

# Investing in Ontario's Future through research

R E P O R T 1 9 9 9 – 2 0 0 1

## H I G H L I G H T S A T A G L A N C E T O M A R C H 3 1 , 2 0 0 1

**Ontario Innovation Trust investment:** \$362.4 million

**Leveraged investment from all other sources:** \$531 million

**Total value of infrastructure investment:** \$893.4 million

**Number of projects funded by the Ontario Innovation Trust:** 294

**Universities involved:** 16

**Colleges involved:** 6

**Hospitals involved:** 10

**Industry partners who invested in Ontario Innovation Trust infrastructure projects:** more than 300





*The Ontario Innovation Trust congratulates the Honourable Jim Flaherty on his appointment as Ontario's Minister of Enterprise, Opportunity and Innovation, and looks forward to working with the Minister in advancing Ontario's science and technology innovation strategy.*



*The Honourable Jim Wilson, Ontario Minister of Energy, Science and Technology, 1997–2002, remains a strong supporter of the Ontario Innovation Trust, and has participated in several Ontario Innovation Trust investment announcements.*

The **Ontario Innovation Trust** was established by the Government of Ontario to make investments in non-profit research organizations conducting scientific research and technology development in Ontario. Created in May 1999, the Ontario Innovation Trust has been endowed with \$750 million to enhance the R&D infrastructure (physical facilities, equipment and non-personnel resources) of Ontario's universities, hospitals, colleges, and research institutes.

The Ontario Innovation Trust's focus on capital expenditures complements the work of the *Ontario Research and Development Challenge Fund (ORDCF)*, a \$500 million program of the Government of Ontario that also provides funding for research projects, primarily for the salaries of research leaders and their staff. The Ontario Innovation Trust and the ORDCF are two core initiatives of the Ontario Government's strategy to foster research excellence and forge partnerships among the province's business and research communities.

The Ontario Innovation Trust operates under a Trust Agreement at arm's length from the Government of Ontario. It is governed by a seven-member volunteer Board of Directors and employs a small professional staff.

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For a complete and up-to-date list of Ontario Innovation Trust investments visit us at [www.oit.on.ca](http://www.oit.on.ca)





# NORTHERN ONTARIO

**Sudbury:** Laurentian University  
Atlas Copco Construction  
and Mining North America  
Canada Life  
ETI Canada Inc.  
Falconbridge Ltd.  
Fisher Scientific  
HKL Technologies  
Leco Instruments  
Mining Technologies International Inc.  
MIRARCO/ELRFS  
Noranda Inc.  
Rio Algom Ltd.  
Sievers/Ionics  
Thyssen Mining Construction  
of Canada  
Waters Scientific  
★★

**Sault Ste. Marie:** Sault College of Applied Arts and Technology  
Anishinabek/Ontario Fisheries  
Research Centre  
Campbell Scientific  
Canadian Forest Service Ltd.  
CFE Industries  
Dap Technologies  
Dumanski  
Environment Canada  
ESRI Canada  
Fisheries and Oceans Canada  
Great Lakes Power Ltd.  
Ontario Ecological Land  
Classification Program  
Ontario Forest Research Institute  
PCI  
Sun Microsystems  
TD Canada Trust's Friends  
of the Environment Foundation  
Varian Canada Inc.  
Waters Scientific  
★★★

**Thunder Bay:** Lakehead University  
Canadian Hydrogarden  
GH Growers Supply  
Kimberly Clark  
Silicon Graphics Inc.  
Varian Canada Inc.  
★★★★★

Includes those industry partners identified in investment contracts as of March 31, 2001.  
As research projects progress, additional partners may be added.

★ The number of stars indicates the number of projects supported by the Ontario Innovation Trust.

# SOUTHWESTERN ONTARIO

**Waterloo:** University of Waterloo  
 Agilent Technologies Inc.  
 Alcon Pharmaceuticals  
 Alpha Controls  
 ATAS International  
 Barringer  
 Bausch and Lomb  
 Beckman Coulter Canada  
 Bell Canada  
 Blake Industries  
 Bio-Rad Laboratories  
 BOC Edwards  
 Bruker Canada Ltd.  
 Canada Engraving  
 Canon USA Inc.  
 Centre-Line  
 Convergent Bioscience  
 Criticare Systems  
 Dantec Measurement Technology  
 Deckel Maho Gildmeister  
 Dell Computer Systems  
 Exploration Outfitter  
 Fire Testing Technology  
 FLIR Systems  
 Folio Instruments Inc.  
 Ingersoll  
 JKL Micro  
 JMC-COSMED  
 Massive Die-Form  
 Netzh  
 Nonius  
 Nortel Networks Inc.  
 Optikon  
 Oriental Scientific Instruments  
 Oxford Instruments  
 PE Biosystems Inc.  
 Perkin-Elmer  
 Relion Industries  
 Rose Scientific  
 Silicon Graphics Inc.  
 SRI Instruments  
 Sun Microsystems  
 Systems for Research Corp.  
 TA Instruments  
 Techno-Isel  
 Testing Machines Inc.  
 Thermoinstruments Inc.  
 Topcon Canada  
 Turbosonic  
 Unilever  
 Uniroyal Chemical Co.  
 Varian Canada Inc.  
 Vistakon  
 VWR Canlab  
 Westech Industrial  
 Zcorp  
 ★★★★★★★★★★  
 ★★★★★★★★★★

**Wilfrid Laurier University**  
 Alias/Wavefront  
 Beckman Coulter Canada  
 Bio-Rad Laboratories  
 Coulbourn Instruments  
 Dell Computer Systems  
 ESRI-ARC-INFO  
 Fisher Scientific  
 Geomatix  
 IBM Canada  
 Leica Microsystems  
 Molecular Devices  
 Nikon Canada Inc.  
 Noldus Information Technology  
 Silicon Graphics Inc.  
 Sun Microsystems  
 Varian Canada Inc.  
 VWR Canlab  
 ★★★★★★  
 ★★★★★★

**Windsor:** University of Windsor  
 Bruker Canada Ltd.  
 Dionex  
 GLIER  
 Sapphire  
 ★★★★★

**London:** Fanshawe College of Applied Arts and Technology  
 ★  
 Lawson Health Research Institute  
 IMRIS  
 ★  
 London Health Sciences Centre  
 Beehive Instruments  
 Computer Motion  
 Ivex  
 ★  
 London Regional Cancer Centre  
 ★  
 The University of Western Ontario  
 Advanced Scientific Design  
 Agilent Technologies Inc.  
 Aloka  
 ALPAC  
 Applied Science Inc.  
 Autoclave Engineers  
 Aymes Medical  
 Bell Canada  
 Biothermic  
 Bio-Rad Laboratories  
 BOC Edwards  
 Bolen Computers  
 Bruker Canada Ltd.  
 Carl Zeiss Canada  
 Carsen Group  
 Centre Technologies  
 Coherent Technologies  
 Compaq Canada Inc.  
 Cyberware  
 Delsys Inc.  
 Ducks Unlimited Canada  
 Elf-Aquitaine  
 Elf-Atochem  
 Endoscope  
 ESBE Scientific  
 Fakespace  
 Fisher Scientific  
 Forest City  
 GE Medical Systems  
 GE/Vingmed

General Motors of Canada  
 Horiba  
 H-Power  
 InMotion Technologies  
 JMC-COSMED  
 Kratos XPS  
 Lasentec  
 Liffey Custom Coatings Inc.  
 Mackenzie Financial Corp.  
 Mar Research  
 Mars Food Ltd.  
 Medi-Man  
 Mettler-Toledo  
 Molecular Structure  
 Multigon Inc.  
 Namox  
 Neuroscan  
 Nortel Networks Inc.  
 Northern Digital  
 OPAL-RT  
 Parr Instruments  
 Platform Computing  
 Primm Labs  
 Procyon Biopharma Inc.  
 Prospect Scientific  
 Protein Solutions Inc.  
 Quadrics Interconnect  
 Remspec  
 Rogue Research  
 Roxon Medi-Tech Ltd.  
 Sensable Technologies  
 Shapetape  
 Silicycle  
 Silicon Graphics Inc.  
 Sonometrics  
 Sun Microsystems  
 Systems for Research Corp.  
 ThermoInstruments Inc.  
 Total Fina  
 Ultramar  
 Varian Canada Inc.  
 Virtual Marco  
 Virtual Technologies  
 VWR Scientific  
 ★★★★★★★★★★  
 ★★★★★★★★★★  
 ★★★★★

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 As research projects progress, additional partners may be added.

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# SOUTHEASTERN ONTARIO

## Guelph:

University of Guelph  
Agilent Technologies Inc.  
Argus Control Systems Inc.  
Aventis-Pasteur  
BASF  
BD Biosciences  
Beckman Coulter Canada  
Becton Dickinson  
Biacore 2000  
Bio-Rad Laboratories  
Bruker Canada Ltd.  
Calico Medical Inc.  
Campbell Scientific  
CD Novatech  
CRESTech  
Databridge Inc.  
de Cloet  
Diamed  
Dionex  
DuPont Canada  
Econair  
Empix Imaging, Inc.  
ESBE Scientific  
ESTAC

Estec Computer Services  
European Space Agency  
Fisher Scientific  
Helios/Oceana  
Hewlett Packard  
Honeywell Canada  
Interpump  
Kaijo Corp.  
Kipp and Zonen  
Kodak  
Leica Microsystems  
Mandel Scientific Co.  
Millipore Simplicity  
MJ Research  
Molecular Devices  
Montreal Biotech Inc.  
National Electrostatics Corp.  
National Instruments  
Nikon Canada Inc.  
Nortech  
Ontario Greenhouse Vegetable Growers  
Marketing Board  
Parmalat Canada  
PE Biosystems Canada Inc.

