SENESCO TECHNOLOGIES INC
Form 10QSB
November 12, 2004

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-QSB

(Mark One)

ý **Quarterly Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the quarterly period ended September 30, 2004

o **Transition 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: ý No: o

State the number of shares outstanding of each of the Issuer s classes of common stock, as of October 29, 2004:

Class	**Number of Shares**
Common Stock, $0.01 par value	13,789,750

Transitional Small Business Disclosure Format (check one):

Yes: o No: ý

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

TABLE OF CONTENTS

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

	September 30, 2004 (unaudited)	June 30, 2004
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 119,294	$ 186,248
Short-term investments	3,348,358	3,949,774
Prepaid expenses and other current assets	59,816	93,967
Total Current Assets	3,527,468	4,229,989
Property and equipment, net	46,707	51,702
Intangibles, net	1,088,852	922,214
Security deposit	7,187	7,187
TOTAL ASSETS	$ 4,670,214	$ 5,211,092
LIABILITIES AND STOCKHOLDERS EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 148,852	$ 69,008
Accrued expenses	227,659	287,626
Deferred revenue	20,835	33,333
Total Current Liabilities	397,346	389,967
Grant payable	90,150	90,150
TOTAL LIABILITIES	487,496	480,117
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 13,789,750 and 13,787,250 shares, respectively	137,898	137,873
Capital in excess of par	17,173,143	17,168,043
Deficit accumulated during the development stage	(13,128,323)	(12,574,941)
Total Stockholders Equity	4,182,718	4,730,975
TOTAL LIABILITIES AND STOCKHOLDERS EQUITY	$ 4,670,214	$ 5,211,092

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 September 30, 2004	For the Three Months Ended September 30, 2003	From Inception on July 1, 1998 through September 30, 2004
Revenue	$ 12,498	$	$ 239,165
Operating Expenses:			
General and administrative	327,763	1,139,392	10,237,166
Research and development	245,985	272,001	3,909,101
Total Operating Expenses	573,748	1,411,393	14,146,267
Loss From Operations	(561,250)	(1,411,393)	(13,907,102)
Sale of state income tax loss			433,282
Other noncash income			185,627
Interest income, net	7,868	10,911	159,870
Net Loss	$ (553,382)	$ (1,400,482)	$ (13,128,323)
Basic and Diluted Net Loss Per Common Share	$ (0.04)	$ (0.12)	
Basic and Diluted Weighted Average Number of Common Shares Outstanding	13,787,848	11,880,045	

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 SEPTEMBER 30, 2004

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Total
	Shares	Amount			
Common stock outstanding	2,000,462	$ 20,005	$ (20,005)		
Contribution of capital			85,179		$ 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		1,995,982
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		50,000
Issuance of common stock for cash on January 31, 2000 at $2.87875 per share	34,737	347	99,653		100,000
Issuance of common stock for cash on February 4, 2000 at $2.934582 per share	85,191	852	249,148		250,000
Issuance of common stock for cash on March 15, 2000 at $2.527875 per share	51,428	514	129,486		130,000
Issuance of common stock for cash on June 22, 2000 at $1.50 per share	1,471,700	14,718	2,192,833		2,207,551

(continued)

See Notes to Condensed Consolidated Financial Statements.

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Total
	Shares	Amount			
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2000			$ (260,595)		$ (260,595)
Fair market value of options and warrants vested during the year ended June 30, 2000			873,779		873,779
Fair market value of options granted on October 2, 2000			80,700		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		6,477,500
Issuance of common stock and warrants associated with bridge loan conversion on December 3, 2001	305,323	3,053	531,263		534,316
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2002			(846,444)		(846,444)
Fair market value of options and warrants vested during the year ended June 30, 2002			577,708		577,708
Fair market value of options and warrants vested during the year ended June 30, 2003			97,497		97,497

(continued)

See Notes to Condensed Consolidated Financial Statements.

