

ONTARIO'S **LIFE SCIENCES** COMMERCIALIZATION STRATEGY

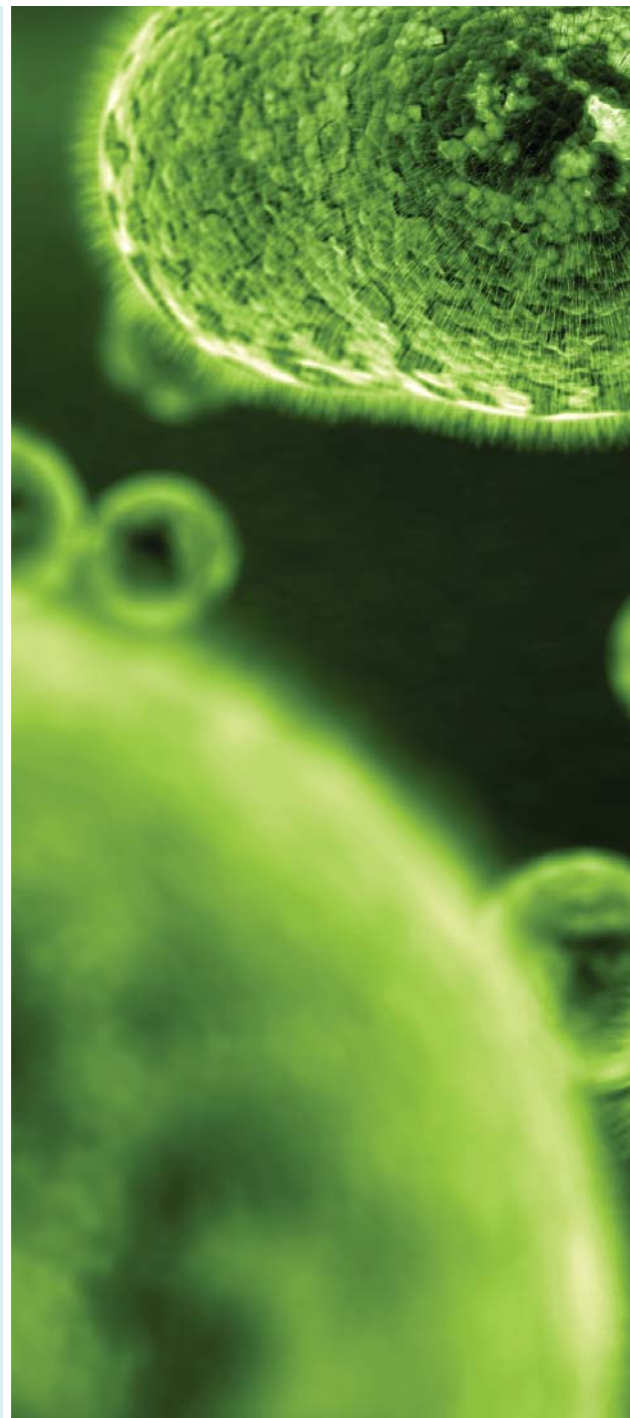
■ *Bringing our Vision to Life*

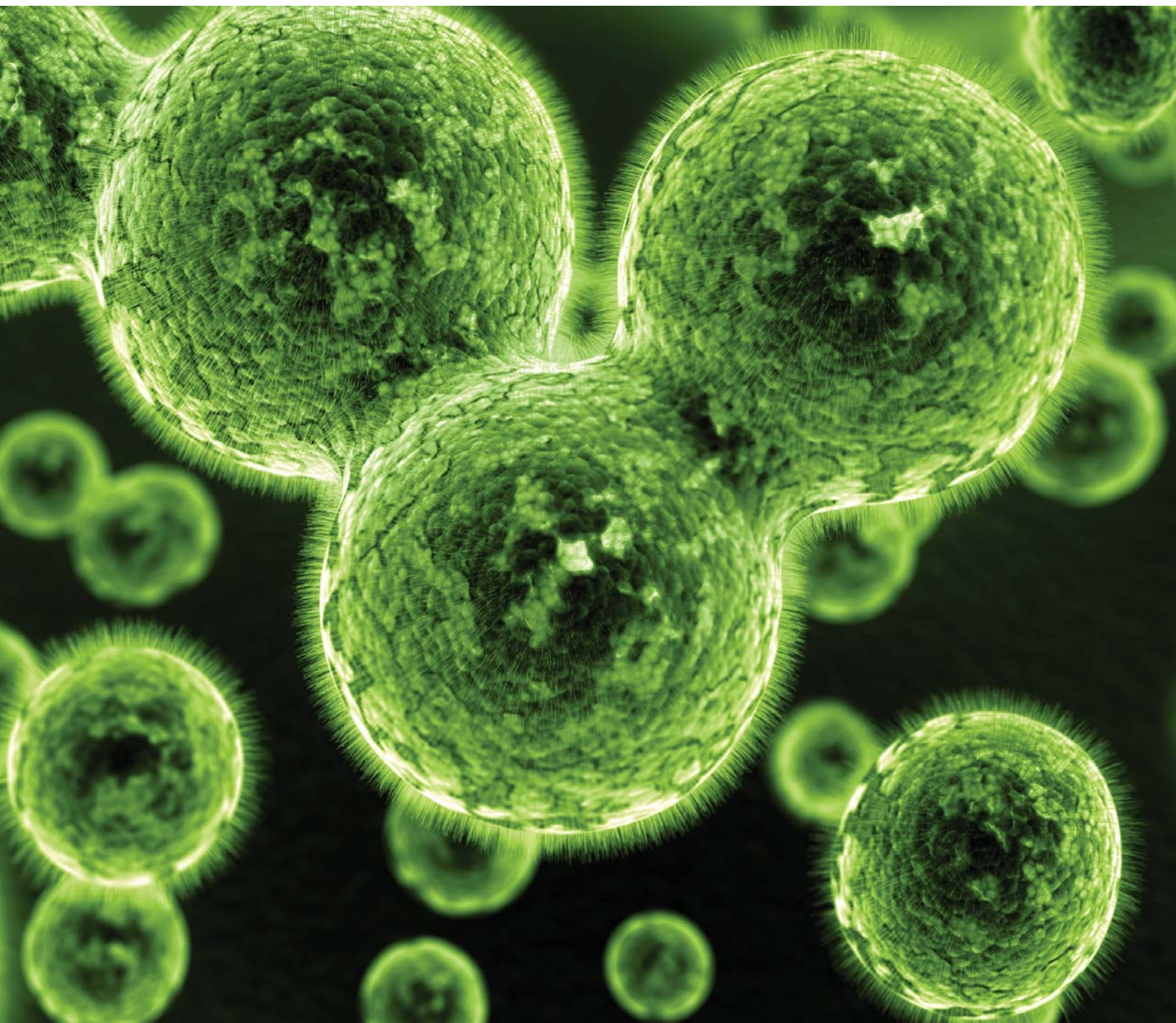
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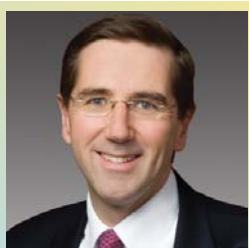
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INTRODUCTION FROM JOHN MILLOY, MINISTER OF RESEARCH AND INNOVATION