Pegasus  
Perkin-Elmer  
Photon Technology International  
Pope Scientific  
Quorum Technologies  
Roche Diagnostics  
Rose Scientific  
Sentron BV  
Silicon Graphics Inc.  
SMS Machine Tool Ltd.  
SRB Controls Inc.  
Steris Canada Inc.  
Synergenics  
Systems for Research Corp.  
Tacktronix Canada Inc.  
Tetra Pak  
Varian Canada Inc.  
Villancanale Farms  
Vital Images Inc.  
VWR Canlab  
VWR Scientific  
Waters Scientific  
★★★★★  
★★★★★

## Oakville:

Sheridan College of Applied Arts and Technology  
Immersion Studios  
Silicon Graphics Inc.  
★★

## St. Catharines:

Brock University  
Agilent Technologies Inc.  
Beckman Coulter Canada  
Compuserve  
Fisher Scientific  
Fuji Medical Systems  
Imaging Research Inc.  
Research Corporation Inc.  
Steris Canada Inc.  
VWR Canlab  
★★★★★

Niagara College of Applied Arts and Technology  
Silicon Graphics Inc.  
Trimension  
★

## Hamilton:

St. Joseph's Hospital  
★★  
McMaster University  
Acuson  
Althexis  
Amersham Pharmacia  
Biotech  
APB  
ATS Instruments  
Axic  
Beckman Instruments Inc.  
Beckman Coulter  
Canada

BedeScientific  
Bio-Rad Laboratories  
Brinkmann Instruments  
Brunker AXS  
Canberra Packard Canada  
Carl Zeiss Canada  
Compaq Canada Inc.  
CSC Chromatography  
Dash Associates  
Dionex  
Empix Imaging, Inc.  
Engineering Services Inc.  
ESBE Scientific  
Fallon Ultrasonics

Fisher Scientific  
GE Medical Systems  
Graden Instruments  
IBH  
IBM Canada  
Innovative Magnetic Resonance  
Imaging Systems  
Instron Canada  
Jeol Canada  
Johnson Ultravac  
Kodak  
Leco Instruments  
Leica Microsystems  
Logitech

London Scientific  
Luzchem Research  
Mandel Scientific Co.  
Medi-Man  
Micromass Canada  
Molecular Services  
National Instruments  
Noldus Information Technology  
Nuair  
Osmonics  
PE Biosystems Canada Inc.  
Perkin-Elmer  
Pharmacia Canada  
PSH Kilns and Furnaces

Roche Molecular Biochemicals  
Scientific Products  
Silicon Graphics Inc.  
Spectra-Physics Lasers  
SVT Associates  
Tektronix Canada Inc.  
The MathWorks Inc.  
Varian Canada Inc.  
VWR Canlab  
Waters Scientific  
Westech Industrial  
★★★★★★★★★★  
★★★★★★★★★★

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# TORONTO AREA

## Toronto:

Baycrest Centre for Geriatric Care  
★

Hospital for Sick Children  
★★★

Ryerson Polytechnic University  
Carl Zeiss Canada  
Compusearch  
Digital Instruments  
Newport Instruments  
Renishaw Instruments  
Rockwell Automation  
Silicon Graphics Inc.  
Sun Microsystems  
★★★★

Samuel Lunenfeld Research Institute  
(Mount Sinai Hospital)  
Beckman Coulter Canada  
Carl Zeiss Canada  
Cellomics  
Molecular Devices  
★★★

Seneca College of Applied Arts  
and Technology  
Agilent Technologies Inc.  
Beckman Coulter Canada  
Global G.A.D.  
IBM Canada  
Silicon Graphics Inc.  
TVOntario  
★★

St. Michael's Hospital  
★

Sunnybrook and Women's College  
Health Sciences Centre  
★★★

University of Toronto  
Active Electronics  
AeroTech Positioning Systems  
Agilent Technologies Inc.  
Bay-Bloor Radio  
Bio-Rad Laboratories  
BOC Edwards  
Canberra Packard  
Carsen Group  
Celestica  
Compaq Canada Inc.  
Connaught Labs  
Consortium of Ontario Businesses  
Digital Instruments  
Elcan Optical Tech.  
Fisher Scientific  
Guelph Utility Pole Co.  
Hickson Building Products  
HSNX-NEC  
ION-TOF  
JDS Uniphase  
Kurt J. Lesker Co. Ltd.  
Lambda Physik  
Leica Microsystems  
Lumisys Inc.  
Mandel Scientific Co.  
MDS-Sciex  
MicroLas Lasersystems  
Microsoft Research  
MJ Instrument Sales Co.  
Molecular Imaging  
Nanonics  
Newport Instruments  
Nikon Canada Inc.  
Noldus Information Technology  
Nortel Networks Inc.  
Olympus  
OPAL-RT  
Perkin-Elmer  
Photon Technology International  
Qualix Direct Inc.

Quantum Designs PPMS  
Qubit Systems  
Silicon Graphics Inc.  
Spectra Research Corp.  
Systems for Research Corp.  
ThermoInstruments Inc.  
Timber Specialties Ltd.  
Toronto Road Builders Association  
Tripos Inc.  
Tucker-Davis Technologies  
Varian Canada Inc.  
VWR Canlab  
Waters Chromatography Inc.  
Waters Scientific  
Westaim Technology  
★★★★★★★★★★★★★★  
★★★★★★★★★★★★★★  
★★★★★★★★★★★★★★  
★★★★★★★★★★★★★★

University Health Network and  
Princess Margaret Hospital  
★★★

York University  
Brinkmann Instruments  
Carsen Group  
Fisher Scientific  
Leica Microsystems  
Melles Griot  
PE Biosystems Inc.  
Silicon Graphics Inc.  
Systems for Research Corp.  
VWR Canlab  
★★★★★

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# EASTERN ONTARIO

**Peterborough:** Sir Sandford Fleming College  
DAPANet Inc.  
MicroAge  
Mitel  
Nortel Networks Inc.  
★

Trent University  
CRS Automated DNA Solutions  
Pfizer Canada  
Varian Canada Inc.  
★★★★

**Kingston:** Queen's University  
Analogy  
Ansoft Corporation  
ARM Ltd.  
Beckman Coulter Canada  
Biacore 2000  
Bio-Rad Laboratories  
Bruker Canada Ltd.  
Cadence Design Systems Inc.  
Carl Zeiss Canada  
Carsen Group  
Centre for Automotive Materials  
and Manufacturing  
Coherent Laser  
CyberLab Inc.  
DuPont Canada  
Electrical Geodesics Inc.  
En-Plas Inc.  
GE Medical Systems  
IBM Canada  
IGS  
Mentor Graphics Corp.

Micralyne  
Microcal  
Micromass Canada  
Millennium Technologies International Inc.  
Neuroceptor Inc.  
OLIS Inc.  
PowerSim Technology Inc.  
Protein Solutions Inc.  
Roche Molecular Biochemicals  
Silicon Graphics Inc.  
Spectra Research Corp.  
Sun Microsystems  
Synchronicity Inc.  
Tality Corporation  
Tectronix Canada Inc.  
Texas Instruments  
The MathWorks Inc.  
Transim Technology  
Virage Logic Corp.  
XEROX  
★★★★★★★★★★★★★★  
★★★★★★★★★★★★★★

**Ottawa:** Carleton University  
Aastromed  
Accusan Instruments  
Agilent Technologies Inc.  
ALA Scientific  
Arcturus Environmental  
BC Hydro  
BHP Diamonds Inc.  
Bio-Rad Laboratories  
Bruker Canada Ltd.  
Carl Zeiss Canada  
Cognos Inc.  
Dantec Measurement Technology  
Diatek  
Digital Technologies  
Associates Inc.  
Disc Diag  
Empix Imaging, Inc.  
ESBE Scientific  
Fisher Scientific  
Interfax Canada  
London Scientific  
Med Associates  
Melles Griot  
Microbrightfield  
MJ Research  
Monopros Limited Canada  
Nanometrics Inc.  
Narod Geophysics Ltd.  
Noldus Information Technology  
Ontario Power Generation  
Perkin-Elmer  
Phoenix Geophysics Ltd.  
San Diego Instruments  
Soquetec  
Stotling  
Stratogene  
VWR Canlab  
Waterline  
Winspear Resources Ltd.  
★★★★★★

University of Ottawa  
ABB Bomem  
Agilent Technologies Inc.  
Aquatic Habitats  
Beckman Coulter Canada  
Becton Dickinson  
Bell Canada  
Bio Tools Inc.  
BioComp Instruments Inc.  
Bio-Rad Laboratories  
Canada Life  
Carl Zeiss Canada  
Charron  
Cisco Systems  
Dionex  
Fisher Scientific  
Gamble Scientific  
Ger-Hi-Res  
Graden Instruments  
Hewlett Packard  
Hoskins Corp.  
Informax  
Kodak  
Mandel Scientific Co.  
Mbraun Inc.  
MicroTech Corp.  
Molecular Devices  
Nikon Canada Inc.  
Nortel Networks Inc.  
PCI  
Perkin-Elmer  
QNX Software Systems Ltd.  
Scientific Products  
Sequenom Corp.  
Silicon Graphics Inc.  
Sun Microsystems  
Tektran Inc.  
Varian Canada Inc.  
Viscotek  
VWR Canlab  
Waters Scientific  
Westech Industrial  
Zymark  
★★★★★★★★★★  
★★★★★★★★★★

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# A Catalyst for Progress



Just as highways, airports, railroads, waterways, communications networks and energy utilities are all part of the physical infrastructure necessary for the commercial and industrial sectors of Ontario's economy, so too our research and development sector requires physical infrastructure – buildings, laboratories, equipment and databases. But even a modest medical research laboratory requires an investment of up to \$10 million to build and equip.

