (0.05)	
Pro forma	\$ (0.08)	\$ (0.06)	
SIX MONTH PERIODS ENDED DECEMBER 31,	2003	2002	
Net loss: As reported Stock-based employee compensation costs	\$(2,198,668) (308,146)	\$(1,077,042) (430,290)	
Pro forma	\$(2,506,814)	\$(1,507,332)	
Loss per share: As reported	\$ (0.18)	\$ (0.09)	
Pro forma	\$ (0.21)	\$ (0.13)	

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 six-month periods ended December 31, 2003 and 2002 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 - SIGNIFICANT EVENTS:

In connection with the one-year financial advisory agreement entered into by the Company with Sands Brothers International Ltd. ("Sands Brothers") in September 2003, Sands Brothers was issued a five-year warrant to purchase 237,600 shares of the Company's Common Stock at an exercise price equal to \$3.59 per share. During the six-month period ended December 31, 2003, the Company recorded stock-based compensation in the amount of \$843,480 related to the issuance of such warrant.

On December 15, 2003, the Board unanimously approved and the Company subsequently granted, effective December 16, 2003: (i) options under the 1998 Stock Incentive Plan, as

-9-

amended (the "Plan"), to purchase an aggregate of 85,000 shares of Common Stock to certain members of the Board at an exercise price equal to \$3.15 per share, with one-half of such options exercisable on the date of grant and one-half of such options becoming exercisable on the first anniversary from the date of grant; (ii) options under the Plan to purchase an aggregate of 130,000 shares of Common Stock to the members of the Company's Scientific Advisory Board, certain research consultants and executive officers of the Company, at an exercise price equal to \$3.15 per share, with one-third of such options exercisable on the date of grant and one-third of such options becoming exercisable on each of the first and second anniversaries from the date of grant; and (iii) a warrant to purchase 20,000 shares of Common Stock to Forbes, Inc. at an exercise price equal to \$3.15 per share, with one-third of such options exercisable on the date of grant and one-third of such options becoming exercisable on each of the first and second anniversaries from the date of grant.

Pursuant to the New Jersey Technology Tax Credit Transfer Program, the Company sold its entire New Jersey net operating loss tax benefit for the fiscal year ended June 30, 2002 in the amount of \$105,720 and received net proceeds of \$91,448.

#### NOTE 5 - SUBSEQUENT EVENT:

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 \$330,000. The Company did not engage a placement agent for the sale of such securities. In addition, the Company entered into a Registration Rights Agreement with these purchasers. The Registration Rights Agreement requires the Company to file a registration statement on Form S-3 for the shares by March 18, 2004, to register the securities acquired by the purchasers in the Private Placement. If the Company fails to file a registration statement by that date, it is required to pay to each purchaser in the Private Placement 1.5% of the aggregate purchase price paid by such purchaser.

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.

-10-

# 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

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.q., rheumatoid arthritis, macular degeneration, glaucoma, and heart disease), which are the result of premature cell death in humans, 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. Mammalian 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.

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 are currently working with lettuce, melon, tomato, canola, Arabidopsis (a model plant that is similar to canola), banana, alfalfa 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 moving into a second round. These 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. We have also completed our research and development initiative in carnation flower, which yielded a 100% increase in shelf life through the inhibition of the DHS reaction.

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

-11-

We believe that our technology downregulating the apoptosis isoforms of Factor 5A may have potential application as a means of 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 pre-clinical research on diseased heart tissue as well as cell-line studies to determine Factor 5A's ability to regulate key inflammatory cytokines, including Interleukin-1, Interleukin-18 and

TNF-a, which are indicated in numerous apoptotic diseases. In addition, we have initiated cell-line studies for applications of our technology to glaucoma, surface ocular diseases and cells of the intestines and on 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 p53, interleukins, caspases, tumor necrosis factor (TNF-alpha) and Interferon gamma. Expression of these cell death proteins is required for the execution of apoptosis.

Conversely, we have also established in pre-clinical studies that apoptosis upregulation of the apoptosis Factor 5A gene is able to kill cancer cells. Tumors arise when cells that have been targeted 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 has 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 cancer treatments which simultaneously cause cancer cells to die and not allow them to divide further.

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.

Consistent with our commercialization strategy, we intend to attract other companies interested in strategic partnerships or licensing our technology that 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.

-12-

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 \$11,695,327 at December 31, 2003. 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.

Our primary business is the development and commercial exploitation of technology to identify, isolate, characterize, and silence genes which control the aging and death of cells in plants and mammals. Our future revenue and profitability critically depend upon our ability to successfully develop senescence and apoptosis gene technology and later market and license such 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 mammalian applications.