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Total
	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	$	3,642,500
Allocation of proceeds to warrants			(2,099,090)		(2,099,090)
Reclassification of warrants			1,913,463		1,913,463
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2004			(378,624)		(378,624)
Fair market value of options and warrants vested during the year ended June 30, 2004			1,177,845		1,177,845
Options and warrants exercised during the year ended June 30, 2004 at exercise prices ranging from $1.00 - $3.25	370,283	3,704	692,945		696,649
Options exercised during the three months ended September 30, 2004 at an exercise price of $2.05	2,500	25	5,100		5,125
Net loss				$ (13,128,323)	(13,128,323)
Balance at September 30, 2004	13,789,750	$ 137,898	$ 17,173,143	$ (13,128,323)	$ 4,182,718

See Notes to Condensed Consolidated Financial Statements.

SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY

(A DEVELOPMENT STAGE COMPANY)

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

(unaudited)

	For the Three Months Ended September 30, 2004	2003	From Inception on July 1, 1998 through September 30, 2004
Cash flows from operating activities:			
Net loss	$ (553,382)	$ (1,400,482)	$ (13,128,323)
Adjustments to reconcile net loss to net cash used in operating activities:			
Noncash capital contribution			85,179
Noncash conversion of accrued expenses into equity			131,250
Noncash income related to change in fair value of warrant liability			(185,827)
Issuance of common stock and warrants for interest			9,316
Issuance of stock options and warrants for services		843,480	2,676,280
Depreciation and amortization	10,004	7,553	123,841
(Increase) decrease in operating assets:			
Prepaid expense and other current assets	34,151	32,994	(59,816)
Security deposit			(7,187)
Increase (decrease) in operating liabilities:			
Accounts payable	79,844	(22,039)	148,852
Accrued expenses	(59,967)	107,110	227,659
Deferred revenue	(12,498)		20,835
Net cash used in operating activities	(501,848)	(431,384)	(9,957,941)
Cash flows from investing activities:			
Patent costs	(169,963)	(57,748)	(1,095,761)
Redemption (purchase) of investments, net	601,416	447,733	(3,348,358)
Purchase of property and equipment	(1,684)		(163,640)
Net cash provided by (used in) investing activities	429,769	389,985	(4,607,759)
Cash flows from financing activities:			
Proceeds from grant			90,150
Proceeds from issuance of bridge notes			525,000
Proceeds from issuance of common stock	5,125		14,069,844
Cash provided by financing activities	5,125		14,684,994
Net increase (decrease) in cash and cash equivalents	(66,954)	(41,399)	119,294
Cash and cash equivalents at beginning of period	186,248	319,930	
Cash and cash equivalents at end of period	$ 119,294	$ 278,531	$ 119,294
Supplemental disclosure of cash flow information:			
Cash paid during the period for interest	$	$	$ 22,317
Supplemental schedule of noncash financing activity:			
Conversion of bridge notes into stock	$	$	$ 534,316

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, 2004.

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 September 30, 2004, the results of its operations, stockholders equity and cash flows for the three-month periods ended September 30, 2004 and 2003, the results of its operations and cash flows for the period from inception on July 1, 1998 through September 30, 2004.

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. As of September 30, 2004 and 2003, shares to be issued upon the exercise of options and warrants aggregating 6,849,586 and 6,235,753, respectively, at an average exercise price of $2.83 and $2.64, 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 September 30,	2004	2003
Net loss:		
As reported	$ (553,382)	$ (1,400,482)
Stock-based employee compensation costs	(170,239)	(143,501)
Pro forma	$ (723,621)	$ (1,543,983)
Loss per share:		
As reported	$ (0.04)	$ (0.12)
Pro forma	$ (0.05)	$ (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-month periods ended September 30, 2004 and 2003 include the following: (i) an estimated life of 5 and 10 years; (ii) a risk-free rate range of 3.30% to 4.27% 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; (iii) volatility of 147.83%; and (iv) 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:

On October 19, 2004, the Company entered into a license agreement with the Broin Companies (Broin) to license the Company s proprietary gene technology to Broin to improve aspects of Broin s ethanol production capabilities. The Company will receive an annual payment for each Broin facility that incorporates the Company s technology.