The Honourable John Milloy
Minister of Research and
Innovation

Ontario's life sciences industry began in 1914, when Dr. John Gerald FitzGerald developed a diphtheria antitoxin.

Since then, Ontario has achieved one medical research "first" after another and built a vibrant life sciences industry where global multinationals and homegrown companies have established themselves as proven leaders in innovation.

But today our industry is being challenged by increased global competition from established and emerging life sciences jurisdictions, as well as by difficult economic conditions that include tight credit and market volatility.

To compete successfully in the global marketplace, we know that our industry needs to continue to attract and nurture great scientific minds, increase collaboration among all the players – academia, industry and government – to accelerate the commercialization of research breakthroughs, and improve financing for innovative companies, particularly at the early-stage.

We also know that we need to promote our industry as a life sciences leader internationally.

The McGuinty Government understands the challenges our life sciences industry is facing, which is why we are implementing a Life Sciences Commercialization Strategy.

The \$161 million Life Sciences Commercialization Strategy builds on one of the three key focus areas identified in the *Ontario Innovation Agenda*. It also supports *Open Ontario*, the government's five-year plan to create new jobs and growth and helps to position Ontario as one of the best places in the world to re-locate, collaborate or grow an innovative life sciences company.

A handwritten signature in black ink that reads "John Milloy". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

*The Honourable John Milloy
Minister of Research and Innovation*

THE OPPORTUNITY

The global life sciences industry consists of three sectors: pharmaceutical, medical and assistive devices, and biotechnology.

Together, their sales will exceed \$2 trillion in 2010¹ – a figure that is predicted to more than double by the end of this decade.

Clearly, life sciences represent a huge and growing market, but with Ontario's share of the global bio-medical market currently at just 2 per cent, we have the potential to do much better.

With stakes this high, there is plenty of competition. From well-established jurisdictions like Boston and Southern California to rapidly emerging bio-clusters in the developing world, many other jurisdictions worldwide are investing aggressively in life sciences; developing and recruiting the world's best talent, attracting venture capital and promoting their brand internationally.

The race is on. There is no time to waste.

Ontario has many competitive advantages, but if we intend to take the lead in a crowded field, we need to develop and execute a new comprehensive life sciences strategy that ensures we continue to build on our strengths, address our weaknesses and continue to raise our international profile.



Paul Lucas

“Ontario is uniquely positioned with a highly-skilled work force, world renowned academic institutions, a strong, business-focused government and a vibrant private sector, including research-based pharmaceutical companies. Together, these sectors are committed to and competitively attract investment and partnerships.”

Paul Lucas, President and CEO, GSK Canada

ONTARIO'S LIFE SCIENCES INDUSTRY TODAY

Ontario is a major North American life sciences hub. It's one of those rare global locations where leading-edge medical research converges with both international business expertise and advanced manufacturing capabilities.

Ontario is home to global giants like GlaxoSmithKline, Roche, sanofi pasteur, Johnson & Johnson, GE Medical Systems and Genzyme. It's also where world-leading companies like MDS, Apotex, Biovail and Trudell Medical got their start and continue to thrive.

Ontario's life sciences industry employs more than 40,000 people at 850 companies. Revenues top \$15 billion a year, with \$5 billion of this figure generated by exports to countries all over the world. And sales are growing.



Fact: Ontario's 25 research hospitals employ 10,000 researchers, who conduct \$850 million in research annually. Multinational pharmaceutical companies invest another \$720 million.

Fact: Ontario is North America's third largest biotechnology cluster.

