



## **YEAR ENDED DECEMBER 31, 2010**

### **MANAGEMENT'S REPORT ON FINANCIAL POSITION AND OPERATING RESULTS**

All amounts included in this report are expressed in Canadian dollars unless otherwise stated.

#### **GENERAL**

The following analysis provides a review of Medicago Inc. ('Medicago' or the 'Company') results of operations, financial condition and cash flows for the years ended December 31, 2010 and 2009. This analysis should be read in conjunction with the information contained in the consolidated financial statements and related notes for the years ended December 31, 2010 and 2009, appearing in the annual report of the Company, which are prepared in accordance with generally accepted accounting principles in Canada ("GAAP").

The 2010 Annual Report of Medicago, the Annual Information Form and additional information regarding the business of the Company are available on SEDAR at [www.sedar.com](http://www.sedar.com).

#### **FORWARD-LOOKING STATEMENTS**

This report contains certain forward-looking statements with respect to the Company. These forward-looking statements, by their nature, necessarily involve risks and uncertainties that could cause actual results to differ materially from those contemplated by these forward-looking statements. We consider the assumptions on which these forward-looking statements are based to be reasonable, but caution the reader that these assumptions regarding future events, many of which are beyond our control, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect us. The information contained herein is dated as of March 29, 2011, date of the approval by the Board of the MD&A and the Consolidated Financial Statements.

#### **COMPANY OVERVIEW**

Medicago is committed to providing highly effective and competitive vaccines based on proprietary Virus-Like Particles (VLPs) and manufacturing technologies. Medicago is developing VLP vaccines to protect against H5N1 pandemic influenza, using a transient expression system which produces recombinant vaccine antigens in the cells of non-transgenic plants. This technology has potential to offer advantages of speed and cost over competitive technologies. It promises to deliver a vaccine for testing rapidly after the identification and reception of genetic sequences from a pandemic strain. This production time frame has the potential to allow vaccination of the population before the first wave of a pandemic strikes and to supply large volumes of vaccine antigens to the world market.

#### **MARKET AND ECONOMIC SITUATION OVERVIEW**

The influenza vaccine market is expected to expand over \$3.7 billion by 2010. The Company is developing products for a growing market, with a first product (H5N1 pandemic influenza VLP vaccine) expected to be on the market in 2013, if all clinical phases are successfully completed and market approval is granted by the regulatory authorities by such time.

We did not incur any losses on asset-backed commercial paper as we have never invested in such securities. Our main credit facility (BioLevier loan) runs until 2014 and we have met all related requirements thereunder. In 2011, considering the financing announced on March 25, 2011, and the Equity line of credit in place, we are of the opinion that we have the financial resources required to work towards the attainment of our objectives (See *Products in development*) for the current year.

## KEY DEVELOPMENTS FOR THE YEAR ENDED DECEMBER 31, 2010

### *CORPORATE*

#### MEDICAGO AWARDED \$US 21 MILLION FROM THE U.S. DEPARTMENT OF DEFENSE

On August 10, 2010, Medicago announced that Medicago USA Inc, a wholly-owned subsidiary of Medicago, was awarded a US\$21 Million funding award from the Defense Advanced Research Projects Agency (“**DARPA**”), Broad Agency Announcement (BAA), Defense Sciences Research & Technology. Medicago USA and DARPA entered into a technology investment agreement governing the terms and conditions of the funding award (the “**Technology Investment Agreement**”). Pursuant to this technology investment agreement, the funding award is structured as a cost-sharing research program between Medicago USA and DARPA for a proof-of-concept demonstration of Medicago USA’s improved process for the scalable and automated production of purified VLP vaccines in plants.

As a result, Medicago will develop a 90,000 square-foot cGMP facility in Research Triangle Park (RTP), North Carolina, including a 30,000 square-foot greenhouse. The purpose of this facility will be to scale-up and automate Medicago’s cGMP process to demonstrate its capacity to produce 10 million doses/month of influenza vaccines, and to meet FDA requirements for purity, quality and current cGMP regulations. The facility is expected to be completed in the fourth quarter of 2011.

The total costs of the research program is estimated at US\$42 Million. DARPA will provide approximately US\$21 Million while the balance of the required funds must be provided by Medicago USA. To this effect, on August 10, 2010, Medicago USA entered into a lease agreement with ARE-NC Region No. 6 LLC (the “**Landlord**”), an affiliate of Alexandria Real Estate Equities Inc., under which the Landlord undertook to provide a construction allowance of approximately US\$13.5 Million with respect to the construction of the New Facility and in consideration of which Medicago USA agreed to lease the New Facility during a term of 15 years.

The yearly base rent obligation for the ‘New Facility’ shall be approximately US\$1,350,000, subject to a fixed yearly percentage increase. Medicago will be responsible for all operating expenses of the New Facility. The Landlord will grant Medicago USA a construction allowance of US\$13.5 Million, such construction allowance corresponding to the current estimates of the construction costs.

#### MEDICAGO CLOSED \$7.5 MILLION EQUITY OFFERING

On August 19, 2010, Medicago closed an offering of 18,518,520 units at a price of 40.5 cents per unit, representing gross proceeds of \$7.5 Million. Each unit is comprised of one common share and three-quarter of one common share purchase warrant. Each full warrant has an exercise price of \$0.50, exercisable for a period of 5 years following the closing date of the offering.

Medicago is using the net proceeds from the offering to fund its participation to the cost-sharing program with DARPA and for other general corporate and working capital purposes.

#### EXECUTION OF A \$10 MILLION STANDBY EQUITY DISTRIBUTION AGREEMENT

On May 13, 2010, Medicago announced that it has entered into a standby equity distribution agreement (“**SEDA**”) with YA Global Master SPV Ltd. (“YA Global”), a fund managed by Yorkville Advisors, LLC, whereby Medicago has the option, at its sole discretion, to issue and sell, and YA Global is committed to purchase up to CAD \$10 Million of common shares from Medicago (the “Common Shares”). The Company has not drawn on the SEDA since its implementation.

#### MEDICAGO GRADUATED TO THE TSX

On May 14, 2010 Medicago graduated from the TSX Venture Exchange and listed its common shares on the TSX under the symbol “MDG”.

The graduation to the TSX is an important milestone for the company. The listing of its shares on the TSX is expected to enhance the visibility of the Company in the public markets, which may potentially provide greater accessibility to a broader group of investors, and increased market recognition.

## MEDICAGO TO COLLABORATE ON BROAD COVERAGE INFLUENZA VACCINES FOR THE DEVELOPING WORLD WITH PATH

On October 13, 2010, Medicago announced it was awarded US\$1M in funding by U.S.-based PATH pursuant to a research collaboration agreement. Medicago and PATH will work together on a broad coverage influenza vaccine based on Medicago's proprietary plant-based Virus-Like Particle (VLP) technologies for the developing world. PATH is an international global health non-profit organization that collaborates with private and public-sector partners as part of its influenza vaccine project to advance the development of promising new influenza vaccines that can be affordable and accessible for people in low-resource countries.

## MEDICAGO SIGNS MOU WITH PT BIO FARMA FOR THE DEVELOPMENT OF VACCINES IN THE REPUBLIC OF INDONESIA

On June 14, 2010, Medicago signed a memorandum of understanding (MOU) with PT Bio Farma (Persero) to identify and develop select vaccine targets of mutual interest, with the final goal being to establish a partnership to build a Medicago plant-based manufacturing facility in the Republic of Indonesia. Initially, Medicago and Bio Farma will collaborate in design and conduct a proof-of-concept evaluation on Medicago's plant-based VLP technology for a selected vaccine target and discussions are still ongoing.

## MEDICAGO SIGNS MOU WITH NITT PARTNERS FOR COMMERCIAL DEVELOPMENT OF INFLUENZA VACCINES IN JAPAN

In March 2010, Medicago signed a memorandum of understanding with Niigata TLO/NBRP/KUTLO-NITT to discuss and negotiate an agreement to commercialize Medicago's pandemic and seasonal influenza VLP-based vaccines in Japan and other territories. For several years, NITT Partners has been the government-approved technology transfer/licensing organization to license in state-of-the-art technologies. Under the terms of the MOU, the parties will evaluate and select an optimal deal structure with the objective of formalizing a definitive agreement and discussions are still ongoing.

## FILING OF TWO NEW PATENTS APPLICATIONS

On September 22, 2010, Medicago announced it has discovered a breakthrough method of preparing plant derived recombinant proteins and VLPs and filed two international patent applications under the Patent Cooperation Treaty (PCT) that broadly cover new methods of preparing plant-derived recombinant proteins and VLPs. The new method of biochemical degradation releases recombinant proteins and/or VLPs in the extract and eliminates most plant-originating impurities, which greatly simplify subsequent purification steps.

The patent applications enhance the Company's IP position, and further establish their competitive advantage with respect to the development of VLPs and other recombinant proteins in plants.

## APPOINTMENT OF MICHAEL E. WANNER AS VICE-PRESIDENT OF U.S. OPERATIONS

Mr. Wanner joined Medicago U.S.A. as Vice-President of U.S. Operations to lead the Company's U.S. expansion efforts. He was previously President and CEO of Abeome, a biotechnology company developing therapeutic and diagnostic monoclonal antibodies. Mr. Wanner served for over 11 years as CFO for Merial and Rhone Merieux, Inc. (RMI), one of the world's leading animal health companies, where he was involved in the construction and management of a large scale vaccine production facility in the U.S.