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 patented and patent-pending genes (primarily DHS, Factor 5A and Lipase) to:

enhance the quality and productivity of fruits, flowers, vegetables and agronomic crops through the control of cell death in plants (senescence);

develop novel approaches to treat programmed cell death diseases in humans (apoptosis) (*e.g.*, rheumatoid arthritis, Crohn s disease, glaucoma, or heart disease), which are the result of premature cell death; and

develop novel approaches to treat 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 inducing apoptosis, while retarding cell proliferation, in both human cancer cell lines derived from tumors and in mice which have the same genetic defect that causes lung cancer in humans.

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 Factor 5A technology may have potential application as a means for controlling a broad range of apoptotic diseases, both inflammatory/ischemic diseases and cancers. We have commenced preclinical *in-vivo* and *in-vitro* research to determine Factor 5A s ability to regulate key execution genes, inflammatory cytokines, receptors, and transcription factors which are implicated in numerous apoptotic diseases.

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, heart disease, stroke, Crohn s disease and rheumatoid

arthritis, among others. We have commenced preclinical research. Using siRNAs against the apoptosis isoform, we have reduced formation of the receptors for LPS, interferon gamma and TNF alpha. *In-vitro* experiments have shown that siRNAs against Factor 5A protected human lamina cribrosa (optic nerve) and colon epithelial (HT 29) cells from TNF alpha induced apoptosis. *In-vivo* mouse studies have shown that the siRNAs protect thymocyte cells from apoptosis and decreases formation of myeloperoxidase in the lungs of mice challenged with LPS. We have also determined that inhibiting the apoptosis isoform of Factor 5A downregulates NFkB and JAK1 and decreases the inflammatory cytokines formed through the NFkB and JAK/STAT pathways. The siRNAs are currently being tested in several preclinical *in-vivo* inflammatory disease models.

We have established in preclinical studies that upregulation of the apoptosis Factor 5A isoform is able to kill cancer cells through both the p53 (intrinsic) and cell death receptor (extrinsic) 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. We have found that upregulating the apoptosis isoform results in upregulation of p53 and inflammatory cytokine production and increased cell death receptor formation and caspase activity coupled with a simultaneous downregulation of bcl-2 and telomerase. In addition, we have also shown that inhibition 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, without any targeted delivery technologies, was injected into the blood stream of the mice, and the lung tissue was subsequently analyzed for apoptosis. 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, turfgrass, tomato, canola, Arabidopsis (a model plant that is similar to canola), banana, alfalfa, and certain species of trees and bedding plants, and we have obtained proof of concept for the lipase, DHS and Factor 5A genes in several of these plants. We have ongoing field trials of lettuce and bananas with our respective partners, and are poised to commence field trials with our partner in forestry products. The first round of lettuce field trials showed that our technology effectively reduces browning in cut lettuce. The first and second round of banana field trials have shown that our technology extends the shelf life of banana fruit by 100%. In addition to the shelf life benefits, field trials are being conducted in a tropical location through this winter to generate disease resistance data for banana plants. Our near-term research and development initiatives include silencing or reducing the expression of

DHS and Factor 5A genes in these plants and propagation and testing of plants with our silenced genes.

Research Program

We do not expect to generate significant revenues for approximately the next one to two 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

We have been granted two patents by the United States Patent and Trademark Office, or PTO. Most recently, on August 10, 2004, we were granted Patent No.6,774,284, entitled DNA Encoding A Plant Lipase, Transgenic Plants and A Method For Controlling Senescence in Plants ,

from the PTO.