SECTOR SNAPSHOTS

Pharmaceuticals

- ◆ >15,500 workers
- ◆ includes global giants such as AstraZeneca, Bayer, GlaxoSmithKline, Eli Lilly, Johnson & Johnson
- ◆ sales of more than \$8 billion



Medical and Assistive Devices

- ◆ >22,000 workers
- ◆ 675 companies, including Siemens, GE Medical Systems, Johnson & Johnson Medical Products
- ◆ sales of \$4 billion



Biotech

- ◆ 5,000 employees
- ◆ >140 companies, including sanofi pasteur, UCB, Amgen, Genzyme
- ◆ sales of \$2.8 billion



THE ONTARIO ADVANTAGE

Ontario offers life science companies six important competitive advantages.

► A history of medical discovery

Ontario has a history of medical breakthroughs that dates back nearly a century to the development of a landmark diphtheria antitoxin, and includes the discovery of insulin, the development of the pacemaker and the world's first hospital-to-hospital telerobotic-assisted surgery.

We remain at the forefront of discovery today in several key areas, including cardiology, oncology, neurology, stem cells and regenerative medicine, imaging, ophthalmology and infectious diseases. Clinical trials and investigational testing are also an area of strength as a result of our centrally managed public healthcare system, which facilitates patient recruitment and tracking, and our large multi-ethnic population. Multinational pharmaceutical companies invest more than \$400 million a year in clinical trials in Ontario.

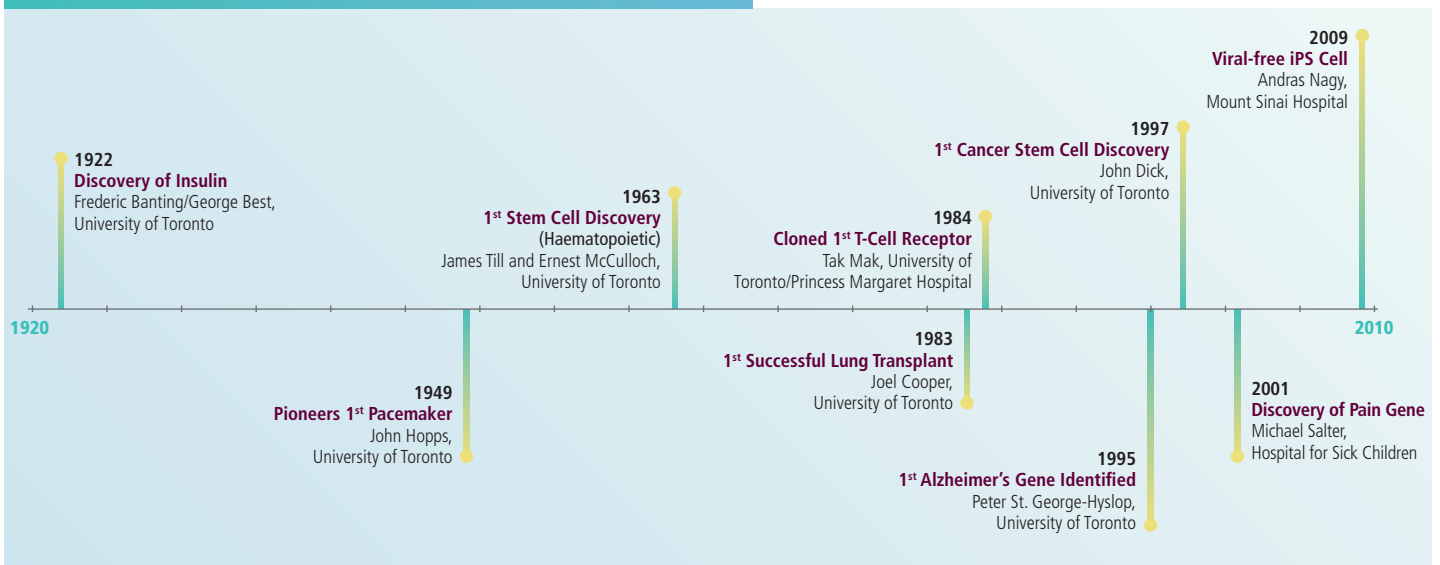
This tradition of bio-medical achievement, grounded in Ontario's unique collaborative research environment, is a major drawing card for the world's best researchers.



Dr. Andras Nagy, Senior Investigator, Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto

Fact: Currently, Ontario invests more than \$500 million annually in basic and translational life sciences R&D.

A HISTORY OF ONTARIO DISCOVERY AND INNOVATION



► An exceptional workforce

Successful life science companies need smart, skilled employees who understand science, business and international markets – and they can find them in Ontario.

Our workforce is one of the best educated in the world. In fact, a higher percentage of Ontario's workforce has completed its post-secondary education than in any industrialized country in the world.

Our network of 20 universities and 24 colleges produces a steady supply of highly-skilled workers, graduating an average of 9,300 graduates a year in fields such as biotechnology, biochemistry, biology, chemical engineering, chemistry and other related fields. With a view to ensuring workers with skills for the 21st century, curricula are often developed with industry input.

► A sophisticated infrastructure

Ontario's life sciences industry is clustered in a corridor that includes more than 60 publicly-funded research facilities, all internationally recognized for their expertise in specialized fields of research and all with a history of collaboration with the private sector.

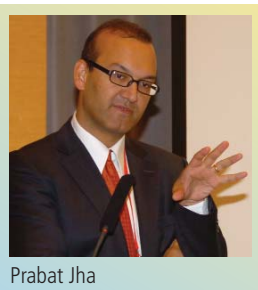


THE ONTARIO INSTITUTE FOR CANCER RESEARCH

Ontario's commitment to cancer research is underscored by the creation in 2005 of the Ontario Institute for Cancer Research (OICR), with an investment totaling \$357 million over the first five years. OICR's mandate is to conduct research on the prevention, early detection, diagnosis and treatment of cancer.