Without such sophisticated resources, even the most gifted scientist is unable to conduct the most basic research, let alone the kinds of advanced research necessary to assure Ontario a strong presence in today's global innovation-driven economy. From the flow of talent around the world – usually called 'brain currents' – our research institutions have learned a stark lesson: talent follows money and money follows talent. The best people go where they can find the best facilities and the greatest rewards. This is as true here in Canada as it is in any other country. In a report entitled "Brain Drain and Brain Gain: The Migration of Knowledge Workers To and From Canada," Statistics Canada confirmed that Canada is suffering a net loss of workers in a variety of key knowledge-based occupations. This report showed, for example, that of the 1995 graduates who moved to the United States, 54% were concentrated in the fields of health, engineering, mathematics and physical and biological sciences.

Accordingly, and as part of an overall strategy for meeting the competitive challenges of the new century, the Government of Ontario created the Ontario Innovation Trust in 1999 to meet the following five objectives:

1. Help promote and create an environment that fosters innovation in Ontario's universities, hospitals, colleges and research institutes;
2. Invest in making Ontario's post-secondary institutions and medical facilities world leaders in research, scientific discovery and health care advances;

3. Support the development of conditions and resources that will allow Ontario's research institutions to attract and retain the most accomplished, most visionary researchers from across the country and around the world;
4. Seek and encourage research partnerships among publicly funded research institutions as well as with private sector organizations; and
5. Increase Ontario's innovation capabilities in a way that creates knowledge-based employment and enhances the province's appeal to potential investors.

In its first two years of operation the Ontario Innovation Trust took several important steps towards achieving those objectives:

- A strict but fair criteria was established by which all funding proposals are judged to ensure their consistency with the Ontario Innovation Trust's mandate.
- The Ontario Innovation Trust moved quickly to establish a close working relationship with its federal counterpart, the *Canada Foundation for Innovation* (CFI), which is also dedicated to increasing the ability of Ontario's non-profit research organizations to conduct advanced R&D. The Ontario Innovation Trust provides complementary investments for CFI projects in Ontario, a practice that significantly enlarges the size and scope of projects our researchers can undertake.
- The Ontario Innovation Trust also established the practice of publicly announcing its major investments as a way of informing Ontarians of how Ontario tax dollars are being used to their ultimate benefit. With each announcement, the Ontario Innovation Trust helps forge an understanding among the people of Ontario of the vital importance of enhancing the Ontario's stature as a centre for world-class research.

Jonathan Abbatt, University of Toronto • Baher Abdulhai, University of Toronto • Anurag Agrawal, University of Toronto • Maher Ahmed, Wilfrid Laurier University • Akram Alfantazi, Laurentian University • Carl Amrhein, University of Toronto • Sirinart Ananvoranich, University of Windsor • Maydianne Andrade, University of Toronto • Michael Archer, University of Toronto • Gail Atkinson, Carleton University • Isabelle Aubert, University of Toronto • Mike Bancroft, University of Western Ontario • Jeffrey Banks, Lakehead University • Abderrazak Bannari, University of Ottawa • Louis Barriault, University of Ottawa • Ajay Basak, University of Ottawa • Amarjeet Bassi, University of Western Ontario • Michael Bauer, University of Western Ontario • Robert Beanlands, University of Ottawa • Sanjeev Bedi, University of Waterloo • Samuel Benchimol, University Health Network and Princess Margaret Hospital • Peter Bernath, University of Waterloo • Alan Bernstein, Samuel Lunenfeld Research Institute (Mount Sinai Hospital) • Paul Berti, McMaster University

# A Catalyst for Progress

- The Ontario Innovation Trust's most significant achievement to date (March 31, 2001) has been to commit more than \$362 million to increase Ontario's research capacity. The Ontario Innovation Trust has supported 294 research projects at Ontario's universities, hospitals, colleges and research institutes.
- The Ontario Innovation Trust is governed by a seven-member volunteer Board of Directors, consisting of:
  - Two members appointed by the Council of Ontario Universities;
  - One member appointed by the Ontario Hospital Association;
  - One member appointed by the Association of Colleges of Applied Arts and Technology of Ontario; and
  - Three members appointed by the Lieutenant Governor in Council.

| Since 1999, the Ontario Innovation Trust's Board of Directors has included:                                                      |                     |                 |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------|
| BOARD MEMBER                                                                                                                     | APPOINTED BY        | TERM OF SERVICE |
| <b>Michael Gourley</b> , (Chair) Partner, PricewaterhouseCoopers                                                                 | Province of Ontario | 1999 to present |
| <b>David Lindsay</b> , President and CEO, SuperBuild Corporation                                                                 | Province of Ontario | 2000 to present |
| <b>Gerry McGuire</b> , President, Sault College of Applied Arts & Technology                                                     | Community Colleges  | 2001 to 2002    |
| <b>Robert Prichard</b> , President and CEO, Torstar Corporation                                                                  | Universities        | 2001 to present |
| <b>Bryne Purchase</b> , Deputy Minister, Ontario Ministry of Energy                                                              | Province of Ontario | 2000 to present |
| <b>Bette Stephenson</b> , former Ontario Minister of Education and of Colleges and Universities                                  | Hospitals           | 1999 to present |
| <b>Calvin Stiller</b> , Chair and CEO, Canadian Medical Discoveries Fund; Chair, Ontario Research and Development Challenge Fund | Universities        | 1999 to present |
| <b>Kenneth Knox</b> , former Deputy Minister, Ontario Ministry of Energy, Science & Technology                                   | Province of Ontario | 1999 to 2000    |
| <b>Sheldon Levy</b> , former President, Sheridan College of Applied Arts & Technology                                            | Colleges            | 1999 to 2000    |
| <b>David Smith</b> , Principal Emeritus, Queen's University                                                                      | Universities        | 1999 to 2000    |



*In Memoriam*  
This report is dedicated to the memory of Professor David Smith, Principal Emeritus, Queen's University. One of the founding Directors, Professor Smith was instrumental in shaping the Ontario Innovation Trust during its formative first year. His energetic devotion to the goals of the Ontario Innovation Trust inspired us.



# Total Ontario Innovation Trust Investments by Institution

| INSTITUTION                                                | LOCATION       | NUMBER OF PROJECTS SUPPORTED | TOTAL INVESTMENT |
|------------------------------------------------------------|----------------|------------------------------|------------------|
| Baycrest Centre for Geriatric Care                         | Toronto        | 1                            | \$10,712,000.00  |
| Brock University                                           | St. Catharines | 5                            | \$417,071.00     |
| Carleton University                                        | Ottawa         | 6                            | \$4,178,815.00   |
| Fanshawe College of Applied Arts and Technology            | London         | 1                            | \$243,230.00     |
| University of Guelph                                       | Guelph         | 14                           | \$16,177,578.00  |
| Hospital for Sick Children                                 | Toronto        | 3                            | \$16,894,243.00  |
| Lakehead University                                        | Thunder Bay    | 5                            | \$587,385.00     |
| Laurentian University                                      | Sudbury        | 2                            | \$1,970,000.00   |
| Lawson Health Research Institute                           | London         | 1                            | \$2,864,000.00   |
| London Health Sciences Centre                              | London         | 1                            | \$2,818,062.00   |
| London Regional Cancer Centre                              | London         | 1                            | \$211,500.00     |
| McMaster University                                        | Hamilton       | 27                           | \$32,016,762.00  |
| Niagara College of Applied Arts and Technology             | St. Catharines | 1                            | \$757,896.00     |
| University of Ottawa                                       | Ottawa         | 22                           | \$39,598,948.00  |
| Queen's University                                         | Kingston       | 34                           | \$26,081,371.00  |
| Ryerson Polytechnic University                             | Toronto        | 4                            | \$1,294,110.00   |
| Samuel Lunenfeld Research Institute (Mount Sinai Hospital) | Toronto        | 3                            | \$13,311,614.00  |

| INSTITUTION                                              | LOCATION         | NUMBER OF PROJECTS SUPPORTED | TOTAL INVESTMENT        |
|----------------------------------------------------------|------------------|------------------------------|-------------------------|
| Sault College of Applied Arts and Technology             | Sault Ste. Marie | 3                            | \$1,532,535.00          |
| Seneca College of Applied Arts and Technology            | Toronto          | 2                            | \$676,035.00            |
| Sheridan College of Applied Arts and Technology          | Oakville         | 2                            | \$1,299,292.00          |
| Sir Sandford Fleming College                             | Peterborough     | 1                            | \$389,733.00            |
| St. Joseph's Hospital                                    | Hamilton         | 2                            | \$11,262,736.00         |
| St. Michael's Hospital                                   | Toronto          | 1                            | \$1,685,107.00          |
| Sunnybrook and Women's College Health Sciences Centre    | Toronto          | 3                            | \$15,836,150.00         |
| University of Toronto                                    | Toronto          | 59                           | \$83,195,984.00         |
| Trent University                                         | Peterborough     | 3                            | \$1,031,389.00          |
| University Health Network and Princess Margaret Hospital | Toronto          | 3                            | \$17,788,487.00         |
| University of Waterloo                                   | Waterloo         | 27                           | \$16,143,384.00         |
| The University of Western Ontario                        | London           | 33                           | \$33,936,681.00         |
| Wilfrid Laurier University                               | Waterloo         | 14                           | \$1,091,993.00          |
| University of Windsor                                    | Windsor          | 4                            | \$2,210,395.00          |
| York University                                          | Toronto          | 6                            | \$4,193,812.00          |
| <b>TOTALS: 32 Institutions</b>                           | <b>14 cities</b> | <b>294 projects</b>          | <b>\$362,408,298.00</b> |