In addition to our two patents, 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

We presently license our technology to agricultural companies capable of incorporating our technology into crops grown for commercial agriculture. We anticipate revenues from these relationships in the form of licensing fees and royalties from our partners, or in sharing gross profits in the case of the joint venture with Rahan Meristem. In addition, we anticipate payments from our partners upon our achievement of certain research and development benchmarks. This commercialization strategy allows us to generate revenues at various stages of product

development, while ensuring that our technology is incorporated into a wide variety of crops. Our optimal partners combine the technological know-how to incorporate our technology into their product line along with the ability to successfully market the enhanced final product, thereby eliminating the need for us to develop and maintain a sales force. Through September 30, 2004 we have entered into four license and development agreements and one joint venture. Most recently, on October 19, 2004, we entered into a License Agreement with The Broin Companies to license our proprietary Factor 5A and DHS technology to improve aspects of Broin s ethanol production capabilities. The agreement provides for an annual payment for each Broin facility that incorporates the Company s technology. If our technology is incorporated at all of Broin s facilities, we would receive annual payments in excess of one million dollars.

In October 2002, we entered into a non-exclusive sales representative agreement to market and promote our technology in the People s Republic of China. Under the terms of the agreement, we will pay a commission to the sales representative based on a percentage of any gross license fees we may receive. With the assistance of the sales representative, in November 2002, we executed a non-binding letter of intent with the Tianjin Academy of Agricultural Sciences for the exclusive use of our technology in a large variety of fruit and vegetable crops in China. Discussions have been held with representatives of the Academy as well as government representatives from the city of Tianjin and from the central government of China. We have also initiated discussions with several Asian biotechnology companies. Such a company would be necessary to secure the financing for the proposed agreement with the Academy and to commercialize the seeds developed with our technology under the proposed license. Because of the number of crops the Academy has expressed interest in, the letter of intent called for significant licensing and milestone fees to be paid to us by a commercial partner if the project were successful. The size of the proposed financial terms in the letter of intent have made attracting such a commercial partner difficult. As such, ongoing discussions with the Academy have been focused on possibly reducing the number of crops selected so that financial terms may be restructured. Additionally, discussions with some of these companies and certain central government agencies have focused on direct licensing opportunities that would not include the Academy.

We plan to employ the same partnering strategy in both the human health and agricultural target markets. Our preclinical research has yielded data that we have presented to various biopharmaceutical companies that may be prospective licensees for the development and marketing of potential applications of our technology. 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 $13,128,323 at September 30, 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 which control the 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 such technology at a profit. We have conducted experiments on certain crops with favorable results and have conducted certain preliminary cell-line and animal 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, 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 humans 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 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 discovered, 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 September 30, 2004, we had cash and highly-liquid investments valued at $3,467,652 and working capital of $3,130,122. Using our available reserves as of September 30, 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 outstanding, as of September 30, 2004, we had 9,360,664 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 two patents 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 our competitors that are involved in apoptosis research include: Amgen; Centocor; Genzyme; OSI Pharmaceuticals, Inc.; Idun Pharmaceuticals; Novartis; Introgen Therapeutics, Inc.; Genta, Inc.; and Vertex Pharmaceuticals, 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.

19

Pre-clinical studies and clinical trials of our human health applications may be unsuccessful, which could delay or prevent regulatory approval.

Pre-clinical studies may reveal that our human health technology is ineffective or harmful, and/or clinical trials may be unsuccessful in demonstrating efficacy and safety of our human health technology, 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. 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 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 September 30, 2004, our executive officers, directors and affiliated entities together beneficially own approximately 44.2% 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 September 30, 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 5,003,586 shares of our common stock. In addition, as of September 30, 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 September 30, 2004, we had 13,789,750 shares of our common stock issued and outstanding, of which approximately 1,536,922 shares are registered pursuant to a registration statement on Form S-3, which was declared effective on May 14, 2004, and the remainder of