## UPDATE ON PARTNERSHIP OPPORTUNITIES

Medicago is pursuing its strategy of partnership with countries and pharmaceutical companies looking at investing in faster and economical technologies to produce pandemic and seasonal flu vaccines. With an agreement in place in North America, DARPA, Medicago is now targeting its efforts in Europe and Asia. Our strategy in these regions is to enter into Memorandum of Understanding to explore possible deal structure before committing any resources and rights. We will favor partnerships with significant short term revenue potential in order to support the development of our technology and products and increase shareholder value.

## **PRODUCTS IN DEVELOPMENT**

### **H5N1 PANDEMIC INFLUENZA VLP VACCINE**

#### *Continuation of the clinical development – Phase II clinical trial*

Following the successful completion of the phase I clinical trial for its H5N1 pandemic Influenza VLP vaccine, the Company continued its development in 2010. On November 1, 2010, Medicago announced that the Company received clearance from Health Canada to commence its Phase II clinical trial.

The Phase II randomized placebo controlled clinical trial evaluates the safety and immunogenicity of different doses of its H5N1 vaccine. Specifically, the vaccine will be studied in approximately 255 healthy adults between the ages of 18 to 60. In the first part of the study, 135 healthy adults received an injection of either a placebo or the H5N1 vaccine at doses of 20 mcg, 30 mcg or 45 mcg to determine the optimal dose. In the second part of the study, 120 healthy adults will receive an injection of either a placebo or the H5N1 vaccine at the optimal dose.

On February 1, 2011 the Company has released positive results from the first part of this phase II trial. The vaccine was found to be safe, well tolerated and also induced a solid immune response. No serious adverse events were reported during the trial and the vaccine was found to be safe and well tolerated at all levels. Local site reactions were mild and comparable between the H5N1 vaccine groups. In those vaccinated in the 18-to-49-age group at the 20-microgram dosage level, 82 per cent of immunized subjects developed an immune response against the H5N1 virus after the second immunization, 65 per cent of subjects had a four-fold increase in HI titers from baseline and 65 per cent of subjects had seroprotective antibody titers. All subjects tested negative for antibodies to the H5N1 A/Indonesia strain before vaccination and no response was observed among individuals who received a placebo. These data show that Medicago's H5N1 vaccine induces a robust hemagglutination inhibition (HAI) antibody response against the H5N1 vaccine strain. The H5N1 vaccine also induced the production of antibodies that react with multiple strains of H5N1 avian influenza indicating the potential for cross-protection of Medicago's vaccines. As planned in the initial design, adverse event monitoring will continue for six months after administration of the second dose of vaccine.

Based on these results, a committee selected the optimal dose of 20-microgram with part B of the phase II H5N1 vaccine clinical trial. In the second part of the study, 120 healthy adults will receive an injection of either the H5N1 vaccine at the optimal dose or a placebo. Final results are currently expected in the second quarter of 2011.

#### *Single low dose of its H5N1 pandemic influenza VLP Vaccine achieves 100% cross-protection in lethal challenge study in ferrets*

A single low dose of Medicago's pandemic vaccine formulated for the H5N1 Indonesia strain of Avian flu provided 100 per cent cross-protection in ferrets against a lethal challenge with the highly virulent Vietnam influenza virus. H5N1 vaccines are known to require repeated administrations to elicit an antibody response. Medicago is believed to be the first company to demonstrate full cross-protection in a heterogeneous challenge with only a single dose of its H5N1 vaccine in the ferret model.

In this study, ferrets were vaccinated with a single 1.9 (ug) dose of the company's clinical-grade VLP vaccine made for the Indonesia H5N1 Avian influenza virus (A/Indonesia/5/05). Animals were then challenged with a lethal dose of the Vietnam influenza virus (A/Vietnam/1203/04). All the vaccinated ferrets survived the lethal challenge while all non-vaccinated ferrets died within seven days. As the influenza virus replicates in a similar way in ferrets and humans, and causes similar symptoms and disease, these protection data are highly significant.

### **SEASONAL AND H1N1 VACCINES**

In 2010, the Company completed the preclinical studies for its H1N1 pandemic vaccine candidate and submitted an investigational new drug application (IND). The strategy is to take advantage of the development work that will be completed for its H1N1 pandemic vaccine candidate, to bolster its safety database and apply it to optimize the path of approval for Medicago's seasonal vaccine candidate. At the beginning of 2011, Medicago received Food and Drug Administration clearance for its phase I H1N1 influenza VLP vaccine candidate clinical trial in the United States. The company initiated this trial on March 21, 2011. Interim clinical data from the H1N1 trial, including measurements of safety and tolerability, are expected to be available in the second quarter of 2011. This phase I trial will lead into Medicago's U.S. phase IIa trial for its seasonal trivalent vaccine with the recommended H1N1, H3N2 and B influenza strains which the company plans to conduct later in 2011 if granted approval by relevant regulatory authorities.

The phase 1, randomized, double-blind, multicentre, active- and placebo-controlled dose-ranging study will evaluate the safety, tolerability and immunogenicity of a single non-adjuvanted dose of the H1N1 vaccine in 100 healthy adults 18 to 49 years of age. The subjects will be randomized to receive one of the following: an injection of the placebo, Medicago's H1N1 vaccine; or an H1N1 vaccine from a licensed trivalent vaccine.

## SUBSEQUENT EVENT

On March 25, 2011 the Company announced that it has agreed to sell up to 34,117,600 units (each, a "Unit") at a price of \$0.51 per Unit, representing gross proceeds of \$17,399,976 (the "Offering"). The Offering is being done, on an agency basis.

Each Unit is comprised of one common share (a "Common Share") and one quarter of one common share purchase warrant (each, a "Warrant"). Each full Warrant will have an exercise price of \$0.75, exercisable for a period of 24 months following the closing date of the Offering. The Warrants are subject to an accelerated expiry if, at any time after the closing of the offering, the published closing trade price of the Common Shares on the TSX is equal or superior to \$1.00 for any 30 consecutive trading days, in which event the Company may give the holders a written notice that the Warrants will expire at 5:00 p.m. (Montréal time) on the 30<sup>th</sup> day from the receipt of such notice.

Net proceeds from the Offering will be used for continued clinical development of the Company's plant-based manufactured Influenza Virus Like Particles ("VLP") vaccines, to fund the development of additional potential product candidates and for other general corporate and working capital purposes. The Offering is expected to close on or about April 5, 2011, subject to the satisfaction of all necessary regulatory approvals, including the conditional listing approval of the Toronto Stock Exchange.

## SELECTED ANNUAL CONSOLIDATED INFORMATION

	2010 \$	2009 \$	2008 \$
<b>CONSOLIDATED STATEMENT OF EARNINGS</b>			
<b>Revenues</b>	<b>109,000</b>	-	2,248,000
<b>Loss for the period</b>			
\$	<b>16,344,000</b>	12,475,000	7,649,000
Basic and diluted loss per share	<b>0.13</b>	0.13	0.17

## CONSOLIDATED BALANCE SHEET DATA

<b>Cash, cash equivalents and short-term investments</b>	<b>8,521,071</b>	14,333,000	14,028,000
<b>Total assets</b>	<b>21,313,000</b>	22,830,000	20,604,000
<b>Total long-term liabilities</b> <sup>(1)</sup>	<b>15,672,000</b>	15,488,000	15,283,000

(1) Total long-term liabilities include long term-debt and current portion

## COMPARISON OF THE YEARS ENDED DECEMBER 31, 2010 AND 2009

### *Consolidated statements of earnings*

For the year ended December 31, 2010 revenues were of \$109,000 compared to no revenue for the year ended December 31, 2009. Revenues in 2010 were generated by the successful completion of the proof of concept contract with the United States Army Research, Development and Engineering Command for \$34,000 and from the contract signed with the Infectious Disease Research Institute (IDRI) for \$75,000.

Research and development (R&D) expenses increased by \$5,448,000 to \$13,365,000 for the year ended December 31, 2010, compared to 2009. The increase in R&D expenses is mainly related to the Phase II study on its H5N1 pandemic influenza VLP vaccine and the upcoming phase I study for its seasonal vaccine in 2011. Wage and salaries were higher (\$1,621,000) for the year ended December 31, 2010, compared to 2009 explained by hiring in the second-half of 2009 and since the beginning of 2010 of new employees required for the preparation and the production of clinical materials for the two clinical studies. More laboratory supplies and analysis (\$1,526,000) and a higher level of outsourced contract work (\$1,945,000) were also required to perform these activities. Outsourced contract work increased as the result of the final payments related to phase I clinical trial for the H5N1 pandemic influenza vaccine at the beginning of the year, work for the development of the VLPEXpress, pre-clinical and clinical studies of the Phase II for the H5N1 pandemic influenza vaccine and pre-clinical work for the seasonal vaccine.

Research grants and contribution increased by \$684,000 for the year ended December 31, 2010 to \$1,036,000. The increase is mainly explained by the grant from Quebec's Consortium for Drug Discovery (CQDM) that was obtained in the second quarter of 2009. Grant from the CQDM totaled \$1,773,000 of which \$652,000 is still available as of December 31, 2010.