For a complete and up-to-date list of Ontario Innovation Trust investments visit us at [www.oit.on.ca](http://www.oit.on.ca)

• Dennis Cvitkovitch, University of Toronto • Sudhir D'Souza, University of Western Ontario • Christopher Damaren, University of Toronto • Qing-Lai Dang, Lakehead University • Hugo de Lasa, University of Western Ontario • Sandy Der, University of Toronto • Al-Amin Dhirini, University of Toronto • Peter Dillon, Trent University • Mike Dixon, University of Guelph • Susan Done, University of Toronto • Marc Ekker, University of Ottawa • Mohamed Elbestawi, McMaster University • Randy Ellis, Queen's University • Michael English, Wilfrid Laurier University • Mary-Ann Fieldes, Wilfrid Laurier University • John Flanagan, Queen's University • Geoffrey Flynn, Queen's University • Cecil W. Forsberg, University of Guelph • Alessandro Forte, University of Western Ontario • Suzanne Fortier, Queen's University • Marie Fraser, University of Western Ontario • Brendan Frey, University of Waterloo • James Friesen, University of Toronto • Brian Fryer, University of Windsor • David Gabriel, Brock University • Sandro Gambarotta, University of Ottawa

# Criteria for Investment Eligibility

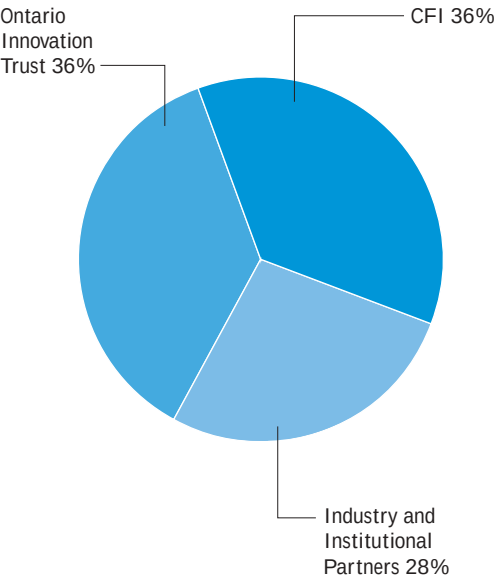
The Ontario Innovation Trust invests in research projects conducted at non-profit organizations such as universities, hospitals, colleges and research institutes located in Ontario. The Board welcomes applications led by non-profit organizations in which private sector partners also provide investments.

The Ontario Innovation Trust invests in research equipment, scientific collections and specimens, computer software, information databases, communications linkages and other relevant assets required for conducting research. It may also invest in the housing, installation and servicing of research-related resources as well as for new research buildings or modifications to existing research structures.

While the Ontario Innovation Trust provides complementary funds for eligible projects supported by the Canada Foundation for Innovation (CFI), it also may entertain applications for Ontario projects that will be pursued independently of CFI funding.

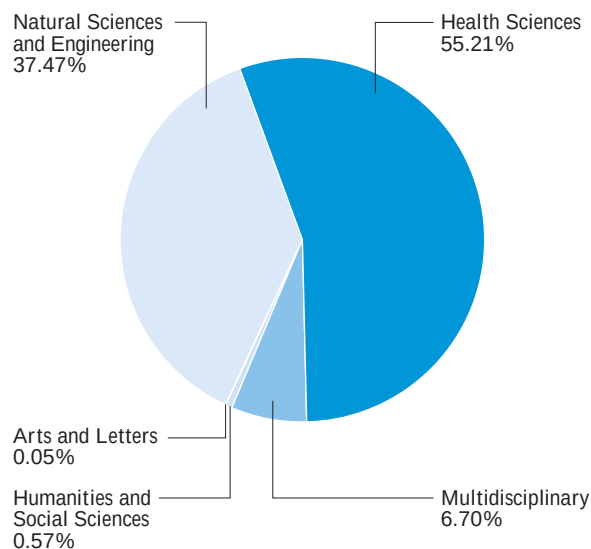
The typical investment provided to any one project is 40% of the total approved eligible costs, to a maximum of \$10 million. In exceptional circumstances, the Board may choose to approve 60% of the approved costs, to a maximum of \$15 million.

Overview of Allocated Funding Sources



# Applications and Project Evaluation

## Distribution of Investments by Area of Research



Applications are assessed on their potential to achieve the objectives of the Ontario Innovation Trust. In considering an application, the Board assesses the degree to which a project will:

- Contribute to building Ontario's capacity for innovation, leading to economic growth, health and environmental quality;
- Create opportunities to strengthen the cadre of Ontario research personnel and by attracting and retaining researchers in Ontario;
- Actively encourage collaboration between eligible recipients and the private sector;
- Promote sharing and the more efficient use of research infrastructure within and among institutions; and
- Contribute to Ontario's strengths in research.

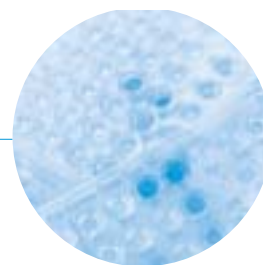
In making its investment decisions, the Board also considers:

- The type and degree of other funding commitments that have been made to a proposed project;
- The recipient's ability to capitalize on the investment to benefit Ontario;
- The applicant's commitment to owning and using the infrastructure; and
- The project's sustainability and its cost/benefit relationship.

The Ontario Innovation Trust typically uses a peer review process to assess a project application. However, in cases where the application has already been reviewed by another granting agency, the Ontario Innovation Trust is guided by the relevant aspects of existing reviews. This recognizes that:

1. The extensive and exacting peer review process relies exclusively on experts already deeply engaged in their fields who volunteer their time;
2. Additional peer review by the Ontario Innovation Trust would duplicate reviews undertaken by organizations with similar research project evaluation criteria; and
3. Such duplication would cause unnecessary additional costs to the applicant.

For these reasons, the Board established an information and review-sharing mechanism by which eligible institutions have authorized the CFI to provide copies of reviewers' comments directly to the Ontario Innovation Trust, thus streamlining the decision-making process.





# Cultivating the Spirit of Innovation

The Ontario Innovation Trust is fortunate to have the cooperation of many dedicated leaders from Ontario's universities, hospitals, colleges, research institutes and the private sector. They assist in identifying and supporting those projects and researchers most able to strengthen the research capacity of Ontario's research institutions.

## Community Colleges

Ontario's community colleges are becoming increasingly adept at translating their traditionally technical focus and hands-on approach into technological breakthroughs and the application of recent discoveries.

A key goal of the Ontario Innovation Trust is to continue to promote this growing capability by investing in promising research projects at colleges across Ontario.

### Investment Profiles

#### Seneca College

An investment from the Ontario Innovation Trust will purchase a new super-computer, a DNA sequencer and other analytic equipment for Seneca College's new Biotechnology Centre for Applied Research. This Ontario Innovation Trust investment will allow students in the three-year biotechnology program to participate in hands-on research projects critical to their studies.

Seneca will also work to develop computer databases to accelerate and enhance biological research with the identification and management of human genes.

#### Seneca College's Significant Industry Partners

Silicon Graphics Inc., Agilent Technologies Inc., Beckman Coulter Canada

#### Sheridan College

Sheridan College's students, faculty and graduates are recognized as world leaders in the rapidly emerging science of computer animation. Investment by the Ontario Innovation Trust is supporting development of a new Interactive Virtual Environment Laboratory at the College. This new laboratory is a critical component of Sheridan's state-of-the-art Visualization Design Institute, housed in the college's new Centre for Animation and Emerging Technologies.

"An application of these new technologies will be in the area of high-risk environments, where human presence in the environment might pose a physical risk," said Professor Avrim Katzman, Director of the Visualization Design Institute. Research in the new lab will focus on visualization and simulation. This pioneering research will benefit a broad range of fields, including engineering, manufacturing and medicine.

#### Sheridan College's Significant Industry Partners

Silicon Graphics Inc., Immersion Studios

#### Sault College

Ensuring the sustainability of our natural resources is vital to Ontario. A project by the Upper Lakes Environmental Research Network establishes Sault College as the home of a new facility dedicated to increasing the awareness of the intricate connections among fishery, forestry, sewage treatment and wildlife management.

The new Northern Centre for Sustainable Resource Management will help establish the College as a global leader in research that is vital to understanding the environment. The overall goal is to support Ontario's resource-based economy while protecting the environment. The Ontario Innovation Trust investment in the project will support research by local scientists, researchers and educators.

#### Sault College's Significant Industry Partners

Varian Canada Inc., TD Canada Trust's *Friends of the Environment Foundation*, Great Lakes Power Ltd., PCI, ESRI Canada, Ontario Ecological Land Classification Program, Fisheries and Oceans Canada, Ontario Forest Research Institute, Anishinabek/Ontario Fisheries Research Centre, Environment Canada, Canadian Forest Service Ltd.