OICR was selected to coordinate the International Cancer Genome Consortium (ICGC). One of the most ambitious projects since the Human Genome project, ICGC brings together researchers from eight countries to study up to 50 types of cancer. Their work will provide a foundation for personalized medicine and its promise to refine diagnosis, guide optimum treatment and avoid unnecessary side effects. OICR is also home to the Clinical Trials Program, which puts in place infrastructure and processes that promote speed, quality and access to clinical trials for cancer patients in the province. The resulting increase in capacity represents a commensurate reduction in the time, cost and duplication of effort associated with running multi-centre clinical trials.

Insertion of samples in the sample manager of OICR's Ultra Performance Liquid Chromatography (UPLC) system



Prabat Jha

“Ontario is well placed to take a leadership role in global health problems like HIV and SARS. There’s a superb scientific capability here, private partners who are interested in, and understand, the global dimensions of disease and how infectious diseases have local repercussions, and an outward-looking and engaged attitude.”

*Prabat Jha, Founding Director, Centre for Global Health Research,
St. Michael's Hospital*

We also have 12 regional networks which support partnerships among business, institutions and local governments to promote innovation. Each has its own life sciences strength.

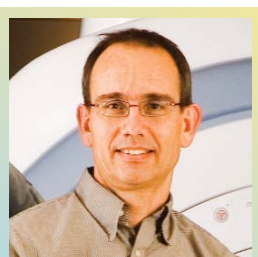
And this commercialization infrastructure will soon be even better aligned with the launch of the Ontario Network of Excellence, a coherent and effective network that will coordinate all of Ontario’s programs and services available to support entrepreneurs.

Fact: In Ontario, more than a million square feet and \$1 billion in new research facilities have been completed since 2005, and over the next 12 years we’ll add another three million square feet of research space.

► Low business costs

KPMG’s *Competitive Alternatives* reports of 2004, 2006 and 2008² all concluded that Ontario offers a lower cost environment for life sciences companies than any G7 country. And costs here are about to get lower.

Starting July 1, 2010, there will be no capital tax on businesses operating in Ontario, and the marginal effective tax rate (METR) on new capital



Dr. Graham Wright

“We’re uniquely positioned here in Ontario to change the way cardiovascular disease is diagnosed and treated. We have unparalleled research expertise in cardiovascular imaging, a collaborative research environment and a focus on technology development – all the elements required.”

*Dr. Graham Wright, Research Director, Schulich Heart Program,
Sunnybrook Health Sciences Centre*



Tara Koyama, Master's student at Lawson Health Research Institute at the University of Western Ontario, takes a closer look under the microscope.

investments will fall to 18.6 per cent, dropping to 16.2 per cent in 2018. We're also moving to a value-added tax in order to reduce business input costs.³

Fact: The Economist Intelligence Unit predicts Canada will be the best place for doing business among the G7 over the next five years.⁴

Government incentives and funding programs

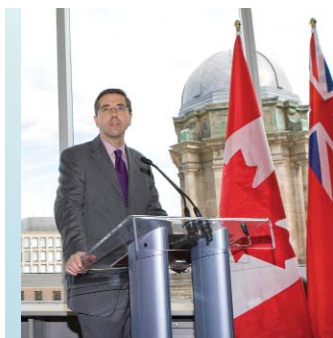
Tax incentives

Our R&D tax incentive program is widely recognized as one of the most generous in the world. Among G7 countries, only Italy offers a more favourable tax treatment for R&D.

When tax credits are factored in, \$100 in R&D expenditures can be reduced to less than \$44 – and less than \$37 for small businesses. A broader range of costs qualify for deductions than in many jurisdictions, and tax credits can be carried back for 3 years or forward for 20 years.

New corporations that commercialize intellectual property developed by Canadian universities, college or research institutions can take advantage of the Ontario Tax Exemption for Commercialization (OTEC). OTEC refunds provincial income tax and corporate minimum tax for each of a corporation's first ten taxation years.

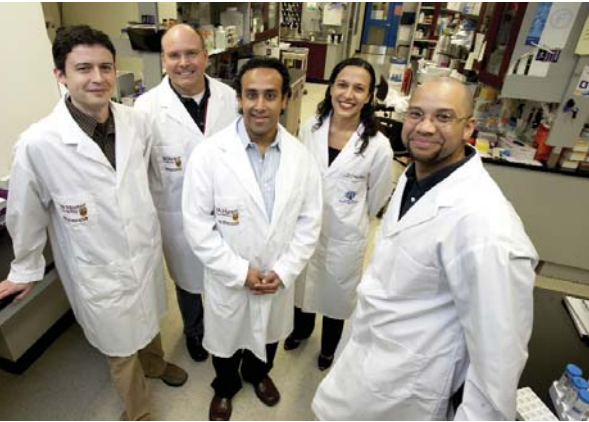
Ontario also offers a distinct advantage when it comes to intellectual property. Recognizing that it takes multiple skills to commercialize breakthrough technologies, we offer companies the opportunity to acquire the rights to the IP developed at our public research centres.



Minister of Research and Innovation John Milloy at the Ontario Institute for Cancer Research (OICR).

PFIZER

The Ontario Institute for Cancer Research (OICR) and the Ontario Cancer Institute (OCI) are at the forefront of global expertise in genomics, cancer stem cell research and cancer metabolism. It's expertise that the world's largest pharmaceutical company, Pfizer, is tapping into to help identify new molecular targets and biomarkers. The goal? To develop more effective drugs aimed at detecting and treating colorectal cancer. It's a collaboration that is supported by a \$900,000 investment from the Ontario Government.