Research and development tax credits were of \$1,328,000 for the year ended December 31, 2010, \$659,000 higher than for the year ended December 31, 2009. Since December 2009, the Company is no longer deemed associated with Philip Morris International for tax purposes which resulted in an increase of the tax credit rate at the provincial level from 17.5% to 37.5% on the first \$3M of eligible R&D expenses, explaining this increase in 2010.

General and administrative, business development and intellectual property (G&A) expenses increased by \$533,000 to \$4,340,000 for the year ended December 31, 2010 compared to 2009. This increase is mainly explained by the fees paid for the graduation of the company from the TSX-V to the TSX (\$128,000), increased fees for patents and licences (\$208,000) and increased business development activities.

Depreciation of property, plant and equipment were of \$407,000 for the year ended December 31, 2010, \$57,000 lower than the year ended December 31, 2009. This decrease is explained by the fact that the Company reviewed its accounting estimates as to the useful lives of certain classes of assets. This review led to changes in the depreciation methods used as they relate to the consumption pattern and the useful lives of assets. The changes were made to better reflect the assets' useful lives taking into account the experience gained by the Company in operating and using its property, plant and equipment. This change in accounting estimates reduced the depreciation by a total amount of \$487,000 in 2010.

Amortization of intangible assets amounted to \$90,000 for the year ended December 31, 2010 an increase of \$30,000 over 2009 explained by more capitalized costs for patents in 2010 compared to 2009.

Net financial expenses amounted to \$1,085,000 for the year ended December 31, 2010, \$161,000 higher compared to the year ended December 31, 2009. This increase is mainly explained by lower interest income (\$159,000) result of a decrease in cash and short-term investments and lower interest rates in 2010.

Future income taxes amounted to \$1,075,000 for the year ended December 31, 2010. The expiration of warrants in the last quarter of 2010 created a capital gain for the Company. This taxable capital gain was applied against accumulated losses and future income taxes resulting from it were recognized in the Consolidated Statements of Earnings and Comprehensive loss. The taxes related to this capital gain are presented in the Contributed surplus.

Consolidated loss for the year ended December 31, 2010 was \$16,344,000, or \$0.13 per basic and diluted share compared to a loss of \$12,475,000, or \$0.13 per basic and diluted share for the year ended December 31, 2009.

#### *Consolidated Balance Sheet*

Cash and short-term investments were of \$8.5 Million as at December 31, 2010 a decrease of \$5.8 Million from December 31, 2009. This decrease is mainly the result of the loss for the year net of items not affecting cash and cash equivalents for \$16,184,000 and additions to property, plant and equipment and intangible assets (\$2,454,000) that were offset by the issuance of 18,518,520 units totaling \$7,500,000 and the first DARPA milestone payment (\$6,871,000).

Total consolidated assets were of \$21.3 Million as at December 31, 2010, a decrease of \$1.5 Million since December 31, 2009.

Long-term debt increased by \$0.2 Million to \$15.7 Million, mainly the result of the theoretical interest on non-bearing interest loans.

#### **QUARTERLY FINANCIAL DATA**

	<b>Quarters ended</b>			
	<b>December 31, 2010</b>	<b>September 30, 2010</b>	<b>June 30, 2010</b>	<b>March 31, 2010</b>
Revenues	75,000	-	-	34,000
Total expenses including future income taxes	(\$4,643,000)	(\$4,104,000)	(\$3,963,000)	(\$3,743,000)
Loss	(\$4,568,000)	(\$4,104,000)	(\$3,963,000)	(\$3,709,000)

Basic and diluted net loss per share	(\$0.04)	(\$0.03)	(\$0.03)	(\$0.03)
	<b>December 31, 2009</b>	<b>September 30, 2009</b>	<b>June 30, 2009</b>	<b>March 31, 2009</b>
Revenues	-	-	-	-
Total expenses	(\$3,893,000)	(\$3,163,000)	(\$2,794,000)	(\$2,625,000)
Loss	(\$3,893,000)	(\$3,163,000)	(\$2,794,000)	(\$2,625,000)
Basic and diluted net loss per share	(\$0.04)	(\$0.03)	(\$0.03)	(\$0.04)

Revenues from quarter to quarter may vary significantly. They are non-recurring by nature and are generated by license agreements as well as contract research agreements. It is also important to note that historical patterns of expenses cannot be taken as an indication of future expenses. The amount and timing of expenses and availability of capital resources vary substantially from quarter to quarter, depending on the level of R&D activities being undertaken at any time and the availability of funding from investors or partners.

The evolution in the stage of development of the Company from research to preclinical and clinical development for its H5N1 Avian Influenza VLP vaccine, the development of the cGMP process and the production of clinical materials for the Phase I in 2009 and Phase II in 2010, the pre-clinical studies for its H1N1/seasonal vaccine and the production of Phase I materials in the fourth quarter of 2010 explain the increase in expenses. Wage and salaries increased in 2009 and 2010 explained by the hiring of new employees in the second half of 2009 and since the beginning of 2010 required by preclinical and clinical work related to the clinical development of both vaccines (H5N1 Avian Influenza VLP vaccine and H1N1/seasonal vaccine). More laboratory supplies and analysis and additional outsourced contract work were also required to perform these activities.

#### **FOURTH QUARTER RESULTS**

For the fourth quarter ended December 31, 2010, the loss increased by \$675,000 to \$4,568,000 compared to \$3,893,000 for the fourth quarter of 2009. The increase is mainly explained by higher R&D expenses for \$1,776,000 and higher general and administrative, business development and intellectual property (G&A, BD and IP) for \$281,000 partly offset by future income taxes for \$1,075,000.

The increase in R&D expenses of \$1,776,000 for the quarter ended December 31, 2010 compared to 2009 is related to the production of Phase II clinical materials and the outsourced contract work of the phase II clinical study for the H5N1 Avian Influenza VLP vaccine, the preclinical studies and the production of Phase I clinical materials and the outsourced contract work for the H1N1/seasonal vaccine. Wage and salaries were higher (\$502,000) in 2010 compared to 2009 explained by hiring in the second-half of 2009 and since the beginning of 2010 of new employees required by preclinical and clinical work related to the clinical development of both vaccines (H5N1 Avian Influenza VLP vaccine and H1N1/seasonal vaccine). More laboratory supplies and external analysis (\$411,000), and additional outsourced contract work (\$768,000) were also required to perform these activities.

The increase in G&A, BD and IP is explained by increased fees for patents and licenses (\$253,000) in the quarter. Many patents are in National phase and this explains the increase.

Future income taxes amounted to \$1,075,000 in the quarter ended December 31, 2010. The expiration of warrants in the last quarter of 2010 created a capital gain for the Company. This taxable capital gain was applied against accumulated losses and future income taxes resulting from it were recognized in the Consolidated Statements of Earnings and Comprehensive loss. The taxes related to this capital gain are presented in the Contributed surplus.

#### **LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES**

The Company had cash and short-term investments totaling \$8.5 Million as at December 31, 2010, a decrease of \$5.8 Million from December 31, 2009. The Company had working capital of 1.7 Million as at December 31, 2010 compared to \$13.6 Million as at December 31, 2009. The short-term investments do not include asset-backed commercial papers which are affected by liquidity issues. As at December, 2010, the Company's long-term debt amounted to \$15.7 Million. Under the terms of the Bio-Levier loan agreement, the Company needs to maintain its current ratio at 1.3/1 or higher. Deferred grants on research agreements are excluded from the calculation of the current ratio. As at December 31, 2010 this ratio was at 3.2:1.

The Company's primary capital needs are the funds required to support its scientific research and development activities including preclinical and clinical trials, capital expenditures for the US facility and working capital. Medicago expects expenses to increase in 2011 as the Company will continue to advance its programs. Management believes that existing capital resources combined with the financing announced on March 25, 2011, the DARPA grant and the Equity line of credit of \$10,000,000 (see note 13 of the financial statements) in place are adequate to fund our plans at least for the next twelve months.

Since its inception, the Company has financed its cash requirements primarily through issuances of securities, Research and development tax credits, government funding, cost recoveries, license agreement, contract research agreements, long-term debt and short-term debt guaranteed by its Research and development tax credits. The strategy of the Company for future funding is to find additional capital after a successful completion of the Phase II trial for its H5N1 pandemic influenza VLP vaccine. The amount of additional capital needed will depend on the cash on hand at that time and funds necessary to conduct its clinical programs for the vaccines in development. Management anticipates funding additional capital requirements primarily either through additional issuance of securities or the potential monetization of the Company's products. (See section *RISK AND UNCERTAINTIES- Additional Financing Requirements and Access to Capital* of the Annual Information Form)

The variation of our liquidity by activities is explained below.

#### CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>Cash flows</i>	Year ended December 31	
	2010	2009
Operating activities	<b>(\$10,442,000)</b>	(\$10,841,000)
Financing activities	<b>\$7,442,000</b>	\$12,607,000
Investing activities	<b>\$6,237,000</b>	(\$2,629,000)
Effect of changes in foreign exchange rates	<b>(\$49,000)</b>	-
Net change in cash	<b>\$3,188,000</b>	(\$863,000)

##### *Operating Activities*

Cash used in operating activities decreased by \$399,000 to \$10,442,000 for the year ended December 31, 2010 compared to 2009. This decrease is mainly explained by the change in non-cash working capital items for \$5,742,000 described in note 16a) of the financial statements. This was partly offset by the increase in loss, net of items not affecting cash and cash equivalents (or burn rate) for \$4,869,000 for the year ended December 31, 2011.