In addition, no assurance can be given that adverse consequences might not result from the use of our technology such as the development of negative effects on plants or mammals or reduced benefits in terms of crop yield or protection. Our failure to obtain market acceptance of our technology or to successfully commercialize such technology or develop a commercially viable product would have a material adverse effect on our business.

#### WE OUTSOURCE ALL OF OUR RESEARCH AND DEVELOPMENT ACTIVITIES.

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, at Anawah, Inc., 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, would have a material adverse effect on our ability to develop and exploit our technology.

# WE HAVE SIGNIFICANT FUTURE CAPITAL NEEDS.

As of December 31, 2003, we had cash and highly-liquid investments valued at \$1,582,062 and working capital of \$1,217,546. In January 2004 and February 2004, we received aggregate net proceeds of approximately \$3,300,000 from a private placement of our equity securities. Using our available reserves as of December 31, 2003 and the net proceeds from the private equity financing, 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

-13-

that our operating costs may 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 such funding may not be available on favorable terms, if at all. In addition, in connection with such 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 December 31, 2003, we had 11,699,728 shares of common stock authorized but unissued, which may be issued from time to time by our board of directors without stockholder approval. In connection with our private placement of equity securities, in January 2004 and February 2004, we issued an aggregate of an additional 1,536,922 shares of common stock and warrants to purchase 842,141 shares of common stock. Therefore, assuming the exercise of all options and warrants granted as of February 13, 2004, we had 9,320,665 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 inception, we have financed all of our operations through private equity financings. Our future capital requirements depend on numerous factors, including:

- o the scope of our research and development;
- o our ability to attract business partners willing to share in our development costs;
- o our ability to successfully commercialize our technology;
- o competing technological and market developments;
- o our ability to enter into collaborative arrangements for the development, regulatory approval and commercialization of other products; and
- o the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights.

OUR BUSINESS DEPENDS ON OUR PATENTS, LICENSES AND PROPRIETARY RIGHTS AND THE ENFORCEMENT OF THESE RIGHTS.

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:

- o our ability to obtain patent protection for technologies, products and processes;
- o our ability to preserve trade secrets; and
- o our ability to operate without infringing the proprietary rights of other parties both in the United States and in foreign countries.

-14-

We have been issued one patent by the PTO. We have also filed patent applications in the United States for our technology, 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 enforcement of our patent rights and whether patents are granted for our pending patent applications.

Furthermore, although we believe that our technology is unique and will not violate or infringe upon the proprietary rights of any third party, there can be no assurance that such 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 guarantee that:

- o our patent applications will result in the issuance of patents;
- o any patents issued or licensed to us will be free from challenge and that if challenged, would be held to be valid;
- o any patents issued or licensed to us will provide commercially significant protection for our technology, products and processes;
- o other companies will not independently develop substantially equivalent proprietary information which is not covered by our patent rights;
- o other companies will not obtain access to our know-how;
- o other companies will not be granted patents that may prevent the commercialization of our technology; or
- o 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.

If any relevant claims of third-party patents which 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 guarantee that such licenses would be available or, if available, would be on acceptable terms.

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.

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.

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

-15-

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.

Our success also 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 quarantee adequate protection for our trade secrets, know-how or other proprietary information against unauthorized use or disclosure. We occasionally provide information to research collaborators in academic institutions and request the collaborators to conduct certain tests. We cannot guarantee 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 have a material adverse effect on our business and financial results.

#### WE WILL HAVE TO PROPERLY MANAGE OUR GROWTH.

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. 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. Our failure to effectively respond to changes brought about by our growth may have a material adverse effect on our business and financial results.

WE HAVE NO MARKETING OR SALES HISTORY AND DEPEND ON THIRD-PARTY MARKETING PARTNERS.

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, such 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, we will not be able to generate significant revenue.

-16-

#### WE DEPEND ON PARTNERS TO DEVELOP AND MARKET PRODUCTS.

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 BIOTECHNOLOGY INDUSTRIES IS INTENSE AND TECHNOLOGY IS CHANGING RAPIDLY.

Many agricultural and 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. Such 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.

OUR BUSINESS IS SUBJECT TO VARIOUS GOVERNMENT REGULATIONS.

At present, the U.S. federal government regulation of biotechnology is divided among three agencies: (i) 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; (ii) the EPA regulates activity related to the invention of plant pesticides and herbicides, which may include certain kinds of transgenic plants; and (iii) 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.