# Cultivating the Spirit of Innovation

## Niagara College

Niagara College's Industrial Solutions Research Unit addresses a very real problem for Ontario's small and medium businesses: the high cost of conducting innovative design and testing. The Unit will operate as a research and development hub. Industry competitiveness will be enhanced with virtual reality technology in:

- Manufacturing – creating a product or process in a virtual environment without the need of a costly prototype;
- Plant design and ergonomics – planning the most efficient tooling and production layout and eliminating costly refitting;
- Medical applications – supporting surgical planning, image-guided surgery and virtual surgery;
- Environmental development – analyzing and assessing environmental impacts of products or manufacturing processes; and
- Urban and rural development – planning effective land-use operations.

An exciting research project underway is the bi-national Peace Bridge Visualization Project that is looking at ways to improve cross-border traffic flow between Ontario and the United States.

According to Marti Jurmain, the Unit's principal leader, the Industrial Solutions Research Unit will offer a complete engineering design, prototyping, manufacturing service as well as a virtual reality simulation system and an important high-tech research and learning facility serving southeastern Ontario.

By providing these tools to Ontario's small- and medium-sized companies, the Unit is strengthening their competitive abilities locally in Ontario, nationally in Canada and globally.

## Niagara College's Significant Industry Partners Silicon Graphics and Trimension

## Universities

Universities have traditionally been laboratories for innovation and ideas, and Ontario's universities are no exception. Each year, breakthroughs occur at Ontario university research centres that create new opportunities and pave the way for further innovation. Supporting research at Ontario universities is therefore crucial to ensuring a prosperous future for Ontario and maintaining a healthy and vibrant culture of innovation.

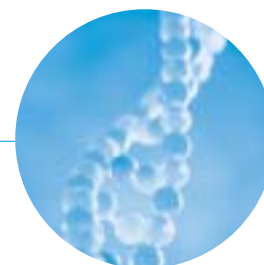
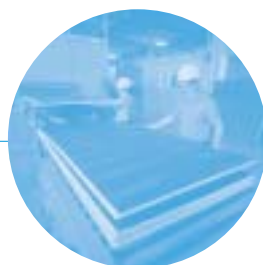
The Ontario Innovation Trust is committed to supporting the groundbreaking work being done at Ontario universities. During its first two years of operation, it awarded almost \$260 million to projects at Ontario universities and their related research institutions. From Ottawa to Thunder Bay, these investments will create best-of-breed facilities at Ontario universities, enabling Ontario researchers to engage in significantly enhanced research.

## Investment Profiles

### Brock University

Canadian Dr. Art van der Est was eager to return to Ontario after having worked at a university in Germany for the past decade. Dr. van der Est is undertaking unique research in the field of photosynthesis, a science that seeks to determine how plants and algae use sunlight to supply their energy needs. Through billions of years of evolution these organisms have developed a protein complex called a 'reaction centre' that is incredibly efficient in absorbing and storing solar energy. The Ontario Innovation Trust investment enabled Dr. van der Est to establish a new laboratory at Brock University, a facility he describes as "crucial to my research." The investment will support several components of the electron spin resonance (ESR) spectrometer in the new lab, equipment essential for studying how the extremely efficient conversion of solar energy in plants is achieved.

The main component of the ESR spectrometer is a laser system that is capable of producing short (10 ns) light pulses at any wavelength in the visible spectrum. The Ontario Innovation Trust's investment will also allow Brock to purchase a digital oscilloscope and a magnetic field control unit. In the long term, this research could lead to more efficient solar cells and could provide information valuable to the agriculture sector.



# Cultivating the Spirit of Innovation

## University of Guelph

The University of Guelph's Controlled Environment Research Facility (CERF) is the most advanced facility in the world for studying ways to develop self-sustaining, renewable life-support systems for deep-space missions.

"Now that Canada's robotic arm is doing its job helping to build the international space station, advanced life-support for long missions is the next area where we can make a significant contribution," says CERF leader Dr. Mike Dixon, a plant agronomist who has spent more than 15 years studying how to sustain life in space. Dr. Dixon believes "We're going to Mars in the next 20 years. This facility will allow Ontario another opportunity to participate in partnerships exploring space technology."

The Controlled Environment Research Facility's 14 low-atmosphere chambers, made possible in part by an Ontario Innovation Trust investment, allow researchers to test how plants respond to a variety of growing conditions. The facility is Canada's unique contribution to the international space program in bioregenerative life-support sciences. More down-to-earth applications include a number of technologies, from 'living walls' where plants filter the air in office buildings to environmentally beneficial techniques for cutting costs and improving productivity within Ontario's \$300 million vegetable greenhouse industry.

### University of Guelph's Significant Industry Partners

BASE, Villacane Farms, Ontario Greenhouse Vegetable Growers Marketing Board, Rose Scientific, ESTAC, Sentron B.V., Honeywell Canada, Beckman Coulter Canada, Varian Canada Inc., SRB Controls Inc., Agilent Technologies Inc., Interpump, Argus Control Systems Inc., Fisher Scientific, Nikon Canada Inc., Photon Technology International, Steris Canada Inc., European Space Agency, CRESTech, P E Biosystems Canada Inc., Bio-Rad Laboratories, VWR Scientific, Roche Diagnostics, Mandel Scientific Co., Leica Microsystems, ESBE Scientific, Estec Computer Services

## Lakehead University

Thanks to an investment from the Ontario Innovation Trust, Lakehead University will soon be home to a new research centre that will ultimately enhance the quality of Ontario's forest reserves. The investment will assist the Geospatial Analysis Research Centre in supporting innovative research on boreal forest issues. This research is crucial to answering complex land utilization questions raised by many different stakeholders in Northern Ontario.

The Centre will be equipped with best-of-breed computers and several types of Geographic Information Systems software. It will significantly help researchers engage in original research in forestry, landscape ecology, geography, geology, archaeology, anthropology, history and northern studies. While the Geospatial Analysis Research Centre will specifically support research in northern Ontario, the infrastructure will be available to address research problems of a national and international scope.

### Lakehead University's Significant Industry Partner Silicon Graphics Inc.

## Laurentian University

An investment by the Ontario Innovation Trust at Laurentian University helped the University put in place the final piece of the puzzle needed to establish a new Centre for Integrated Monitoring Technology, or CIMTEC. CIMTEC is a world-class facility that will take technologies used in oil, gas, aerospace and the automotive industry, and apply them to exploration and mining.

Through the Centre, several research domains important to the mining and exploration sectors, including engineering, environmental monitoring, exploration, architecture, plant design and simulation, and health and safety, will be supported. Projects will be undertaken in partnership with industrial sponsors and technology providers that will contribute to safe, sustainable and cost-effective mining. CIMTEC will provide cutting-edge technology, in the form of a computing network infrastructure, which will support interdisciplinary research and development projects.

The funding will also allow CIMTEC to start development of a data-acquisition facility with data storage capabilities, and a database distribution network. Faculty and staff researchers, graduate students, industry partners and others will be able to conduct high-end research that demands high-speed, large-volume data collection and transfer. In the initial phase, a Virtual Reality Laboratory, the only facility in the world specializing in mining and exploration, will be commissioned.

### Laurentian University's Significant Industry Partners

Falconbridge Ltd., Rio Algom Ltd., Noranda Inc., Mining Technologies International Inc., Atlas Copco Construction and Mining North America, ETI Canada Inc., Canada Life, Thyssen Mining Construction of Canada



# Cultivating the Spirit of Innovation

## McMaster University

McMaster University's new Centre for Molecular Medicine in Hamilton will be one of Ontario's strongest weapons in the fight against our most deadly diseases. When constructed, the 52,000 square foot, \$31 million facility will accommodate research, development and treatment in four critical areas: breast and prostate cancer, respiratory disease, gastrointestinal disease, and gene vector and human cell development. This research will encompass the discovery of disease-causing genes, the development of animal models to establish proof of research principles, the application of gene therapeutics and the evaluation of the outcomes of clinical trials. Led by noted medical researcher Dr. Jack Gauldie, the Centre will unite under one roof the talents of several other renowned researchers currently operating at various medical institutions in the Hamilton area.

The Ontario Innovation Trust is a major investor in the cost of building this new research facility, but its support also extends to several other major projects at McMaster in the fields of health, life sciences, medicine and biochemistry.

### McMaster University's Significant Industry Partners

Bechman Instruments Inc., Fisher Scientific, Mandel Scientific Co., Leica Microsystems, ESBE Scientific, PE Biosystems Canada Inc., Engineering Services Inc., Canberra Packard Canada

## Queen's University

System-on-Chip technology makes it feasible to place an entire microelectronics system on a single chip, a significant advance over larger, more expensive and power-hungry circuit boards. It has applications in consumer products such as digital cameras, telecommunications/Internet equipment, cell phones and personal digital assistants as well as in high-performance signal processing in the field (like medical equipment in ambulances).

The Ontario Innovation Trust has invested in an advanced microchip research and design network that will link industry partners with technology researchers at 33 universities throughout Ontario and across Canada. This is the first time a national distributed network for System-on-Chip research has been implemented on this scale anywhere in the world.

Awarded to Queen's University and managed by Canadian Microelectronics Corporation, the network infrastructure will create a national library of microelectronic system components and computer-aided design tools. As a result, Canadian researchers will be able to conduct innovative research in a multitude of disciplines, from telecommunications to robotics, computing, sensors, biotechnology and medicine.

By 2005, the output of the domestic microelectronic components industry could rise to as much as \$22 billion. Companies that succeed in the global marketplace will need the expertise and trained graduates from Canadian universities to help them capitalize on the competitive edge this research network will give them.