##### *Financing Activities*

Cash from financing activities decreased by \$5,165,000 to \$7,442,000 for the year ended December 31, 2010 compared to 2009. In 2009 the Company completed one public offering issuing 16,100,000 at 0.72 cents per unit for gross proceeds of \$11,592,000 and 8,346,750 warrants totaling \$2,363,000 were exercised. In comparison for 2010, the Company issued 18,518,520 units at a price of 40.5 cents per unit, representing gross proceeds of \$7.5 Million. 3,443,500 warrants to acquire common shares were exercised for proceeds of \$861,000.

##### *Investing Activities*

Cash used in investing activities (excluding additions and disposal of short-term investments and security deposit) increased by \$866,000 to \$2,454,000 for the year ended December 31, 2010, related to more additions of property, plant and equipment for \$470,000, and intangible assets for \$396,000.

The Company had planned to invest \$0.6 Million in property, plant and equipment in 2011 at its Canadian manufacturing activities and \$13.3M at its US facility under the DARPA contract. Most of this amount is covered by the DARPA grant.

*Use of proceeds of the public offering completed in December 2009*

The following table provides information concerning the use of proceeds resulting from the public offering completed in December 2009.

<b>USE OF PROCEEDS</b>	<b>From April 1, 2010 through December 31, 2010</b>	<b>Per Prospectus</b>
Clinical development of the Company's H5N1 VLP pandemic vaccines and other vaccines	\$7,072,000	\$7,072,000
General corporate and working capital puposes	\$3,483,000	\$3,483,000
Total	\$10,555,000	\$10,555,000

*Use of proceeds of the public offering completed in August 2010*

The Company completed a public offering with net proceeds of \$6,787,500 in August 2010 and the following table provides information concerning the use of proceeds resulting from this offering.

<b>USE OF PROCEEDS</b>	<b>From August 19, 2010 through December 31, 2010</b>	<b>Per Prospectus</b>
Cost sharing program with DARPA	\$841,000	\$5,500,000
General corporate and working capital purposes	-	\$1,287,500
Total	\$841,000	\$6,787,500

## **CONTRACTUAL OBLIGATIONS**

The Company has certain contractual obligations and commercial commitments. The following table indicates the Company's cash requirements to comply with these obligations:

Minimum payments under the Company's contractual obligations are as follows as at December 31, 2011:

\$	2011	2012	2013	2014	2015	Thereafter	Total
Accounts payable	3,243,142						3,243,142
Bank loans	600,000						600,000
Long-term debt	72,538	66,512	67,143	15,326,484	1,045	834,635	16,368,357
Licenses	152,000	152,000	152,000	152,000	152,000	150,000	910,000
Operating leases	997,554	1,692,554	1,645,110	1,533,672	1,490,000	18,679,000	26,037,890

## **OUTLOOK FOR 2011**

We expect R&D expenses to increase in 2011 compared to 2010 to support the following activities:

- Initiation of U.S. Phase I and results of clinical trial with H1N1 vaccine / seasonal vaccine
- Phase II final results with H5N1 vaccine
- Completion of the construction of the U.S. commercial grade facility
- Initiate U.S. Phase II clinical trial with trivalent seasonal vaccine in the fourth quarter
- Potential contracts (government, pharmaceutical companies)
- Addition of new pipeline candidates (Vaccines, Biosimilar enzymes)

Our expectations are that the cash outflow will not proceed linearly through the year but will be higher in the second half of the year due to cost associated with clinical studies and the performance under the DARPA project.

## **RELATED PARTY TRANSACTIONS AND OFF-BALANCE SHEET AGREEMENTS**

There were no related party transactions or off-balance sheet agreements.

## **OUTSTANDING SHARE DATA**

As at March 29, 2011, there were 138,922,102 common shares issued and outstanding, 8,725,046 stock options outstanding, 1,203,704 compensation options and 16,159,586 warrants outstanding.

## **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles. The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts of assets and liabilities reported in the financial statements. Those estimates and assumptions also affect the disclosure of contingencies at the date of the financial statements and the reported amounts of revenues and expenses during the year. Significant estimates are generally made in connection with the calculation of revenues, research and development expenses, stock-based compensation expense, as well as in determining future income tax assets and liabilities, the useful lives of property, plant and equipment and intangible assets with finite lives and the valuation of intangible assets, the fair value of stock options granted, and certain accrued liabilities. Estimates are based on historical experience, where relevant, and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ from those estimates.

The following summarizes our critical accounting policies and other policies that require the most significant judgement and estimates in the preparation of our consolidated financial statements.

### **Foreign currency translation**

#### *Foreign subsidiary*

Medicago USA Inc., the Company's subsidiary, is considered to be a self-sustaining foreign entity. As a result, this foreign subsidiary's accounts are translated into Canadian dollars using the current rate method. Under this method, assets and liabilities denominated in foreign currencies are translated at the exchange rate in effect at the balance sheet date. Revenues and expenses are translated at the average exchange rate for the year. Exchange gains or losses resulting from translation are reflected in the statement of accumulated other comprehensive income.

#### *Foreign currency transactions*

Transactions denominated in foreign currencies are translated into Canadian dollars as follows: monetary assets and liabilities are translated at the exchange rate in effect at the balance sheet date and revenues and expenses are translated at the average exchange rate for the year. Non-monetary assets and liabilities are translated at historical rates. Exchange gains or losses resulting from translation are reflected in the statements of earnings.

## **Impairment of long-lived assets**

Long-lived assets are reviewed for impairment when events or circumstances indicate that costs may not be recoverable. Impairment exists when the carrying value of the asset is greater than the pre-tax undiscounted future cash flows expected to be provided by the asset. The amount of impairment loss, if any, is the excess of the carrying value of the asset over its fair value.

## **Income taxes**

The Company follows the liability method of accounting for income taxes. Under this method, future income tax assets and liabilities are determined based on deductible or taxable temporary differences between the carrying amounts and tax bases of the assets and liabilities. Changes in the future income tax assets or liabilities are included in the statements of earnings. Future income tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to be in effect for the year in which the differences are expected to reverse.

The Company establishes a valuation allowance against future income tax assets if, based on available information, it is more likely than not that some or all of the future income tax assets will not be realized.

## **Research and development costs**

All expenses related to development activities, which do not meet generally accepted criteria for deferral, and research activities are expensed as incurred. Development expenses which meet generally accepted criteria for deferral are capitalized and amortized against earnings over the estimated period of benefit. As at December 31, 2010 and 2009, no development costs have been deferred.

## **Research and development tax credits and grants**

The Company is entitled to scientific research and experimental development ("SR&ED") tax credits granted by the Canadian federal government and the government of the Province of Québec.

SR&ED tax credits and grants are accounted for using the cost reduction method. Accordingly, tax credits and grants are recorded as a reduction of the related expenses or capital expenditures in the year in which those expenses are incurred, provided there is reasonable assurance that the credits and grants will be realized.

## **Revenue recognition**

Revenues related to research agreements are bound to milestone agreements and are recorded as the milestones are reached and upon customer acceptance. Under these agreements, the payments received in advance are recognized as deferred revenue in the balance sheet and then, as revenue when milestones are reached and upon customer acceptance. Revenue from research agreements are recognized using the percentage-of-completion method.

The existing licensing agreement usually foresees one-time payment (upfront payment) and milestone payments. Revenues associated with those multiple-element arrangements are allocated to the various elements based on their relative fair value. Agreements containing multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered obligation(s). The consideration received is allocated among the separate units based on each unit's fair value or using the residual method, and the applicable revenue recognition criteria are applied to each of the separate units.

License fees representing non-refundable payments received upon the execution of license agreements are recognized as revenue upon execution of the license agreements when the Company has no significant future performance obligations and collectability of the fees is assured. Upfront payments received at the beginning of licensing agreements are not recorded as revenue when received but are amortized based on the progress to the related research and development work. This progress is based on estimates of total expected time or duration to complete the work which is compared to the period of time incurred to date in order to arrive at an estimate of the percentage of revenue earned to date.

## **Stock-based compensation and other stock-based payments**

The company has a stock option plan which is described in note 14 of the financial statements. The fair value of stock options is determined using the Black-Scholes option pricing model and stock-based compensation costs are recognized over the vesting period of the options and are recorded in Shareholders' Equity under caption "Other equity components". Any consideration received by the company on the exercise of stock options and the carrying value of those stock options are recorded in Shareholders' Equity under caption "Share capital" upon the issuance of shares.

## **NEW ACCOUNTING STANDARDS AND FUTURE ACCOUNTING CHANGES**

### **Future accounting changes**

The Company will cease to prepare its financial statements in accordance with Canadian GAAP as set out in Part V of the CICA Handbook - Accounting ("Canadian GAAP") for the periods beginning on January 1, 2011 when it will start to apply International Financial Reporting Standards as published by the International Accounting Standards Board as set out in Part I of the CICA Handbook – Accounting as its primary basis of accounting. Consequently, future accounting changes to Canadian GAAP are not discussed in these financial statements as they will never be applied by the Company.