-17-

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 mammalian technology. In addition, our marketing partners who utilize our technology or sell products grown with our

technology may be subject to government regulations. The imposition of unfavorable governmental regulations on our technology or the failure to obtain licenses or approvals in a timely manner would have a material adverse effect on our business.

THE HUMAN HEALTH APPLICATIONS OF OUR TECHNOLOGY ARE SUBJECT TO A LENGTHY AND UNCERTAIN REGULATORY PROCESS.

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 mammalian 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 pre-clinical testing and clinical trials, which could take several years and may require substantial expenditures. Any failure to obtain regulatory approval could delay or prevent us from commercializing our mammalian technology.

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 mammalian 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 pre-clinical, 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.

CONSUMERS MAY NOT ACCEPT OUR TECHNOLOGY.

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.

-18-

WE DEPEND ON OUR KEY PERSONNEL.

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. 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.

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

As of December 31, 2003, our executive officers, directors and affiliated entities together beneficially own approximately 37.5% of the outstanding shares of our common stock, assuming the exercise of options and warrants which are currently exercisable, held by these stockholders. As of February 13, 2004, upon the closing of our private placement of equity securities, our executive officers, directors and affiliated entities together beneficially own approximately 35.5% 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 considerable 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

-19-

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 OUTSTANDING OPTIONS AND WARRANTS TO PURCHASE OUR COMMON STOCK.

As of December 31, 2003, we have granted options outside of our stock option plan to purchase 10,000 shares of our common stock and outstanding warrants to purchase 4,358,194 shares of our common stock. In addition, as of December 31, 2003, 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. As of February 13, 2004, upon the closing of our private placement of equity securities, we have outstanding warrants to purchase 5,135,961 shares of our common stock. 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.

SHARES ELIGIBLE FOR PUBLIC SALE.

As of December 31, 2003, we had 11,992,179 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 deemed 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. As of February 13, 2004, upon the closing of our private placement of equity securities, we had 13,593,475 shares of our common stock issued and outstanding. Pursuant to the terms of such equity offering, we are obligated to file a registration statement on Form S-3 by March 18, 2004 to register such 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 adversely affect the market price of our common stock.

#### OUR STOCK HAS A LIMITED TRADING MARKET.

Our common stock is quoted on the American Stock Exchange and currently has a limited trading market. We cannot assure 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.

#### OUR STOCK PRICE MAY FLUCTUATE.

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:

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

-20-

o general political, economic and market conditions.

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 Nasdaq 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.

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, the Rahan Joint Venture could be adversely affected.

LIQUIDITY AND CAPITAL RESOURCES

#### OVERVIEW

As of December 31, 2003, our cash balance and investments totaled \$1,582,062, and we had working capital of \$1,217,546. In addition, upon the closings of our private equity financing on January 16, 2004 and February 2, 2004, we received aggregate proceeds of \$3,642,500. As of December 31, 2003, we had a federal tax loss carry-forward of approximately \$8,583,000 and a state tax loss carry-forward of approximately \$3,263,000 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.

-21-

#### CONTRACTUAL OBLIGATIONS

The following table lists our cash  $\,$  contractual  $\,$  obligations as of December 31, 2003:

\_\_\_\_\_

Payments Due by Period

# Contractual Obligations

	 Total	Less than 1 year	1 -	3 years	4 -	5 years
Research and Development Agreements (1)	\$ 280,000	\$ 280,000	\$		\$	
Facility, Rent and Operating Leases (2)	\$ 79,464	\$ 34 <b>,</b> 056	\$	45,408	\$	

Employment, Consulting and Scientific Advisory

Board Agreements (3) \$ 627,416 \$ 437,083 \$ 190,333 \$ -
Total Contractual

Cash Obligations \$ 986,880 \$ 751,139 \$ 235,741 \$ --

- (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 \$210,000 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.

-22-

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 \$330,000.

Pursuant to the New Jersey Technology Tax Credit Transfer Program, the Company sold its entire New Jersey net operating loss tax benefit for the fiscal year ended June 30, 2002 in the amount of \$105,720 and received net proceeds of \$91,448.

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 no changes to such critical accounting policies and estimates.

#### RESULTS OF OPERATIONS

Three Months Ended December 31, 2003 and Three Months Ended December 31, 2002

We had no revenue during the three-month periods ended December 31, 2003 and December 31, 2002.

Operating expenses consist of general and administrative expenses, research and development expenses and stock-based compensation. Operating expenses for the three-month periods ended December 31, 2003 and December 31, 2002 were \$898,671 and \$712,089, respectively, an increase of \$186,582, or 26.2%. This increase in operating expenses was primarily the result of an increase in stock-based compensation, research and development expenses, and other general and administrative expenses.