Dr. Mick Bhatia and his team of scientists at the Stem Cell and Cancer Research Institute at McMaster University. (Photo by Michael Lalich)

Funding Programs

In addition to programs aimed at recruiting and retaining the best and brightest researchers, Ontario also supports companies commercializing technologies and products.

The **Ontario Emerging Technologies Fund** aims to drive start-up investment in high growth potential companies, including those in the life sciences. The fund is investing \$250 million dollars together with qualified venture capital funds and private sector investors.

The \$205-million **Ontario Venture Capital Fund** is focused on attracting investment in high growth companies with the goal of bringing exciting new discoveries to market faster.

The \$29-million **Investment Accelerator Fund** provides high-potential innovative companies in Ontario with early-stage financial support and management expertise to help make these businesses more attractive to follow-on investors.

The **Health Technology Exchange** – htx.ca – accelerates innovation, commercialization and growth of Ontario's medical and assistive technologies sector by providing Ontario scientists, engineers, and entrepreneurs with funding, market research and intelligence, and networking opportunities.

The **Ontario Research Fund (ORF)** is a key component of the government's plan to promote scientific excellence by supporting research that can be developed into innovative goods and services that will boost Ontario's economy.

Among other programs, ORF supports:

- ◆ **The Ontario Research Fund – Global Leadership Round in Genomics & Life Sciences (GL2)** promotes research excellence in Ontario by supporting transformative, internationally significant research in genomics and gene-related areas of research. The program focuses on scientific excellence and strategic value to Ontario and targets leading-edge, large-scale, internationally collaborative research initiatives. It provides an opportunity for the province to fund truly transformative research and build on areas where Ontario researchers have demonstrated world-leading strength.

Research Talent Programs

The Early Researcher Award (ERA) program provides funding to help promising, recently-appointed Ontario researchers build their research teams.

The Post-Doctoral Fellowship (PDF) program provides outstanding scientists with two-year fellowships at Ontario universities.

The Premier's Discovery Awards (PDA) celebrate Ontario's most accomplished researchers by recognizing excellence in research for either a single discovery or a body of work on both domestic and international fronts.

The Premier's Catalyst Awards (PCA) help build a culture of innovation and entrepreneurship in Ontario by recognizing excellence and leadership in innovation.

Advanced manufacturing capabilities

Ontario is a manufacturing powerhouse, with the people, the resources, the location and the infrastructure that are essential for success in today's competitive economy – which is why 11 of the world's 20 largest multinational advanced health technology companies have operations in here.

The contract pharma market is estimated to grow to \$40 billion by 2011. The use of strategic outsourcing is becoming an accepted practice to spread the risk of development and lower fixed costs. Ontario has world-class capacity in terms of contract manufacturing services, both for small-molecule and protein-based therapies.



PATHEON

Founded in Fort Erie, Ontario in 1974, Patheon today serves more than 300 customers, including many of the world's leading pharmaceutical, biotechnology and specialty pharmaceutical companies with an international network of manufacturing facilities, and more than 4,000 employees. The company provides fully-integrated contract manufacturing and development solutions to customers around the world, from early development through to high-volume commercial manufacturing and packaging.



THERAPURE BIOPHARMA

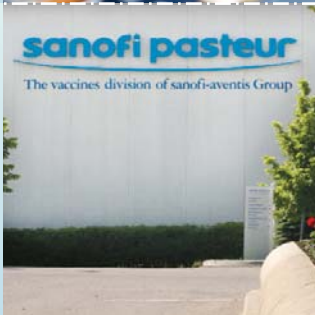
Mississauga, Ontario-based Therapure Biopharma provides its clients and partners with customized solutions for the development and manufacture of highly complex biological therapeutic products. Therapure Biopharma will receive a \$4.2 million grant from the Ontario Biopharmaceutical Investment Program to support an upcoming \$27.9 million expansion of their bio-manufacturing facility. This will further augment their capacity in the development, manufacture, purification and packaging of high-quality biological therapeutics.



eSIGHT

In the future, millions of people with inoperable low vision will be able to see more clearly, thanks to technology developed by Ottawa-based eSight. The company's "evSpex" look like a stylish pair of sunglasses, but they have a built-in miniature camera, and image processing software that manipulates the camera's image in different ways to help people with various vision impairments see better. It wouldn't have been possible without a \$500,000 investment from Ontario's Investment Accelerator Fund, which is jointly administered by MaRS and the Ontario Centres of Excellence.

Photo: evSpex consist of a wearable headset and a touch screen unit where users input their settings.



SANOPI PASTEUR

sanofi pasteur, the vaccines division of sanofi-aventis group, is nearing completion of its new \$100 million state-of-the-art research facility at the company's historic Connaught Campus in Toronto. The facility, which was supported by the Ontario government with an investment of close to \$14 million, will play a key role in helping to keep sanofi pasteur a world leader in vaccine development and production.

Photo: sanofi pasteur Canada's headquarters in Toronto.



MARS CENTRE AND MARS INNOVATION

The MaRS Centre, located right next door to the University of Toronto and its affiliated research institutes, and a stone's throw from Canada's financial centre, is home to scientific research groups, start-ups, emerging and established biotech companies, funding agencies and ventures capitalists. Its goal is to accelerate commercialization of breakthrough discoveries. It's also home to MaRS Innovation, a fourteen-member consortium of Toronto universities and research hospitals that work together to aggregate and develop intellectual property assets and breakthrough discoveries in a fully integrated model.

Photo: MaRS main entrance, Toronto, ON.