### **International Financial Reporting Standards**

In February 2008, the Canadian Accounting Standards Board ("AcSB") announced that Canadian public issuers will be required to report under IFRS, which will replace the Canadian GAAP for years beginning on or after January 1, 2011. The conversion to IFRS will be required for the Company, for interim and annual financial statements beginning on January 1, 2011 and will require the restatement for comparative figures. IFRS uses a conceptual framework similar to Canadian GAAP, but there are significant differences on recognition, measurement, presentation and disclosures.

The Company has developed a changeover plan which includes the following three phases and sets out activities to be performed in each phase over the life of the project:

- *Phase 1 - Diagnosis phase:* In 2009, the Company completed the diagnosis phase for the adoption of IFRS. The diagnosis has identified the main differences between the accounting treatments applied by the Company under Canadian GAAP and the IFRS as well as the practical implications related to the measure. The differences were further classified according to their degree of complexity and by the amount of work to implement with respect to the measure;
- *Phase 2 - Evaluation and design phase:* In the last quarter, the Company almost completed the evaluation and design phase. The Company evaluated and documented the existing differences between IFRS and Canadian GAAP in accounting and disclosure requirements, the selection of accounting policies under IFRS, including the consideration of options available under IFRS, the integration of the effects related to the conversion on internal controls, accounting systems and other business processes, and the planning of training programs to help employees concerned for the transition and the continued compliance with IFRS;
- *Phase 3 - Implementation phase:* This phase will involve the implementation of all changes approved in the evaluation and design phase and will culminate in the preparation of the Company's financial reporting under IFRS.

The Company's adoption of IFRS will require the application of IFRS-1 *First-time adoption of International Financial Reporting Standard* ("IFRS 1") which provides guidance for an entity's initial adoption of IFRS. IFRS 1 generally requires that an entity apply all IFRS effective at the end of its first IFRS reporting period retrospectively, with specific mandatory exemptions and a limited number of optional exemptions. The following are IFRS 1 exemptions that the Company will elect on transition date:

- **Fixed assets:** The adopter has the option to elect fair value at the date of the transition as the deemed cost for its fixed assets. The Company will not utilize this election.
- **Financial instruments:** The adopter has the option to change the designation of previously recognized financial instruments if certain conditions are met. The Company will keep the same classification of its financial instruments.

The adoption of IFRS will result in some changes to the Company's accounting policies. The following provides a summary of the Company's evaluation to date of potential changes to accounting policies in key areas based on the current standards and guidance

within IFRS. This is not intended to be a complete list of areas where the adoption of IFRS will require a change in accounting policies, but to highlight the areas that the Company has identified as having the most potential for a significant change.

➤ **IFRS 2, Share-based Payments (IFRS 2)**

Under IFRS, when stock option awards vest gradually, each tranche is to be considered as a separate award, while under Canadian GAAP, companies can make a policy choice to consider gradually vested tranches as a single award. Similarly, the IFRS standard requires that forfeiture estimates be established at the time of the initial fair value assessment of share-based payments rather than to account for the forfeitures as they occur. Therefore, the compensation expense will have to be recognized over the expected term of each tranche and take into account the impact of the differences in accounting for forfeitures. The Company is in the process of reevaluating all of its policies.

➤ **Property, plant and equipment (IAS 16)**

Under IFRS, the Company can elect to measure fixed assets using either the cost model or the revaluation model. Canadian GAAP only accepts the cost model. The Company reviewed all of its depreciation policies. Net book value and depreciation expenses will not be different under IFRS.

➤ **Impairment of assets (IAS 36)**

IFRS, like Canadian GAAP, requires an assessment at each reporting date as to whether there are indicators of impairment of assets. The factors considered under IFRS are quite similar to Canadian GAAP, but there are some differences. IFRS requires a write down of assets if the higher of fair value and the value in use of a group of assets is less than its carrying value. Value in use is determined using discounted estimated future cash flows. Current Canadian GAAP requires a write down to estimated fair value only if the undiscounted estimated future cash flows of a group of assets are less than their carrying value.

The Company's accounting policies related to impairment of assets will be changed to reflect these differences; however, the Company does not expect these changes to have an immediate impact on the carrying value of its assets.

➤ **IAS 1, Presentation of Financial Statement (IAS 1)**

Financial statement presentation is addressed in conjunction with the related IFRS standards. Certain additional disclosures will be required in the notes to the financial statements and the statement of operations will be modified to reflect either a presentation by nature or by function. The Company is currently working on preliminary IFRS financial statements in accordance with IAS 1, Presentation of Financial Statements.

➤ **Other Standards**

Based on the results of the comparative analysis of the current IFRS with Canadian GAAP, the Company has also completed its assessment of the following standards and determined that, other than enhanced disclosures, no material adjustments would result regarding:

- Provisions, contingent liabilities and contingent assets
- Intangible assets
- Leases
- Income taxes
- Revenue recognition

In the current year, the Company will finalize phase 2 and work on phase 3. Since phase 2 has not been completed as of December 31, 2010, other accounting impacts may be found.

The Company will also continue to monitor standards, which may affect the Company's financial statements in future years.

## **RISK FACTORS AND UNCERTAINTIES**

There are a number of risks that prospective investors should consider before investing in the securities of Medicago, including, but not necessarily limited to, those risks highlighted in this Annual Information Form and in the Company's management's

discussion and analysis of the financial condition and results of operations from time to time. When securities of Medicago are in the course of distribution pursuant to a prospectus or similar public disclosure document, such document will also contain a description of the risks associated with investing in the securities of Medicago which may complement or supersede the disclosure contained herein. Any additional risk factors contained in such future prospectus or similar public disclosure document should be deemed to form part of the Annual Information Form. Investors should consider the entirety of such disclosure, as applicable, before investing in Medicago's securities.

#### *Additional Financing Requirements and Access to Capital*

The Company requires significant additional funds for further research and development, planned clinical trials, regulatory approvals, establishment of pilot scale and commercial manufacturing capabilities and the marketing of its products and product candidates. Medicago has no committed sources of capital. An attempt may be made to raise additional funds for the aforementioned purposes through public or private equity or debt financing, and collaborations with other companies, or financing from other sources may be undertaken. There can be no assurance that additional funding will be available at reasonable terms or at all. Any future equity financing may be dilutive to existing shareholders. If Medicago cannot obtain adequate funding on reasonable terms, it may need to: terminate or delay clinical trials for its product candidates; delay its establishment of sales or marketing capabilities; curtail significant product development programs that are designed to identify new product candidates; and sell or assign rights to its technologies, products or product candidates. The Company's ability to sell or monetize its technologies or products or the terms at which it could do so could be limited by the terms of existing agreements, including the right of first refusal of PMP on the Company's technology platform.

#### *Termination of Technology Investment Agreement*

The Technology Investment Agreement may be terminated at any time by DARPA at the discretion of DARPA. Although, the agreement provides that DARPA and Medicago USA shall negotiate in good faith a reasonable and timely adjustment of all outstanding issues as a result of termination, there can be no assurance that such adjustment will sufficiently compensate Medicago USA. Furthermore, the Technology Investment Agreement provides that DARPA's liability may not exceed the level of funds allotted to the agreement at the time of the agreement. The termination of the Technology Investment Agreement could be materially adverse to us.

#### *Obligations under the New Facility Agreement not Contingent upon Successful Completion of Research Program with DARPA*

There is no guarantee that Medicago USA will successfully achieve all of the milestones under the Technology Investment Agreement, including the final report confirming proof of concept, or, if all of them are achieved, that we will generate additional revenues. We have no commitments from DARPA relating to further funding awards or from any person regarding the purchase of our vaccine candidates. Moreover, Medicago USA's obligations under the New Facility Lease Agreement are not contingent upon the successful completion of the research program with DARPA. Accordingly, Medicago USA will remain bound by such obligations, including payment of the rent during the term of the lease, and by the obligations Medicago USA will incur to operate and maintain the New Facility.

#### *Construction or Operational Delays*

The New Facility Lease Agreement provides that Landlord will construct the New Facility and will use reasonable best efforts to deliver the New Facility by the end of August 2011. While we have no knowledge of any events or circumstances that could hinder the schedule for the completion of the design, engineering and construction of our New Facility, there is a risk that the project may experience delays, interruption of operations or increased costs due to many factors, including, without limitation: weather and seasonal factors affecting construction projects generally; delays in obtaining, or conditions imposed by, regulatory approvals; design errors; non-performance by third party contractors; increases in materials, equipment or labour costs; construction performance falling below expected levels of output or efficiency; events of force majeure that relieve Landlord from its contractual obligations; breakdown or failure of equipment or processes; contractor or operator errors; labour disputes, disruptions or declines in productivity; inability to attract sufficient numbers of qualified workers; changes in project scope; violation of permit requirements; and major incidents and/or catastrophic events such as fires, explosions, earthquakes or storms. Any such delays, interruption of operations or increased costs could be materially adverse to us and ultimately affect the achievement of our milestones in the Technology Investment Agreement or lead DARPA to terminate the Technology Investment Agreement.

#### *Cost Overruns*

Pursuant to the New Facility Lease Agreement, Landlord has granted Medicago USA a construction allowance of US\$13.5 Million. Any construction or other cost overruns are borne by Medicago USA. Although the current estimate of the total construction costs does not exceed US\$13.5 Million, construction and other cost overruns can occur. Cost overruns in connection with the New Facility are possible due to change orders approved by us, delays in completion of the New Facility, delays caused by us, and various other factors including natural disasters, destruction of the New Facility by fires or other hazards and the inability to obtain materials or labour or other factors. Cost overruns are also possible for the finishing of the premises for Medicago USA's use and occupancy, as they are not covered by the undertaking of the Landlord under the New Facility Lease Agreement. Cost overruns could cause substantial delays in the commencement of operations at our New Facility, may have a material adverse impact on the achievement of milestones by Medicago USA in the Technology Investment Agreement, and could ultimately lead to the termination of the Technology Investment Agreement.