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 December 31, 2003 and December 31, 2002 were \$597,527 and \$496,286, respectively, an increase of \$101,241, or 20.4%. This increase was primarily the result of an increase in stock-based compensation related to the issuance and vesting of stock options and warrants as well as an increase in other general and administrative expenses, investor relations expenses and corporate insurance, which were mostly offset by a decrease in payroll and benefits, and professional fees.

-23-

	Three	months	ended	Decen	mber 31,
		2003			2002
Stock-based compensation	\$	189,740		\$	97 <b>,</b> 497
Other general and administrative expenses		407,787			398,789
Total general and administrative expenses	\$	597,527		\$	496,286
	====			===	

The increase in stock-based compensation was primarily the result of an increase in the number of options and warrants that became exercisable during the three-month period ended December 31, 2003 as well as an increase in the Black-Scholes valuation of each option and warrant becoming exercisable during the three-month period ended December 31, 2003. The increase in other general

and administrative expenses was primarily the result of an increase in investor relations expenses and insurance, which was mostly offset by a decrease in professional fees and payroll and benefits. The increase in investor relations expenses during the three-month period ended December 31, 2003 was primarily the result of an increase in financial consulting costs. Insurance costs increased during the three-month period ended December 31, 2003 primarily because we increased the policy limit on our directors' and officers' liability insurance policy. Professional fees decreased during the three-month period ended December 31, 2003, primarily as a result of a decrease in legal fees related to the preparation of our proxy and Form 10-QSB. Payroll and benefits decreased during the three-month period ended December 31, 2003, primarily as a result of the termination of an employee in June 2003.

Research and development expenses 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, 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 December 31, 2003 and December 31, 2002 were \$301,144 and \$215,803, respectively, an increase of \$85,341, or 39.5%. This increase was primarily the result of an increase in stock-based compensation 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 the implementation of our mammalian cell research programs.

	Three months ended	December 31,
	2003	2002
Stock-based compensation	\$ 51,668	\$
Other research and development expenses	249 <b>,</b> 476	215,803
Total research and development expenses	\$ 301,144	\$ 215,803
	========	

Six Months Ended December 31, 2003 and Six Months Ended December 31, 2002

We had no revenue during the six-month  $\,$  periods ended December 31, 2003 and December 31, 2002.

Operating expenses for the six-month periods ended December 31, 2003 and December 31, 2002 were \$2,310,064 and \$1,259,277, respectively, an increase of \$1,050,787, or 83.4%. This increase in operating expenses was primarily the result of an increase in stock-based compensation and research and development expenses, partially offset by a decrease in other general and administrative expenses.

-24-

General and administrative expenses for the six-month periods ended December 31, 2003 and December 31, 2002 were \$1,736,919 and \$884,310, respectively, an increase of \$852,609, or 96.4%. This increase was primarily the result of an increase in stock-based compensation related to the issuance and vesting of stock options and warrants which was partially offset by a decrease in other general and administrative expenses.

	Six months ended I 2003	December 31, 2002	
Stock-based compensation Other general and administrative expenses	\$ 1,033,220 703,699	\$ 122,297 762,013	
Total general and administrative expenses	\$ 1,736,919 ========	\$ 884,310	

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 six-month period ended December 31, 2003. The decrease in other general and administrative expenses was primarily from a decrease in professional fees and payroll, which was partially offset by an increase in investor relations expenses and corporate insurance. Professional fees decreased during the six-month period ended December 31, 2003, primarily as a result of a decrease in legal fees. During the six-month period ended December 31, 2002, 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  ${\tt Form}$ 10-KSB and proxy statement. Payroll and benefits decreased during the six-month period ended December 31, 2003, primarily as a result of the termination of an employee in June 2003. The increase in investor relations expenses during the six-month period ended December 31, 2003, was primarily the result of an increase in financial consulting costs. Insurance costs increased during the six-month period ended December 31, 2003 primarily because we increased the policy limit on our directors' and officers' liability insurance policy.

Research and development expenses for the six-month periods ended December 31, 2003 and December 31, 2002 were \$573,145 and \$374,967, respectively, an increase of \$198,178, or 52.9%. This increase was primarily the result of an increase in stock-based compensation as well as an increase in the research and development costs incurred in connection with the expanded research undertaken by the University of Waterloo, the implementation of our mammalian cell research programs and the implementation of new plant research being conducted in connection with the agreement with Anawah, Inc.