### Queen's University's Significant Industry Partners

ARM Ltd., Cadence Design Systems, Inc., Mentor Graphics Corp., Synchrocity Inc., Tality Corporation, Virage Logic Corp.

## Ryerson Polytechnic University

Ryerson's Laboratory for Electric Drive Applications and Research is an advanced research laboratory dedicated to the development of innovative electric motor speed control systems. An application of the research results is in improving productivity in the pulp and paper industry. Researchers are currently working in four principal areas: power converter technology, control theory, electromagnetic compatibility and custom microelectronic chip design.

An Ontario Innovation Trust investment helped the Laboratory for Electric Drive Applications and Research equip a lab with oscilloscopes, analyzers, testers, workstations and software. Under the direction of Associate Professor Dr. Bin Wu, a well-known researcher in the area of motor drives, this world-class lab will conduct research training and facilitate Ryerson's collaborations with its industrial partners. Many Canadian researchers and corporations view this laboratory as a source for ideas and innovations that will directly benefit their operations.

### Ryerson Polytechnic University's Significant Industry Partners

Rockwell Automation, Sun Microsystems

# Cultivating the Spirit of Innovation

## The University of Toronto

Building on an outstanding record of achievement in collaborative research and education, the University of Toronto and Nortel Networks created the Nortel Institute for Telecommunications in 1997. According to Professor Peter W. E. Smith, the Institute's Director, the goal is to mount a "concerted, focused and substantial effort to seize and maintain a technological advantage in telecommunications for Canada now and for the future."

As a cutting-edge research centre, the Nortel Institute for Telecommunications will pursue research programs aimed at developing telecommunications technologies that can be transferred directly to industry. Already, three patents have been granted to products developed at the institute with 15 more in the approval process.

As a training facility, the Nortel Institute for Telecommunications is unmatched in Canada as an incubator for Ontario's future innovators. To date, institute researchers have worked with and supervised 51 undergraduates, 108 graduate students and 24 post-doctoral students and research associates.

### University of Toronto's Significant Industry Partner Nortel Networks Inc.

## The University of Western Ontario

Leading-edge researchers in many fields need massive computing capability to describe and predict the behavior of complex systems over widely varying scales of length and/or time.

To satisfy this need, the Shared Hierarchical Academic Research Computing Network has been established. Known as SHARCNet, this project, being led by Western, will develop a network of high-performance computing clusters among Ontario universities and colleges.

SHARCNet's primary clusters will be deployed at the University of Guelph, McMaster University and the University of Western Ontario. Smaller development clusters will be situated at the University of Windsor and Wilfrid Laurier University. Educational systems will be located at Fanshawe College and at Sheridan College to provide students there with access to parallel computing systems.

The Ontario Innovation Trust's investment in SHARCNet will help serve the needs of Ontario's leading researchers in the fields of biological and physical sciences, as well as mathematics. Project leader Michael Bauer is confident that "by accessing this new, world-class supercomputing power, not only will Ontario's SHARCNet researchers and industrial partners be able to accelerate the production of research results, but for the first time, they'll be able to meet the needs of commercial partners on a competitive time scale."

### University of Western Ontario's Significant Industry Partners

Bell Canada, Nortel Networks Inc., Platform Computing, Quadrics Interconnect, General Motors of Canada



*(Left to Right) Brian Coburn, MPP for Ottawa-Orleans; Mark Gillespie, Cellular and Molecular Medicine student at the University of Ottawa; and the Hon. Jim Wilson, former Ontario Minister of Energy, Science and Technology and current Ontario Minister of Northern Development and Mines observe an experiment related to stem cell research in a lab at the Ottawa Hospital Research Institute.*

## University of Ottawa

The workings of the human body are still among the most fascinating and challenging mysteries to be solved by science. Dr. Michael Rudnicki, Professor of Medicine at the University



## Cultivating the Spirit of Innovation

of Ottawa, is working to solve the mystery of the genes that control the function of stem cells – cells that are responsible for the regeneration of tissue.

For example, transplanted bone marrow stem cells can give rise to nerve, liver and brain cells. Transplanted muscle and brain stem cells can give rise to blood cells as well as other cell types. Stem cells that have the ability to make different types of cells are pluripotent.

Dr. Rudnicki's laboratory has identified a gene that controls the mechanism or 'switch' by which pluripotent stem cells give rise to specialized stem cells, then form a particular kind of cell type. By activating this 'switch,' the stem cell is given specific instructions that determine what they become. This breakthrough in understanding the way that genes control the growth and repair of tissue avoids the use of embryo tissue while leading directly to the knowledge doctors need when they are treating patients with degenerative diseases.

According to Dr. Ronald Worton, CEO and Scientific Director of the Ottawa Hospital Research Institute, "Stem cell research has asserted itself as one of the most promising avenues for the development of new therapies for neuromuscular diseases and other degenerative tissue diseases."

### Research-Oriented Hospitals

Curing disease through advanced medical and life sciences research is important to the health of Ontario families and a critical component of Ontario's health care strategy.

The Ontario Innovation Trust is helping Ontario research-oriented hospitals to provide their researchers with leading-edge technology and methodologies to learn more about and eventually find cures for many diseases, develop new medicines to treat illnesses, and utilize innovative ways to promote a better quality of life for Ontarians living with disabilities or illnesses.

#### Investment Profiles

##### Ottawa Civic Hospital

As the baby boom generation ages, the number of age-related illnesses is increasing dramatically. The relationship between proteins and diseases associated with aging will be the focus of a new research project in Ottawa. Ontario Innovation Trust investments have allowed the Loeb Health Research Institute at the Ottawa Civic Hospital to open its new Regional Protein Chemistry Centre. Located in a 10,000 square foot expansion of the Loeb Health Research Institute, the Regional Protein Chemistry Centre will provide expertise as well as unique and specialized equipment for protein chemistry research.

Dr. Michel Chrétien, CEO and Scientific Director of the Centre, is leading a team of researchers at the forefront of protein chemistry research. According to Dr. Chrétien and

his colleague Dr. Nabil Seidah, the new Centre "will help advance investigations into ways to combat diseases such as Alzheimer's, atherosclerosis, obesity, diabetes, cancer and viral diseases such as AIDS."

##### St. Joseph's Hospital, Hamilton

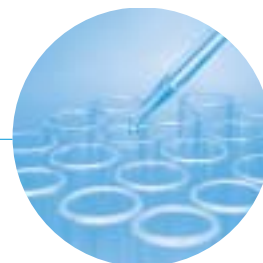
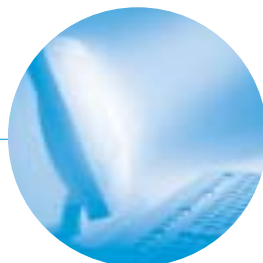
While there is a great deal of research into lung diseases, little is known about how the lungs respond to specific allergens or drugs. The Ontario Innovation Trust investment, coupled with private donations from the Morgan Firestone Foundation and a grant from the Canada Foundation for Innovation, will expand an existing clinic at St. Joseph's Hospital, Hamilton, to create a one-of-a-kind respiratory research centre in Ontario.

Specifically, the Ontario Innovation Trust investment will be used to secure the world's only dedicated positron emission tomography (PET) scanner. The scanner is essentially a large x-ray machine that enables doctors to see the movement of drugs and allergens into a patient's lungs and observe their effect on lung tissue.

##### London Health Sciences Centre

Conventional open-heart surgery, in which the breast bone is broken and the patient's blood is circulated through a heart-lung machine while the heart is cut open, is one of the most traumatic, invasive procedures the human body can endure.

Dr. Douglas Boyd pioneered an alternative to traditional open-heart surgery when he performed the world's first beating-heart coronary bypass operation using robotic arms





# Cultivating the Spirit of Innovation

and a miniature camera. His breakthrough procedure means surgeons will no longer have to cut a long gash in the patient's sternum, and that in turn means the patient undergoes considerably less trauma and thus recuperates in a considerably shorter time.

The Ontario Innovation Trust investment, in establishing the National Centre for Minimally Invasive Robotic Surgery, will yield enormous dividends both in improved lifespan for heart patients and in advancing Ontario's leadership in the medical uses of advanced robotic technology.

## London Health Sciences Centre's Significant Industry Partners

Ivex, Beehive Investments, Computer Motion

## Hospital/University Research Partnerships

Many of the great research breakthroughs of the past have been the result of partnerships that pool the resources and talents of many different people and organizations to accomplish a common goal. Nowhere is the benefit of partnerships as evident as in the relationships among Ontario's university research centres and its hospitals.

The Ontario Innovation Trust encourages these partnerships because they maximize the impact of our research dollars, enable Ontario researchers to broaden their expertise and, most important, increase the likelihood of a breakthrough that could benefit Ontario both financially and medically.

## Partnership Profiles

### Samuel Lunenfeld Research Institute and the University of Toronto

Human DNA holds the key to understanding many disease processes. A major project, led by Dr. Tony Pawson, combines the resources of the Samuel Lunenfeld Research Institute of Mount Sinai Hospital, the University of Toronto in partnership with the Hospital for Sick Children and the Ontario Cancer Institute to investigate the areas of functional genomics, proteomics and bioinformatics. As a result, society will benefit from new therapies for disease detection, diagnostics and treatment.

The goal is to gain a fuller description of the behavior and organization of the human cell that will allow systematic analysis of gene expression in normal and diseased cells.