#### *Credit Risk*

Any breach of Landlord's obligations under the New Facility Lease Agreement could be materially adverse to us and ultimately affect the achievement of our milestones in the Technology Investment Agreement. The likelihood that Medicago USA can seek compensation from Landlord as a result of a breach of its obligations will depend on the financial health of the Landlord and its creditworthiness. In addition, no obligation of the Landlord towards Medicago USA is secured and the Landlord may mortgage the New Facility as owner thereof. Therefore, if the Landlord becomes bankrupt, liquidates its assets, reorganizes or enters into certain other transactions, the Landlord's assets will be available to pay its unsecured obligations, including its obligations under the New Facility Lease Agreement only after it has paid all of its senior and secured indebtedness in full. There may be insufficient assets remaining following such payments to pay amounts due to satisfy its obligations under the New Lease Agreement.

#### *Rights of DARPA with respect to Subject Invention*

Under the Technology Investment Agreement, DARPA benefits from certain march-in rights with respect to any Subject Invention in certain circumstances, including if DARPA determines that such action is necessary to alleviate health or safety needs or meet requirements for public use if such needs or requirements are not reasonably satisfied by Medicago USA. In addition, Medicago USA has granted a non-exclusive paid-up license to DARPA to practice or have practiced on behalf of the United States throughout the world any Subject Invention. Should DARPA exercise its march-in rights, Medicago USA shall have the obligation to grant a non-exclusive license to a responsible applicant upon terms that are reasonable in the circumstances. There can be no assurance that the terms of this license will be satisfactory to us or that they will protect adequately our commercial interests. Medicago USA has no control over the decision of DARPA to exercise its rights under any aforementioned licenses nor the practical usage made thereunder. To the extent that the use includes the production of vaccines on a large scale, it may adversely impact the competitive environment in our market and could materially adversely affect our competitiveness or have a material adverse effect on our ability to generate revenues.

#### *Recent market events and conditions*

In 2007, 2008 and into 2009, the U.S. credit markets began to experience serious disruption due to a deterioration in residential property values, defaults and delinquencies in the residential mortgage market (particularly, sub-prime and non-prime mortgages) and a decline in the credit quality of mortgage backed securities. These problems led to a slow-down in residential housing market transactions, declining housing prices, delinquencies in non-mortgage consumer credit and a general decline in consumer confidence. These conditions continued and worsened in 2008 and early 2009, causing a loss of confidence in the broader U.S. and global credit and financial markets and resulting in the collapse of, and government intervention in, major banks, financial institutions and insurers and creating a climate of greater volatility, less liquidity, widening of credit spreads, a lack of price transparency, increased credit losses and tighter credit conditions. Notwithstanding various actions by the U.S. and foreign governments, concerns about the general condition of the capital markets, financial instruments, banks, investment banks, insurers and other financial institutions caused the broader credit markets to further deteriorate and stock markets to decline substantially. In addition, general economic indicators have deteriorated, including declining consumer sentiment, increased unemployment and declining economic growth and uncertainty about corporate earnings.

These unprecedented disruptions in the current credit and financial markets have had a significant material adverse impact on a number of financial institutions and have limited access to capital and credit for many companies. These disruptions could, among other things, make it more difficult for the Company to obtain, or increase its cost of obtaining, capital and financing for its operations. The Company's access to additional capital may not be available on terms acceptable to it or at all.

### *Stage of Development*

Medicago is still in development and still has a short operating history. The Company's product candidates or third-party products will require additional development and investments to move through commercialization and it is not certain that these products will be produced at reasonable cost and quality or be successfully marketed. It is not known whether the Company's investment in such products or product candidates will be recovered through sales or royalties.

Since the Company's more advanced products are in clinical development, the Company still has not fully demonstrated efficacy in humans for any of the Company's produced proteins or received any regulatory market approval. It is not known whether the Company will meet applicable health regulatory standards and obtain the required regulatory approvals for its actual products or product candidates.

Currently, the Company's ability to produce a commercial quantity of its products and product candidates has not been tested and the Company still does not have the manufacturing capacity to produce at such a commercial level. Additional investments will be required to build the manufacturing capacity to meet the market needs and these scale-up operations may change the Company's cost structure that may affect some of its platform benefits or lower capital costs and lower the cost of goods sold.

The Company is still several years away from commercialization and it may encounter unforeseen difficulties or delays in its operations and it is possible that competitors may develop alternative production methods which could reduce the Company's competitive advantages.

### *Medicago is highly dependant on the success of its lead product, its H5N1 vaccine candidate*

Medicago depends heavily on the success of its lead product, its H5N1 vaccine candidate. Medicago has invested a significant portion of its financial resources in the development of this lead product and anticipates that in the near term, its ability to generate significant revenues will depend primarily on the successful development and commercialization of this product. Although Medicago has other technologies and products under development, they are at an earlier stage of development.

### *History of Operating Losses*

As at the present date, the Company has not recorded any revenues from the sale of products or product candidates. The Company has an accumulated deficit, since its inception through December 31, 2010 of \$72,738,849. Losses could increase in the near term as the Company continues its product development and, in the case of pharmaceutical proteins, seeks regulatory approval for the sale of its product candidates. Operating losses are expected to be incurred until such time as product sales and royalty payments are sufficient to generate revenues to fund its continuing operations. Quarter-to-quarter fluctuations in revenues, expenses and losses are also expected. Medicago may never achieve profitability. Even if it achieves profitability, it may not be able to maintain profitability on an annual or quarterly basis. Medicago's failure to become and remain profitable would depress the market price of its common shares and could impair its ability to raise capital, expand its business, expand its product pipeline or continue its operations.

### *Regulation of Drug and Product Approval*

Potential purchasers should be aware of the risks, problems, delays, expenses and difficulties which the Company may encounter in light of the extensive regulatory environment in which its business is carried on. Numerous statutes and regulations govern the manufacture and sale of human therapeutic products in Canada, the United States and other countries, the intended markets for the Company's products and product candidates. Such legislation and regulation bears upon the approval of manufacturing facilities, testing procedures and controlled research, preclinical and clinical data prior to marketing approval, including adherence to cGMP standards during production and storage, as well as regulation of marketing activities, including advertising and labelling. For example, the conditions of Health Canada on the manufacture of the Company's H5N1 vaccine candidate include compliance with cGMP standards. While the Company believes it is compliant with such cGMP standards, this will have to be ascertained to Health Canada's satisfaction as part of the regulatory approval process. To the extent additional work is required in this connection, the estimated timing and costs for the development of its products may be adversely impacted.

Many of the products, product candidates and processes that the Company is currently developing require significant development, testing and the investment of significant funds prior to their commercialization. There can be no assurance that any of such products, product candidates or processes will actually be developed to a commercial level.

Before obtaining regulatory clearance for the commercial sale of any of the Company's pharmaceutical product candidates, the Company must demonstrate through preclinical studies and clinical trials that the potential product candidate is safe and efficacious for use in humans for each target indication. The results from preclinical studies and early clinical trials may not be predictive of results that will be obtained in large-scale testing, and there can be no assurance that the Company's clinical trials will demonstrate sufficient safety for an Investigational New Drug Application (the documentation submitted to the Food and Drug Administration (the "FDA") to obtain approval to test drug on patients) or subsequent phases or steps in human trials even after preclinical testing and/or human data is submitted. The failure to adequately demonstrate the safety and efficacy of a product candidate under development could delay or prevent regulatory clearance of the potential product candidate and would have a material adverse effect on the Company's success.

Any drug is likely to produce some toxicity or undesirable side effects in animals and in humans when administered as a monotherapy or in combination with other drugs. There can be no assurance that unacceptable toxicity, adverse events or side effects will not occur at any dose level at any time in the course of toxicological studies or of human clinical trials of the Company's potential product candidates as a monotherapy or in combination with other drugs. The appearance of any such unacceptable toxicity, adverse events or side effects in toxicology studies or in clinical trials could cause the Company or regulatory authorities to interrupt, limit, delay or abort the development of any of the Company's product candidates and could ultimately prevent their clearance by Health Canada, the FDA or other regulatory authorities, for any or all targeted indications. There can be no assurance that a phase, component or step of a trial will be successful or safely completed allowing a subsequent phase, step or component of a trial or a trial's design to commence. There is no assurance that Health Canada, the FDA or other regulatory authorities will accept a specific protocol or protocol design regardless of phase, steps or components of a phase. Furthermore, after a trial or phase of a trial has commenced, Health Canada, the FDA or other regulatory authorities could place the trial on clinical hold if Health Canada, the FDA or other regulatory authorities determine a trial or its design may be unsafe or require clarifications regarding protocol design. If the Company is placed on clinical hold, there is no assurance the objections or issues will be overcome or resolved and such trial could be postponed and/or terminated. Even after being cleared by Health Canada, FDA or other regulatory authorities, a product candidate may later be shown to be unsafe or not to have its purported effect, thereby preventing its widespread use or requiring withdrawal from the market. There can be no assurance that any product candidates the Company has developed or will develop will be safe when administered to patients.