PURDUE PHARMA

With a recent investment of close to \$5 million from the Ontario government, Purdue Pharma is doubling its Pickering facility. The \$32 million expansion includes increasing both R&D and manufacturing capabilities. The privately owned company is particularly active in the area of drug delivery technologies, and develops and manufactures products for the treatment of pain, respiratory disease, gastrointestinal disorders and infection control.

Photo: Ashton Ntewak, Quality Control Technologist mixing solutions at Purdue Pharma Canada.

ONTARIO'S VISION – INTRODUCING ONTARIO'S LIFE SCIENCES COMMERCIALIZATION STRATEGY

Ontario aims to be the best place in the world to take innovative bio-medical discoveries and turn them into new products and services that meet unmet patient needs by capitalizing on our world-class talent, research capacity and collaborative spirit.

We will accomplish this by executing a Life Sciences Commercialization Strategy, which has three main goals:

- ◆ promote even greater collaboration among government, academia and industry
- ◆ position Ontario as the “go-to” place for innovative multinational pharmaceutical and advanced health technologies firms looking to source new technologies and test promising new therapies
- ◆ grow our homegrown biotech industry, already the largest in Canada, to the point where it rivals those of leading centres in the U.S. and abroad.

To achieve these goals, Ontario is adopting a four-pronged strategy:

► **Attract and nurture scientific excellence**

Great science is at the heart of a successful life sciences industry and Ontario has done an excellent job of attracting and nurturing scientific talent, both domestic and international.

We need to ensure that we continue to recruit and retain the best and brightest research minds, knowing that scientists are attracted by access to the resources they need, including a collaborative, supportive research environment and a great quality of life.





Located in Toronto's Discovery District and partnered with Princess Margaret Hospital's Radiation Medicine Program, the STTARR (Spatio-temporal targeting and amplification of radiation response) Innovation Centre is a world-leading platform for cutting-edge multi-disciplinary radiotherapy. (Photo CP Images/S.Lake)

Key initiatives:

- ◆ Build upon our significant investments in basic and translational research through established programs like the Ontario Research Fund and one-time programs like the \$114 million Global Leadership Round in Genomic & Life Sciences to deliver on the promise of personalized medicine.
- ◆ Ensure there are proper incentives within research institutions to focus research activities on industry and market needs.
- ◆ Foster scientific talent at the earliest stage through the focused youth programming that connects the aspiring researchers of tomorrow with today's leaders in science and technology.
- ◆ Encourage Ontario-based scientists to become life sciences "champions" through initiatives like the International Strategic Opportunities Program and at international trade shows and other events.
- ◆ Streamline our research talent funding programs to ensure they're focused and easy to understand and to access.

► Facilitate greater collaboration

While great science is fundamental to success in life sciences, taking that science and turning it into technologies and products that improve and save lives is the ultimate goal.

Accelerating commercialization of our groundbreaking discoveries is essential. Greater collaboration among industry, government and the research community will accomplish that.



“Ontario’s commercialization strategy recognizes the economic benefits of a vibrant bioscience industry. By providing immediate financial support, this new strategy responds to industry recommendations on financing challenges facing our sector. This support will help bring innovative medical therapies and technologies to market to enhance the health of Ontarians and people around the world. We congratulate the Government of Ontario on its commitment to effective commercialization and to a thriving bioscience industry.”

*Gail Garland, President & CEO, OBIO
(Ontario Bioscience Industry Organization)*



ONTARIO AGENCY FOR HEALTH PROTECTION AND PROMOTION

The Ontario Agency for Health Protection and Promotion (OAHP) was created by the Ontario Government in 2008 to act as a central hub, linking public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world. The development and application of new knowledge, approaches and disciplines to advance public health in Ontario will support and promote science and innovation in the province.



Internationally renowned for its care, research and educational programs on aging – Baycrest, an affiliate of the University of Toronto – received \$10 million from the Government of Ontario to create the Centre for Brain Fitness. (Image courtesy of Baycrest)

Key initiatives:

- ◆ Invest \$21.4 million in the Health Technology Exchange (HTX) to help accelerate innovation, commercialization and the growth of Ontario's medical and assistive technologies sector.
- ◆ Continue the work of the Pharmaceutical Innovation Working Group (PIWG), which includes the Deputy Ministers of Research and Innovation, Health and Long-Term Care, Economic Development and Trade, Finance, and Health Promotion, in addition to senior executives of research-based pharmaceutical companies.
- ◆ Create a Life Sciences Partnership Council. This advisory group would consist of representatives of industry (including pharma, biotech and medical devices), government and academia. Its mandate would be to prioritize the initiatives necessary to achieving our goal of becoming the best place in the world to take life sciences ideas and turn them into global opportunities that address market needs.
- ◆ Offer support for the life sciences industry to organize itself and speak with one voice where appropriate.
- ◆ Build on the investinontario.com website to facilitate investment in our life sciences industry and the export of Ontario-based technologies.

Canada's Research-Based
Pharmaceutical Companies



Les compagnies de recherche
pharmaceutique du Canada

“As the industry that discovers and develops new medicines and vaccines that save lives and improve our health system, we are excited about working collaboratively with the Ontario government to increase life sciences research and make innovative medicines and vaccines available to Ontarians. Together with the great innovation and discovery of our companies, we can attract more global investment to make Canada a world leader in life-sciences research.”

Russell Williams, President, Rx&D



“In committing to a life sciences strategy designed to ensure the commercialization of Ontario-developed technologies within the province, Ontario has laid the groundwork necessary to support a sustainable industry.”