### Kingston General Hospital and Queen's University

Kingston General Hospital operating rooms will become among the most advanced in the world through the use of powerful, highly advanced medical and computer technology being developed by researchers at Queen's University and the hospital.

An Ontario Innovation Trust investment will enable the expansion of the current computer laboratories at Queen's, the renovation and construction of a computerized operating room and an angiography/CT suite at Kingston General Hospital, which will be a first in North America.

"The new technologies will allow for faster, minimally invasive surgeries, done with fewer or smaller incisions. Patients will be assessed, diagnosed and treated more quickly and accurately," according to Dr. Randy Ellis, the project leader and a professor at the Queen's University Department of Computing Science.

The new facilities will also support graduate research into new modeling methods, new virtual surgery techniques and new biomechanical models.

### Kingston General Hospital & Queen's University's Significant Industry Partner GE Medical Systems

• David Shoesmith, University of Western Ontario • Katherine Siminovitch, University Health Network and Princess Margaret Hospital • Jacob Sivak, University of Waterloo • Ranjini Sivakumar, University of Waterloo • Adonis Skandalis, Brock University • Dennis Skopil, University of Western Ontario • Graeme Smith, Queen's University • James Smith, McMaster University • Peter Smith, University of Toronto • John Smol, Queen's University • Wayne Snedden, Queen's University • Joao Soares, University of Waterloo • Pat Spadafora, Sheridan College • Peter Spasov, Sir Sandford Fleming College • Elis Stanley, University of Toronto • Janet Starkes, McMaster University • Douglas Stephan, University of Windsor • A.K. Stewart, University Health Network and Princess Margaret Hospital • Duncan Stewart, St. Michael's Hospital • Todd Stinebrickner, University of Western Ontario • Donald Stuss, Baycrest Centre for Geriatric Care • Paul Sullivan, University of Western Ontario • Hongjin Sun, McMaster University • Pudupadi Sundararajan, Carleton University

# Ontario Industry Partners

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| <p>Aastromed<br/>ABB Bomem<br/>Accuscan Instruments<br/>ACS Petroleum<br/>Active Electronics<br/>Acuson<br/>Adaptive Technology<br/>Advanced Scientific Design<br/>AeroTech Positioning Systems<br/>Agilent Technologies Inc.<br/>Agriculture Canada<br/>ALA Scientific<br/>Alberta Environmental Protection<br/>Alberta-Pacific Forest Industries Inc.<br/>Alcon Pharmaceuticals<br/>Alias/Wavefront<br/>Aloka<br/>ALPAC<br/>Alpha Controls<br/>Althexis<br/>Amersham Pharmacia Biotech<br/>Analogy<br/>Anishinabek/<br/>Ontario Fisheries Research Centre<br/>Ansoft Corporation<br/>APB<br/>Applied Biosystems<br/>Applied Science Inc.<br/>Applied Systems Inc.<br/>Aquatic Habitats<br/>Arcturus Environmental<br/>Argus Control Systems Inc.<br/>ARM Ltd.<br/>Astromed<br/>ATAS International<br/>Atlas Copco Construction and Mining<br/>North America<br/>ATS Instruments<br/>Autoclave Engineers<br/>Avaaz Starkey<br/>Aventis-Pasteur<br/>Aviv Instruments</p> | <p>Axic<br/>Aymes Medical<br/>B&amp;L Corneal Topographer<br/>Barringer<br/>BASF<br/>Bausch and Lomb<br/>Bay-Bloor Radio<br/>BC Hydro<br/>BD Biosciences<br/>Bechman Instruments Inc.<br/>Beckman Coulter Canada<br/>Becton Dickinson<br/>BedeScientific<br/>Beehive Instruments<br/>Bell Canada<br/>BHP Diamonds Inc.<br/>Biacore 2000<br/>Bio Tools Inc.<br/>BioComp Instruments Inc.<br/>Bio-Rad Laboratories<br/>Biothermic<br/>Blake Industries<br/>BOC Edwards<br/>Bolen Computers<br/>Brinkmann Instruments<br/>Bruker Canada Ltd.<br/>Brunker AXS<br/>Cadence Design Systems Inc.<br/>Calico Medical Inc.<br/>Campbell Scientific<br/>Canada Centre for Minerals and Energy Technology<br/>Canada Life<br/>Canadian Cancer Society<br/>Canada Engraving<br/>Canadian Forest Service Ltd.<br/>Canadian Hydrogarden<br/>Canadian Space Agency<br/>Canberra Packard Canada<br/>Canon USA Inc.<br/>Carl Zeiss Canada<br/>Carsen Group<br/>CD Novatech<br/>Celestica<br/>Cellomics<br/>Centre for Automotive Materials and Manufacturing</p> | <p>Centre Technologies<br/>Centre-Line<br/>CFE Industries<br/>Charron<br/>Cisco Systems<br/>Cognos Inc.<br/>Coherent Laser<br/>Coherent Technologies<br/>Compaq Canada Inc.<br/>Compusearch<br/>Compuserve<br/>Computer Motion<br/>Connaught Labs<br/>Consortium of Ontario Businesses<br/>Convergent Bioscience<br/>Coulbourn Instruments<br/>CRESTech<br/>Criticare Systems<br/>CRS Automated<br/>DNA Solutions<br/>CSC Chromatography<br/>CyberLab Inc.<br/>Cyberware<br/>Dantec Measurement Technology<br/>Dap Technologies<br/>DAPANet Inc.<br/>Dash Associates<br/>Databridge Inc.<br/>de Cloet<br/>Deckel Maho Gildmeister<br/>Dell Computer Systems<br/>Delsys Inc.<br/>Diamed<br/>Diatek<br/>Digital Instruments<br/>Digital Technologies Associates Inc.<br/>Dionex<br/>Disc Diag<br/>Ducks Unlimited Canada<br/>Dumanski<br/>DuPont Canada<br/>Econair<br/>Elcan Optical Tech.<br/>Elections Canada<br/>Electrical Geodesics Inc.</p> | <p>Elf-Aquitaine<br/>Elf-Atochem<br/>Empix Imaging, Inc.<br/>Endoscope<br/>Engineering Services Inc.<br/>En-Plas Inc.<br/>Environment Canada<br/>ESBE Scientific<br/>ESRI-ARC-INFO<br/>ESRI Canada<br/>ESTAC<br/>Estec Computer Services<br/>ETI Canada Inc.<br/>European Space Agency<br/>Exploration Outfitter<br/>Fakespace<br/>Falconbridge Ltd.<br/>Fallon Ultrasonics<br/>Fire Testing Technology<br/>Fisher Scientific<br/>Fisheries and Oceans Canada<br/>FLIR Systems<br/>Folio Instruments Inc.<br/>Forest City<br/>Fuji Medical Systems<br/>Gamble Scientific<br/>GE Medical Systems<br/>GE/Vingmed<br/>General Motors of Canada<br/>Geological Survey of Canada<br/>Geomatix<br/>Ger-Hi-Res<br/>German Federal Government<br/>GH Growers Supply<br/>GlaxoWellcome<br/>GLIER<br/>Global G.A.D.<br/>Graden Instruments<br/>Great Lakes Power Ltd.<br/>Guelph Utility Pole Co.<br/>Hegemonic<br/>Helios/Oceana<br/>Hewlett Packard<br/>Hickson Building Products<br/>HKL Technologies</p> | <p>Honeywell Canada<br/>Horiba<br/>Hoskins Corp.<br/>H-Power<br/>HSNX-NEC<br/>Human Resources and Development Canada<br/>I'Anson Funds<br/>IBH<br/>IBM Canada<br/>ICL<br/>IGS<br/>Imaging Research Inc.<br/>Immersion Studios<br/>IMRIS<br/>Information Gateway Services<br/>Informax<br/>Ingersoll<br/>InMotion Technologies<br/>Innovative Magnetic Resonance Imaging Systems<br/>Instron Canada<br/>Interfax Canada<br/>Interpump<br/>ION-TOF<br/>Isomass Scientific Inc.<br/>Ivex<br/>J.P. Bickel Foundation<br/>JDS Uniphase<br/>Jeol Canada<br/>JKL Micro<br/>JMC-COSMED<br/>Johnson Ultravac<br/>Kaijo Corp.<br/>Kevin Burke Fund<br/>Kimberly Clark<br/>Kipp and Zonen<br/>Kodak<br/>Kratos XPS<br/>Kurt J. Lesker Co. Ltd.<br/>Lambda Physik<br/>Lasentec<br/>Leco Instruments<br/>Leica Microsystems<br/>Liffey Custom Coatings Inc.<br/>Logitech<br/>London Scientific</p> | <p>Lumisys Inc.<br/>Luzchem Research<br/>Mackenzie Financial Corp.<br/>Mandel Scientific Co.<br/>Mar Research<br/>Mars Food Ltd.<br/>Marsh McBirney<br/>Massive Die-Form<br/>Mbraun Inc.<br/>McAllister Funds<br/>MDS-Sciex<br/>Mechanical Dynamics Inc.<br/>Med Associates<br/>Medi-Man<br/>Melles Associates<br/>Melles Griot<br/>Mentor Graphics Corp.<br/>Mettler-Toledo<br/>Micralyne<br/>MicroAge<br/>Microbrightfield<br/>Microcal<br/>MicroLas Lasersystems<br/>Micromass Canada<br/>Microsoft Research<br/>MicroTech Corp.<br/>Millennium Technologies International Inc.<br/>Millipore Simplicity<br/>Mining Technologies International Inc.<br/>MIRARCO/ELRFS<br/>Mitel<br/>MJ Instrument Sales Co.<br/>MJ Research<br/>Molecular Devices<br/>Molecular Imaging<br/>Molecular Services<br/>Molecular Structure<br/>Monopros Limited Canada<br/>Montreal Biotech Inc.<br/>Multigon Inc.<br/>Namox<br/>Nanometrics Inc.<br/>Nanonics<br/>Narod Geophysics Ltd.<br/>National Cancer Institute of Canada</p> |
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# Ontario Industry Partners