The rate of completion of clinical trials in relation to the Company's products will be dependent upon, among other factors, the rate of patient enrolment. Patient enrolment is a function of many factors, including the size of the patient population, the nature of the protocol, competing trials for the same patient population, the proximity of parties to clinical sites, the eligibility criteria for the study and interest of clinical investigators. Delays in planned patient enrolment may result in increased costs, delays or termination of clinical trials, which could have a material adverse effect on the Company's success. In addition, the Company's staff has limited clinical experience and, as a result, will rely on third parties to assist the Company in overseeing and monitoring the clinical trials, which may result in delays in completing clinical trials, or them not being completed at all, if such third parties fail to perform under their agreements with the Company or fail to meet regulatory standards in the performance of their obligations under such agreements. There can be no assurance that the Company will be able to submit a new drug application as scheduled if clinical trials are completed or that any such applications will be reviewed and cleared by Health Canada or FDA in a timely manner or at all.

Also, the statutes, regulations, or policies of Canada, the United States or other countries may change and additional statutes or government regulations or policies may be enacted which could prevent, or impose additional restrictions on the continued marketing of drug products.

#### *Limits and challenges after a regulatory approval*

Even if regulatory approval of a product is granted, the approval may be subject to limitations on the uses for which the product may be marketed or to conditions of approval, which could affect the marketability of the product. Moreover, additional work on a product after regulatory approval at a certain development stage may be required to access the next development stage. This additional work could require significant costs and delay the advancement of the product.

In addition, the terms of approval may contain requirements for costly post-market follow-up studies or post-market surveillance to monitor the safety or efficacy of the product, which could reduce revenues, increase expenses or render the approved product not commercially viable. For example, Health Canada or the FDA could require implementation of a risk management program in

order to monitor the potential abuse, misuse, diversion, or other risks associated with the utilization of a product. Also, regulatory submission is required to contain adequate data to assess the safety and efficacy of the drug for the claimed indication in all relevant pediatric subpopulations. Regulatory authorities may grant waivers and deferrals requests of this requirement or require various post-approval commitments.

If Medicago eventually receives regulatory approval to market a particular product, it will be subject to extensive ongoing regulatory requirements, including requirements relating to registration, manufacturing, labeling, advertising, promotion, adverse event reporting, packaging, distribution, storage, and record keeping. In addition, the manufacturing facilities for such product will be subject to continual review and periodic inspections by regulatory authorities. If Medicago fails to comply with the regulatory requirements of Health Canada, the FDA and other applicable domestic and foreign regulatory authorities, or if previously unknown problems with any approved commercial products, manufacturers or manufacturing processes are discovered, it could be subject to administrative or judicially imposed sanctions or other setbacks.

#### *Potential inability to achieve projected development goals in the time frames announced and expected*

Medicago sets goals for and make public statements regarding its expected timing of meeting the objectives material to its success, such as the commencement and completion of clinical trials, anticipated regulatory approval and product launch dates. The actual timing of these forward looking events can vary dramatically due to factors such as delays or failures in its clinical trials, the need to develop additional data required by regulators as a condition of approval, the uncertainties inherent in the regulatory approval process, delays in achieving manufacturing or marketing arrangements necessary to commercialize its product candidates and failure by its collaborators, marketing and distribution partners, suppliers and other third parties with whom Medicago has contractual arrangements, to fulfill, in whole or in part, their contractual obligations towards it.

#### *Regulation of Genetically Engineered Plants*

The Company must comply with regulations of the United States Department of Agriculture (the “USDA”), the Canadian Food Inspection Agency (the “CFIA”) and other regulatory authorities for outdoor releases of genetically engineered organisms as well as other products designed for use on or with agricultural products. The USDA and the CFIA prohibit growing and transporting genetically modified plants except pursuant to an exemption or under special permits. In order to obtain the required permits, the Company will be required to demonstrate that the Company has satisfactory procedures for the growth of its genetically modified plants and for the control of seed stocks, harvested material, processing facilities, and waste material from such plants. There can be no assurance that permits will be granted to the Company in a timely fashion, if at all. In addition, the conditions to the grant of such permits may be time consuming or expensive for the Company to fulfill. Furthermore, changes in regulations or policies of the USDA, the CFIA and other regulatory authorities regarding the growth and movement or field release of genetically modified plant hosts could adversely affect the Company’s business by increasing the cost of its products and technologies or decreasing consumer demand for those products and technologies or causing governments to prohibit their sale or use. If the Company fails to comply with such rules or policies, it may be subject to financial loss or be liable for costs incurred as a result of non-compliance. To the knowledge of the Company, no regulatory requirement for the outdoor commercial growth of transgenic plants producing pharmaceutical proteins has been promulgated in Canada, the United States or elsewhere.

#### *Rapid Technological Change*

Considering the rapid evolution and the substantial technological change of the industry, there can be no assurance that developments by others will not render the Company’s technologies non-competitive or that the Company will be able to keep pace with technological developments. The Company’s competitors may also have developed or may be developing technologies which could become the basis for competitive products and product candidates. Some of these products and product candidates may prove to be more effective and less costly than the products and product candidates developed or that are being developed by the Company.

#### *Dependence on Key Personnel*

The Company depends on certain members of its management and scientific staff and the loss of services of one or more of said persons could adversely affect the Company. It is necessary for the Company to continue to implement and improve its management systems and to continue to recruit and train new employees in order to manage its growth effectively. In particular, the Company will need to recruit personnel with experience in cGMP manufacturing, drug development and quality control. While the Company has been able to attract and retain skilled and experienced personnel in the past, no assurance can be given that it will be able to do so in the future.

## *Competition*

Technological competition is intense in the industry in which the Company operates. Competition comes from pharmaceutical companies, biotechnology companies and universities as well as companies that participate in each of the non-pharmaceuticals markets the Company is attempting to address with its products and product candidates. Many of the Company's competitors have substantially more financial and technical resources, more extensive research and development capabilities and greater marketing, distribution, production and human resources than the Company. Moreover, competitors may develop products before the Company develops its own products and product candidates and may obtain regulatory approval for such products and product candidates more rapidly than the Company. Products and product candidates and processes which are more effective than those that the Company intends to develop may be developed by the Company's competitors. Research and development by others may render the Company's technology, products and product candidates or processes non-competitive or obsolete.

## *Negative Public Reaction to Genetically Engineered Technology*

Future commercial success of some of the Company's products and product candidates and of the products of some of its partners will depend in part on public acceptance of the use of genetically engineered products and product candidates, including drugs, plants and plant products. Claims that genetically engineered products and product candidates are unsafe for consumption or pose a danger to the environment may influence public attitudes, regardless of their veracity. Negative public reaction to genetically modified organisms and products and product candidates could result in greater government regulation of genetic research and resultant products and product candidates, including stricter labelling requirements, and could cause a decrease in the demand for the Company's products and product candidates, even if such products and product candidates do not result from genetically modified organisms.

## *Patents and Proprietary Rights*

The Company's success depends, in part, on its ability to secure and protect its intellectual property rights and to operate without infringing on the proprietary rights of others or having third parties circumvent the rights owned or licensed by the Company. Applications for patents in Canada, the United States and in other jurisdictions have been filed and the Company is actively pursuing them. The patent positions of pharmaceutical and biotechnology firms, including the Company, are uncertain and involve complex questions of law and fact for which important legal issues remain unresolved. Therefore, it is not clear whether the Company's pending patent applications will result in the issuance of patents or whether the Company will develop additional proprietary products and product candidates which are patentable. Part of the Company's strategy resides on its ability to secure a patent position around the production of a recombinant protein using its Proficia™ technology platform. There is no assurance that the Company will be successful in this approach and failure to secure patent protection may have a material adverse effect upon the Company and its financial condition. Also, the Company may fail in its attempt to commercialize products and product candidates without having to license additional patents, such as patents relating to plant transformation or the use of certain plant specific genetic elements. Moreover, it is not clear whether the patents issued or to be issued to the Company will provide it with any competitive advantages or if any such patents will be the target of challenges by third parties, whether the patents of others will interfere with its ability to market its products and product candidates or whether third parties will circumvent its patents by means of alternate processes. Furthermore, it is possible for others to develop products and product candidates which have the same effect as the Company's products and product candidates or production technologies on an independent basis or to design around technologies patented by the Company.

Patent applications relating to or affecting the Company's business have been filed by a number of pharmaceutical and biotechnology companies and academic institutions. A number of these technologies, applications or patents may conflict with the Company's technologies or patent applications and such conflict could reduce the scope of patent protection which the Company could otherwise obtain or even lead to refusal of its patent applications.

If third parties engage in activities that infringe the Company's proprietary rights, management's focus will be diverted and the Company may incur significant costs in asserting its rights. The Company may not be successful in asserting its proprietary rights, which could result in its patents being held invalid or a court holding that the third party is not infringing the Company's proprietary rights, either or which would harm the Company's competitive position. In addition, there is no assurance that others will not design around the Company's patented technology. Moreover, the Company may have to participate in interference proceedings declared by the U.S. Patent and Trademark Office, European opposition proceedings, or other analogous proceedings in other parts of the world to determine priority of invention and the validity of patent rights granted or applied for, which could result in substantial cost and delay, even if the eventual outcome is favourable to the Company.