*Lorne Meikle, President & Chair, Life Sciences Ontario
(formerly The Biotechnology Initiative – TBI)*

Fact: The Ontario Drug Benefit (ODB) Program is the second largest purchaser of drug benefits in North America after the U.S. Department of Veterans Affairs. The ODB Program is one of the most generous drug benefit programs in Canada, providing coverage for more than 3,200 drug products, including nutrition products and diabetic testing agents. Since October 2003, Ontario has funded an additional 39 cancer therapies for 67 new indications or broader uses, providing Ontarians with access to new cancer products.

Fact: Ontario is home to more than half of Canada’s pharmaceutical companies, and more than 60 per cent of the country’s medical and assistive technologies companies.

► Address financing challenges

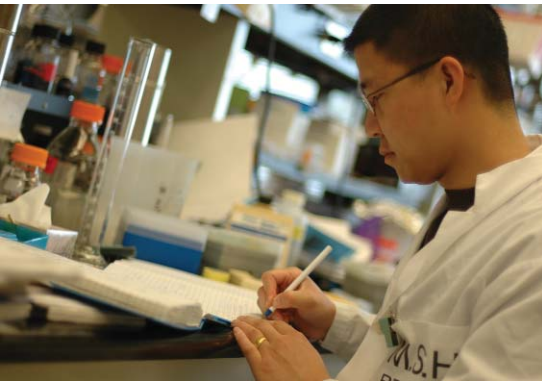
Raising venture capital is perhaps the greatest challenge for life sciences companies.

It takes years and tremendous resources – up to \$1 billion – to develop just one drug. Developing new medical and assistive devices is also becoming increasingly expensive.

Ontario’s emerging life sciences companies are operating in a time of tightening credit markets – the result of the 2009 recession – and a recognized shortage of venture capital financing. This is leaving a significant gap between early and late-stage growth that needs to be closed.

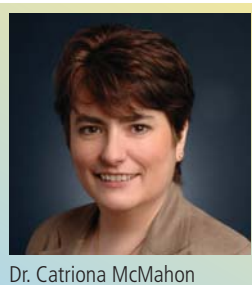
Ontario has responded with targeted programs for early-stage innovative companies:

- ◆ In November 2007 the government announced the Ontario Venture Capital Fund, which provides access to capital for innovative, Ontario-based companies.
- ◆ In March 2008 the province announced the Ontario Tax Exemption for Commercialization, a ten-year income tax exemption for new corporations that commercialize intellectual property developed by Canadian universities, colleges or research institutes.
- ◆ In March 2009 Ontario announced a new \$250 million Emerging Technologies Fund aimed at driving start-up investment in high growth potential businesses, including life sciences.



Key initiatives:

- ◆ Invest \$7 million to enable a one-time special financing round exclusively for Ontario biotechs.
- ◆ Direct \$1 million to MaRS Innovation for proof-of-principle funding to accelerate the commercialization of Ontario-generated IP.
- ◆ Invest up to \$17 million in new infrastructure for clinical trials and investigational testing. This is an area of great potential for our life sciences industry and this new infrastructure will include investments in:
 - An Ontario Clinical Trials Fellowship Program aimed at recruiting new talent, which would involve matching funds from industry.
 - Expanding capacity at McMaster University's world-class Population Health Research Institute to support the management of Phase IV clinical trials on a global scale.
 - New province-wide coordinating infrastructure to streamline administrative processes and ethics reviews across multiple clinical sites in order to increase speed of patient recruitment.



Dr. Catriona McMahon

“The Ontario government is doing an impressive job of fostering collaboration by bringing together industry and research institutions with a common goal of growing the province's life sciences sector.”

*Dr. Catriona McMahon, Vice President, Medical Affairs,
AstraZeneca Canada*

► Improve international marketing and promotion

Every day, Ontario life sciences companies continue to develop new and better medical preventatives, diagnostics and treatments.

Ontario will continue to help them market their innovative new technologies and services abroad.

Key initiatives:

- ◆ Develop a memorable brand for our industry through the creation of a logo/tagline. Consistent branding is fundamental to building a positive international reputation and leveraging it to promote investment.
- ◆ Promote Ontario's life sciences industry at international life sciences trade shows, including the BIO, International Convention.
- ◆ Work with international media and through the government's International Marketing Centres (IMCs) in Beijing, Shanghai, Tokyo, New Delhi, Los Angeles, New York City, Munich, Paris, London and Mexico City.
- ◆ Leverage trade missions to market Ontario both as an ideal location for life sciences investment and as a source of high quality technologies and products.
- ◆ Develop and/or enhance strategic alliances with key life sciences clusters in Canada, the U.S., Europe and Asia.

With our significant assets of talent, infrastructure, leadership and collaboration, Ontario is poised to pull ahead of the pack in the race to capture a significant share of the global life sciences marketplace. With the resources committed to make this vision a reality firmly in place, there's simply no better place in the world to do business than Ontario.

Footnotes

1 Various sources, as reported by the Sector Competitiveness Branch, Economic Development Division, Ministry of Economic Development and Trade, Life Sciences Overview, 2009

2 KPMG Competitive Alternatives 2004, 2006 and 2008 _

3 Ontario Ministry of Finance and Finance Canada. *Ontario Budget 2009: Chapter III: Reforming Ontario's Tax and Pension Systems*

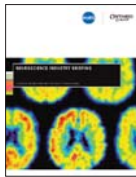
4 The Economist Intelligence Unit, Global Business Rankings, November 2009

Also available:



Regenerative Medicine Asset Map

Discover how Ontario's deep pool of scientific talent, outstanding facilities and government and private sector investments are putting the province at the forefront of regenerative medicine.