which are either eligible to be sold under SEC Rule 144 or are in the public float. In addition, we have registered 1,114,741 shares of our Common Stock underlying warrants previously issued on the Form S-3 registration statement that was declared effective on May 14, 2004, and we registered 3,000,000 shares of our common stock underlying options granted or to be granted under our stock option plan. 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 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 September 30, 2004, our cash balance and investments totaled $3,467,652, and we had working capital of $3,130,122. As of September 30, 2004, we had a federal tax loss carry-forward of approximately $10,100,000 and a state tax loss carry-forward of approximately $4,800,000 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 September 30, 2004:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 - 3 years**	**4 - 5 years**	**More than 5 years**
Research and Development Agreements (1)	$ 1,215,517	$ 654,726	$ 560,791	$	$
Facility, Rent and Operating Leases (2)	$ 53,922	$ 34,056	$ 19,866	$	$
Employment, Consulting and Scientific Advisory Board Agreements (3)	$ 1,027,146	$ 607,417	$ 419,729	$	$
Total Contractual Cash Obligations	$ 2,296,585	$ 1,296,199	$ 1,000,386	$	$

(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 $239,165 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.

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, 2004. There have been no changes to such critical accounting policies and estimates.

Results of Operations

Three Months Ended September 30, 2004 and Three Months Ended September 30, 2003

The net loss for the three-month periods ended September 30, 2004 and September 30, 2003 was $553,382 and $1,400,482, respectively, a decrease of $847,100, or 60.5%. This decrease was primarily the result of a decrease in general and administrative expenses and research and development expenses.

We had revenue of $12,498 during the three-month period ended September 30, 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 September 30, 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 September 30, 2004 and September 30, 2003 were $573,748 and $1,411,393, respectively, a decrease of $837,645, or 59.3%. This decrease in operating expenses was

primarily the result of a decrease in stock-based compensation and research and development expenses, which was partially offset by an increase 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 September 30, 2004 and September 30, 2003 were $327,763 and $1,139,392, respectively, a decrease of $811,629, or 71.2%.

	Three months ended September 30,	
	2004	2003
Stock-based compensation	$	$ 843,480
Other general and administrative expenses	327,763	295,912
Total general and administrative expenses	$ 327,763	$ 1,139,392

The decrease 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 three-month period ended September 30, 2003. The increase in other general and administrative expenses was primarily the result of an increase in payroll and benefits and investor relations expenses. Payroll and benefits increased during the three-month period ended September 30, 2004, primarily as a result of salary increases. Investor relations increased during the three-month period ended September 30, 2004 primarily as a result of additional fees incurred in connection with a financial advisory agreement 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 September 30, 2004 and September 30, 2003 were $245,985 and $272,001, respectively, a decrease of $26,016, or 9.6%. This decrease was primarily the result of a decrease in costs related to certain human health research projects that were completed during the year ended June 30, 2004. The decrease in costs related to certain human health research projects were partially offset by 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 addition of a Vice President Research in July, 2004.

	Three months ended September 30,	
	2004	2003
Stock-based compensation	$	$
Other research and development expenses	245,985	272,001
Total research and development expenses	$ 245,985	$ 272,001

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

	Three months ended September 30, 2004		2003	
Agricultural research programs	$	113,896	$	115,181
Human health research programs		132,089		156,820
Total research and development expenses	$	245,985	$	272,001

Period From Inception on July 1, 1998 through September 30, 2004

From inception of operations on July 1, 1998 through September 30, 2004, we had revenues of $239,165, 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 $13,128,323 at September 30, 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 September 30, 2004. Based on this evaluation, our chief executive officer and chief financial officer concluded that as of September 30, 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 September 30, 2004 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION.

Item 6. **Exhibits.**

Exhibits.

10.1*	Indemnification Agreement with David Rector dated as of April, 2002.
10.2*+	Development and License Agreement with Broin and Associates, Inc. dated as of October 14, 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.

* Filed herewith.

+ Confidential treatment requested.

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: November 12, 2004	By:	/s/ Bruce C. Galton Bruce C. Galton, President and Chief Executive Officer (Principal Executive Officer)
DATE: November 12, 2004	By:	/s/ Joel Brooks Joel Brooks, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)