There is no assurance that the Company will be able to enter into licensing arrangements on reasonable commercial terms, or develop or obtain alternative technology in respect of patents issued to third parties that incidentally cover its products or production technologies. Any inability to secure licenses or alternative technology could result in delays in the introduction of some of the Company's products or product candidates or even lead to prohibition of the development, manufacture or sale of certain products by the Company. Moreover, the Company could potentially incur substantial legal costs in defending legal actions which allege patent infringement, or by instituting patent infringement suits against others.

It is not possible for the Company to be certain that it is the creator of inventions covered by pending patent applications or that the Company was the first to file patent applications for any such inventions. No assurance can be given that the Company's patents, once issued, would be upheld by a court, or that a competitor's technology or product would be found to infringe on the Company's patents.

In addition, the Company's technology, products and products candidate may include intellectual property of third parties used under license, such as is currently the case with the Company's H5N1 vaccine candidate. The same risks and uncertainties described herein apply to such third parties' intellectual property, and could adversely affect the Company's ability to develop, manufacture or sell products or value its technologies.

Moreover, much of the Company's know-how technology which is not patentable may constitute trade secrets. Therefore, the Company requires its employees, consultants, advisors and collaborators to enter into confidentiality agreements. However, no assurance can be given that such agreements will provide for a meaningful protection of the Company's trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure of information.

#### *Potential Product Liability*

A risk of product liability claims and related negative publicity is inherent in the development of human therapeutic and other products. Product liability insurance is expensive, its availability is limited, and may not be on terms acceptable to the Company, if at all. The commercialization of the Company's potential products and product candidates could be inhibited or prevented by an inability to maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims. A product liability claim against the Company or the withdrawal of a product or product candidates from the market could have a material adverse effect upon the Company and its financial condition.

#### *Unproven Market*

Much of the Company's strategy is based on the belief that the application of its technologies to develop products and product candidates for the markets it is addressing will result in the creation of new, commercially viable products. Notwithstanding the Company's estimated market potential for its products and product candidates, no assurance can be given that these beliefs will prove to be correct owing to, in particular, competition from existing or new products and the yet to be established commercial viability of its products and product candidates.

#### *Market Acceptance*

Even if the Company develops safe and effective products and obtains the necessary regulatory approvals, the process will take years, and by the time this occurs, because of the competitive and dynamic nature of the drug development industry, there is a risk that at such time, any such product:

- will not be economical to market, reimbursable by third party payers, or marketable at prices that will allow the Company to achieve profitability;
- will not be successfully marketed or achieve market acceptance;
- will not be preferable to existing or newly developed products marketed by third parties; or,
- will infringe proprietary rights held by third parties now or in the future that would preclude Medicago from marketing any such product.

The degree of market acceptance of products developed by Medicago, if any, will depend on a number of factors, including the establishment and demonstration in the medical community of the clinical efficacy and safety of the Company's products and their potential advantage over alternative treatment methods. There is no assurance that physicians, patients or the medical community in general will accept and utilize any products that may be developed by the Company.

In addition, by the time the Company's products, if any, are ready to be commercialized, what the Company believes to be the market for these products may have changed. Any estimates referenced herein of the number of patients who have received or

might have been candidates to use a specific product may not accurately reflect the true market or market prices for such products or the extent to which such products, if successfully developed, will actually be used by patients.

The Company's failure to successfully introduce and market its products that are under development would have a material adverse effect on its business, financial condition and results of operations.

#### *Sales, Marketing and Distribution Capabilities*

The Company currently has no sales, marketing or distribution capability. The Company intends to rely primarily on its partners to market its product candidates, if and when approved; however, there can be no assurance that such partners or collaborators have effective marketing, sales and distribution capabilities.

If the Company or its partners are unable to establish or maintain relationships with partners with sales, marketing or distribution capabilities and the Company or its partners are required to market any of the Company's products directly, the Company or its partners will have to develop a marketing and sales force with technical expertise and with supporting distribution capabilities. There can be no assurance that the Company or its partners will be able to establish or maintain such relationships with third parties or develop in-house marketing, sales and distribution capabilities.

#### *Commercial Manufacturing*

The Company has no experience manufacturing commercial quantities of products and does not currently have the resources to commercially manufacture any products that the Company may develop. Accordingly, if the Company becomes successful in developing any product with commercial potential, the Company would either be required to develop the facilities to manufacture independently or secure a contract manufacturer or enter into another arrangement with third parties to manufacture such products. If the Company is unable to develop such capabilities or enter into any such arrangement on favourable terms, the Company may be unable to compete effectively in the marketplace. If the Company is unable to manufacture or contract for a sufficient supply of product on acceptable terms, or if the Company encounters delays or difficulties in its relationships with manufacturers or collaborators, its preclinical, clinical testing and/or product sales could be delayed, thereby delaying the submission of products for regulatory approval and/or market introduction and subsequent sales of such products.

#### *Dependence on Collaborative Partners*

The Company's strategy is to enter into various arrangements for clinical testing, and eventual manufacturing, marketing and commercialization of its products and product candidates. The Company also expects to enter into collaborations for the potential development and commercialization of its products and product candidates with other firms, pursuant to which the Company may receive additional funding, including milestone payments. The Company also intends to enter into additional corporate partnership agreements to develop and commercialize products and product candidates based upon its core technology. However, the conclusion of any such agreements may be delayed or limited by the terms of other existing agreements to which the Company is a party, including the right of first refusal under the existing agreements with PMP on the Company's technology platform. There can be no assurance that the Company will be able to establish such additional collaborations on favourable terms, if at all, or that its current or future collaborative arrangements will be successful.

Should any collaborative partner fail to successfully develop or commercialize any product or product candidate to which it has rights, or any of the partners' products or product candidates to which the Company has rights, its business may be adversely affected. In addition, while the Company believes that its actual and eventual collaborative partners will have sufficient economic motivation to continue their funding, there can be no assurance that any of these collaborations will be continued or will result in successfully commercialized products or product candidates. Failure of a collaborative partner to continue funding any particular program could delay or halt the development or commercialization of any products or product candidates arising out of such program. In addition, there can be no assurance that the collaborative partners will not pursue alternative technologies or develop alternative products or product candidates either on their own or in collaboration with others, including the Company's competitors.

#### *Hazardous Materials: Environmental Matters*

The Company's discovery and development processes involve the controlled use of hazardous and radioactive materials. The Company is subject to federal, provincial and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by such laws and regulations, the risk of accidental

contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed its financial capabilities. The Company is not specifically insured with respect to this liability. Although the Company believes that it is in compliance with applicable environmental laws and regulations in all material respects and currently does not expect to make material capital expenditures for environmental control facilities in the near-term, there can be no assurance that the Company will not be required to incur significant costs to comply with environmental laws and regulations in the future, or that current or future environmental laws or regulations will not have a material adverse affect on its operations, business or assets.

#### *Income Tax Matters*

The Company has determined that it was eligible for investment tax credits on expenditures incurred on scientific research and experimental development. There is a risk that the governmental agency could conclude that: (i) some or all of the expenditures were not incurred on scientific research and experimental development activities, and (ii) the rate applicable to such credit is different from the rate claimed by the Company, and, therefore the governmental agency could reduce or disallow claims for such credits, including refundable credits.

#### *Growth Management*

Rapid growth in any area of the Company's business could place a significant strain on its managerial, operational and technical resources. The Company expects operating expenses and staffing levels to increase in the future. To manage its growth, the Company must expand its operational and technical capabilities and manage its employee base while effectively administering multiple relationships with various third parties. There can be no assurance that the Company will be able to manage its expanding operations effectively. Any failure to implement cohesive management and operating systems, add resources on a cost-effective basis or properly manage the Company's expansion could have a material adverse effect on its business and results of operations.

### **DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING**

As at December 31, 2010, an evaluation of the design and operating effectiveness of our disclosure controls and procedures, as defined in the rules of Canadian Securities Administrators, was carried out. Based on that evaluation, the President and Chief Executive Officer and the Vice-President and Chief Financial Officer concluded that the design and operating effectiveness of those disclosure controls and procedures were effective.

Also as at December 31, 2010, an evaluation of the design and operating effectiveness of internal controls over financial reporting, as defined in the rules of the Canadian Securities Administrators, was carried out to provide reasonable assurance regarding the reliability of financial reporting and financial statement compliance with GAAP. Based on that evaluation, the President and Chief Executive Officer and the Vice-President and Chief Financial Officer concluded that the design and operating effectiveness of internal controls over financial reporting were effective.

These evaluations were based on the framework established in *Internal Control over Financial Reporting – Guidance for Smaller Public Companies* issued by the Committee of Sponsoring Organizations of the Treadway Commission, a recognized control model, and the requirements of Multilateral Instrument 52-109 of the Canadian Securities Administrators.

All control systems, no matter how well designed, have inherent limitations, including the possibility of human error and the circumvention or overriding of the controls or procedures. As a result, there is no certainty that our disclosure controls and procedures or internal control over financial reporting will prevent all errors or all fraud. There were no changes in our internal controls over financial reporting that occurred during the year ended December 31, 2010 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

On behalf of management,

*(signed)*

*(signed)*

Pierre Labbé, CA  
Vice-President and Chief Financial Officer

Andrew J. Sheldon  
President and Chief Executive Officer

March 29, 2011