	Six months ended 2003	Dece	mber 31, 2002
Stock-based compensation Other research and development expenses	\$ 51,668 521,477	\$	14,880 360,087
Total research and development expenses	\$ 573 <b>,</b> 145	\$	374 <b>,</b> 967

Period From Inception on July 1, 1998 through December 31, 2003

From inception of operations on July 1, 1998 through December 31, 2003, we had revenues of \$210,000, which consisted of the initial license fees in connection with our various development and license agreements.

-25-

We have incurred losses each year since inception and have an accumulated

deficit of \$11,695,327 at December 31, 2003. 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 December 31, 2003. Based on this evaluation, our chief executive officer and chief financial officer concluded that as of December 31, 2003, 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 December 31, 2003 that has  $\mbox{materially}$  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.

During the three months ended December 31, 2003, options and warrants to purchase an aggregate of 112,134 shares of our common stock were exercised for a total aggregate proceeds of \$195,024.

On December 15, 2003, our Board of Directors unanimously approved and we subsequently granted, effective December 16, 2003: (i) options under the our stock option plan to purchase an aggregate of 85,000 shares of common stock to certain members of the Board of Directors at an exercise price equal to \$3.15 per share, with one-half of such options exercisable on the date of grant and one-half of such options becoming exercisable on the first anniversary from the date of grant; (ii) options under our stock option plan to purchase an aggregate of 130,000 shares of common stock to the members of our Scientific Advisory Board, certain research consultants and executive officers of our Company, at an exercise price equal to \$3.15 per share, with one-third of such options exercisable on the date of grant and one-third of such options becoming exercisable on each of the first and second anniversaries from the date of grant; and (iii) a warrant to purchase 20,000 shares of common stock to Forbes, Inc. at an exercise price equal to \$3.15 per share, with one-third of such options exercisable on the date of grant and one-third of such options becoming exercisable on each of the first and second anniversaries from the date of grant.

-26-

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 0.35 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 \$330,000. 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. The registration rights agreement requires 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. If we fail to file a registration statement by that date, we are required to pay to each purchaser 1.5% of the aggregate purchase price paid by such purchaser.

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 acquired the securities for investment purposes only and not with a view to distribution and had adequate information about our company.

#### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

- (a) Our annual meeting of stockholders was held on December 15, 2003.
- (b) The following is a complete list of our current directors, each of whom was elected to a one-year term at the meeting, and whose term of office continued after the meeting.

Ruedi Stalder
Bruce C. Galton
John E. Thompson, Ph.D.
Christopher Forbes
Thomas C. Quick
David Rector
John Braca

(c) There were 7,637,502 shares of common stock present at the meeting in person or by proxy, out of a total number of 11,887,979 shares of common stock issued and outstanding and entitled to vote at the meeting.

The proposals and results of the vote of the stockholders taken at the meeting by ballot and by proxy as solicited by us on behalf of our Board of Directors were as follows:

-27-

(A) For the election of the nominees for our Board of Directors:

Nominee	For	Against	Withheld
Ruedi Stalder	7,637,222	280	_
Bruce C. Galton	7,637,222	280	_
John E. Thompson, Ph.	7,637,222	280	_
Christopher Forbes	7,637,222	280	_

Thomas C. Quick	7,637,222	280	_
David Rector	7,637,222	280	-
John Braca	7,637,222	280	-

(D) For the proposal to ratify the appointment of Goldstein Golub and Kessler, LLP as our independent auditors for the fiscal year ending June 30, 2004:

For	Against	Abstain
7,614,592	4,000	18,910

#### 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\* Investment Banking Agreement dated November 28, 2003, by and between Senesco Technologies, Inc., Sands Brothers International Ltd. and Stanford Group Company.
- 10.2\* Research Agreement dated November 6, 2003, by and among University Health Network, Dr. Fei-Fei Liu and the Company.
- 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  $\frac{1}{2}$

-28-

thereto). Incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K, filed on February 3, 2004.

- 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.
- 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.

The Company filed a Current Report on Form 8-K on February 3, 2004, which included as exhibits thereto the Securities Purchase Agreement and Registration Rights Agreement.

The Company filed a Current Report on Form 8-K on February 13, 2004, which included as exhibits thereto Amendment No. 1 to the Securities Purchase Agreement and Amendment No. 1 to the Registration Rights Agreement.

\* Filed herewith.

-29-

#### 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: February 17, 2004 By: /s/ Bruce C. Galton

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

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

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Joel Brooks, Chief Financial Officer

and Treasurer

(Principal Financial and Accounting Officer)