Neuroscience Industry Briefing

Highlights Ontario's capabilities in neurotechnology, with a focus on applications which are directly influenced by an aging population: chronic pain, Alzheimer's disease, stroke, Parkinson's disease and preventative medicine for cognitive health/dementia.



Oncology Asset Map

Tackling the global burden of cancer offers unique opportunities for supporting research and innovation. Learn how Ontario's exploration of these opportunities is creating innovative industries and commercial partnerships.



CleanTech Asset Map

Outlines how Ontario's *Green Energy Act*, together with the Feed-in Tariff Program, cutting-edge research and the commercialization of emerging technologies, is propelling the province forward as a globally-recognized leader in this sector.



Ontario's Biopharma Cluster Report

Ontario is home to a thriving biotechnology cluster that is attracting world-leading researchers and global investment. This report showcases the province's strength, vision and leadership in the life sciences.



Ontario Innovation Agenda

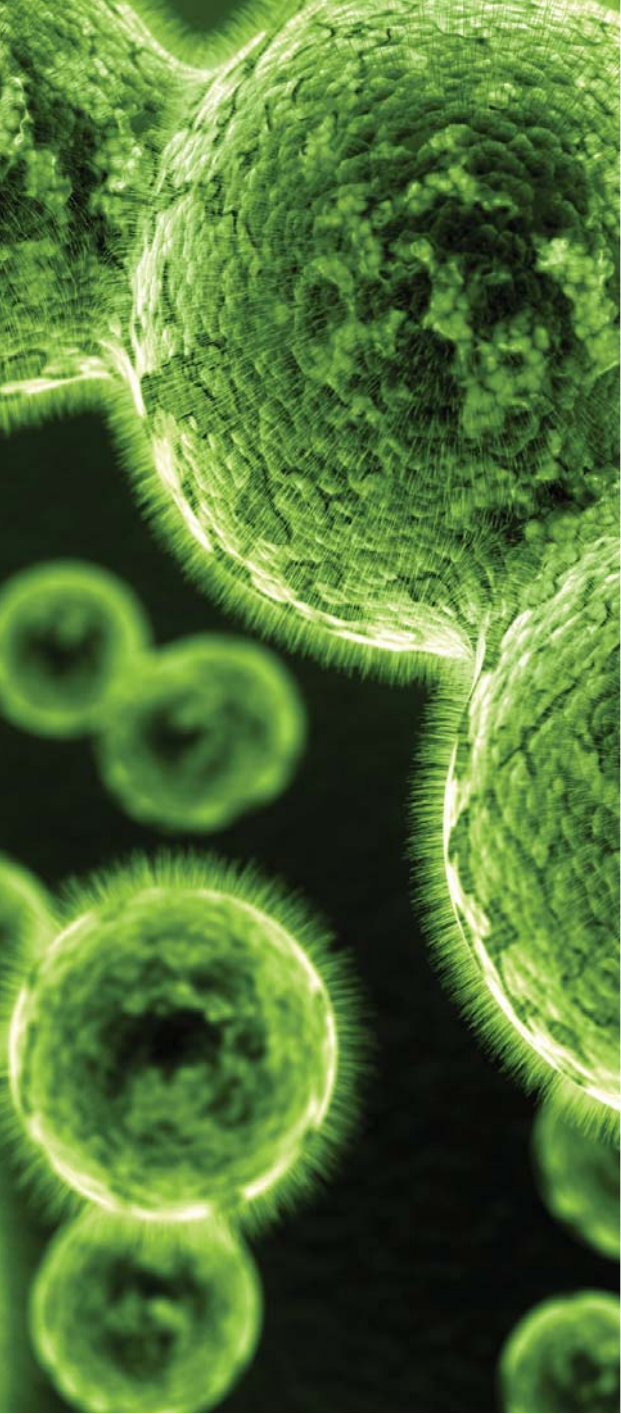
This Ontario government strategy harnesses the strength of our creative environment, diverse culture, highly skilled workforce, world-class educational system and internationally recognized research community to ensure the province is ready to compete and win in the 21st century.

To receive a copy of any of these documents,
please send a request via e-mail to: info4@ontario.ca

In addition to the traditional life sciences market segments, the industry is expanding to encompass new areas, including agri-bio, forestry and bio-fuels.

Ontario's support for these emerging sectors includes:

- ◆ A \$10 million investment over three years to develop the Sarnia-Lambton Bioindustrial Innovation Centre – a 60,000 square foot accelerator centre offering an additional 60,000 square feet of renovated laboratory space.
- ◆ A \$25 million investment to establish the Centre for Research and Innovation in the Bio-Economy (CRIBE) in Thunder Bay. CRIBE will provide a “test bed” for new products and processes to develop next generation forestry products.
- ◆ The Agri-Tech Commercialization Centre (ATCC) provides entrepreneurs, researchers and existing businesses with single window access to specialized services and networks that accelerate the movement of innovative technologies, products and services to market. The ATCC's goal is to accelerate the pace of innovation and facilitate the adoption of new technologies, leading to a more competitive and innovative agriculture, agri-food and agri-based products sector in Ontario.
- ◆ The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has provided funding for pre-commercialization research leading to the development of PlantForm Corporation. Based in Guelph, this company is focusing on oncology and the production of plant-based, low-cost therapeutic drugs. It uses proprietary technology licensed from the University of Guelph to manufacture low-cost antibody drugs and vaccines.
- ◆ Life sciences research conducted through OMAFRA's New Directions Research Program plays a key role in strengthening Ontario's economy and improving human health through the enhancement of conventional foods and the development of functional foods and nutraceuticals.



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