National Electrostatics Corp.  
National Instruments  
Netzch  
Neuroceptor Inc.  
Neuroscan  
Newbridge  
Newport Instruments  
Niagara Peninsula  
Children's Centre  
Nikon Canada Inc.  
Noldus Information  
Technology  
Nonius  
Noranda Inc.  
Nortech  
Nortel Networks Inc.  
Northern Digital  
Nuair  
Object Workshops Inc.  
OLIS Inc.  
Olympus  
Ontario Ecological Land  
Classification Program  
Ontario Forest  
Research Institute  
Ontario Greenhouse  
Vegetable Growers  
Marketing Board  
Ontario Ministry of  
Natural Resources  
Ontario Power Generation  
OPAL-RT  
Optikon  
Oriental Scientific  
Instruments  
Origin  
Osmonics  
Ottawa Regional Cancer  
Centre Foundation  
Oxford Instruments  
Parmalat Canada  
Parr Instruments  
PC Service Centre  
PCI  
PE Biosystems Canada Inc.  
Pegasus  
Perkin-Elmer  
Pfizer Canada

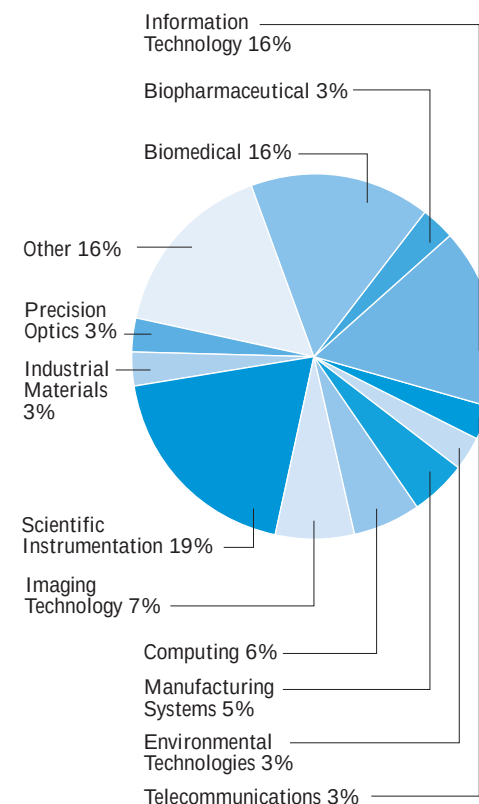
Pharmacia Canada  
Phoenix Geophysics Ltd.  
Photon Technology  
International  
Platform Computing  
Pope Scientific  
Powersim Technology Inc.  
Primm Labs  
Procyon Biopharma Inc.  
Prospect Scientific  
Protein Solutions Inc.  
PSH Kilns and Furnaces  
PTI Inc.  
QNX Software Systems Ltd.  
Quadrics Interconnect  
Qualix Direct Inc.  
Quantum Designs PPMs  
Qubit Systems  
Quorum Technologies  
Region of Waterloo/  
Kitchener  
Relion Industries  
Remspec  
Renishaw Instruments  
Research Corporation Inc.  
Rio Algom Ltd.  
Roche Diagnostics  
Roche Molecular  
Biochemicals  
Rockwell Automation  
Rogue Research  
Rose Scientific  
Roxon Medi-Tech Ltd.  
San Diego Instruments  
Sapphire  
Scientific Products  
Scintrex Earth Science  
Seimans  
Sensible Technologies  
Sentron BV  
Sequenom Corp.  
Shapetape  
Sievers/Ionics  
Silicon Graphics Inc.  
Silicycle  
SMS Machine Tool Ltd.  
Sonometrics  
Soquetec

Spectra Research Corp.  
Spectra-Physics Lasers  
SRB Controls Inc.  
SRI Instruments  
Statistics Canada  
Steris Canada Inc.  
Stotling  
Stratogene  
Sun Microsystems  
Sutter Instruments  
SVT Associates  
Synchronicity Inc.  
Synergenics  
Systems for Research Corp.  
TA Instruments  
Tality Corporation  
TD Canada Trust's Friends  
of the Environment  
Foundation  
Techno-Isel  
Tecktronix Canada Inc.  
Tektran Inc.  
Testing Machines Inc.  
Tetra Pak  
Texas Instruments  
The MathWorks Inc.  
ThermoInstruments Inc.  
Thyssen Mining  
Construction  
Timber Specialties Ltd.  
Topcon Canada  
Toronto Road Builders  
Association  
Total Fina  
Transim Technology  
Trimension  
Tripos Inc.  
Tucker-Davis Technologies  
Turbosonic  
TVOntario  
Ultramar  
Unidata  
Unilever  
Uniroyal Chemical Co.  
United States Department  
of Agriculture  
United States Department  
of Energy

United States Environmental  
Protection Agency  
Varian Canada Inc.  
Villancanale Farms  
Virage Logic Corp.  
Virtual Marco  
Virtual Technologies  
Viscotek  
Vistakon  
Vital Images Inc.  
VWR Canlab  
VWR Scientific  
Waterline  
Waters Scientific  
Waters Chromatography Inc.  
Westaim Technology  
Westech Industrial  
Winspear Resources Ltd.  
Xerox  
Zcorp  
Zymark

\* Note: These investing partners were identified by applicants. As research projects progress, additional partners will have been added. The Ontario Innovation Trust apologizes to partners who may have been left off this list.

Categorization of Industry Partners by Sector



## Message from the Chair – New Century: New Frontiers



*Michael Gourley, Chair, Ontario Innovation Trust*

The Ontario Innovation Trust was created at the crossroads of two centuries. The last century was marked by rapid technological advance that took us from Kitty Hawk to the Sea of Tranquility, from the telegraph to the Internet, from the vacuum tube to the microchip. As the pace of discovery accelerates, the century ahead promises even more revolutionary advances in virtually every field of human endeavor.

How can we benefit from these advances? Since the days when it was called Upper Canada, Ontario's immense human, physical and natural resources have been harnessed to the task of creating a secure, prosperous future for its citizens. I have no doubt that once again we will not just cope with change, but embrace it

and, more importantly, lead it. Through the sheer force of our intellect, energy and vision, we will convert the many challenges ahead in the 21<sup>st</sup> century into opportunities for creating a better, longer, healthier life for all of Ontario's citizens.

Ontario's success at realizing those opportunities resides in large part in our ability to attract and retain ambitious, accomplished leaders in all scientific disciplines. Talented, far-sighted and experienced, these people are the 'spark plugs' in the engine of discovery. Through their research come the graduates, the knowledge and the innovations that hold the brightest promise for Ontario's prosperity in the century ahead.

Providing these researchers in Ontario with the financial resources to pursue their ideas is the Ontario Innovation Trust's first and only priority. Our Board of Directors and staff are to be commended for the diligence and speed with which they applied themselves to this task. I also want to commend the members of the Canada Foundation for Innovation and Ontario Research and Development Challenge Fund for their support and collegiality in working with us. These organizations share our goal of enhancing Ontario's research capability. Together we have established a cooperative approach to the grant application and review process that will better enable us to achieve this goal to the benefit of all of Ontario.

The Ontario Innovation Trust's mandate – to foster a culture of innovation that will attract and retain the best researchers – has also been enthusiastically embraced by Ontario's private sector. The foresight of our corporations, individually or through industry associations, participating as strategic partners with applicants, is evident in the projects highlighted in this report. And they represent only a sample of the hundreds of advanced research projects currently on-going in Ontario.

Ontarians can be proud of the many accomplishments chronicled in this report. We have established the procedures and operational structures necessary for translating the Ontario Innovation Trust's vision into reality. We have recruited a dedicated staff and a Board of Directors impeccably qualified to administer the Ontario Innovation Trust with prudence and vision. We have forged important alliances. This report details Ontario Innovation Trust investments of more than a third of a billion dollars to build and improve Ontario's research capability.

As gratifying and exciting as they have been, I think of our first two years of operation as a prologue. The greatest returns on the investments made by the Ontario Innovation Trust have yet to be realized. In the meantime, we will continue to pursue our mission, confident that with each investment we are helping to strengthen Ontario's grasp on the ladder of progress.

Finally, I would like to extend our appreciation to the Hon. Jim Wilson for his ongoing support of the Ontario Innovation Trust. As we look to the future, we look forward to working with the Hon. Jim Flaherty, Minister of the newly created Ministry of Enterprise, Opportunity and Innovation. We could not end this report without mentioning the vision of Ontario's new Premier, the Hon. Ernie Eves who created the Ontario Innovation Trust when he was Finance Minister in 1999.

On behalf of all of us at the Ontario Innovation Trust, I look forward to reporting to you on our progress in the future.

A handwritten signature in blue ink, reading "M. Gourley".





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## Auditors' Report

### To the Directors of Ontario Innovation Trust

We have audited the balance sheet of **Ontario Innovation Trust** as at March 31, 2000 and the statements of operations and capital, changes in capital, and cash flows for the year then ended. These financial statements are the responsibility of the Trust's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Trust as at March 31, 2000 and the results of its operations and its cash flows for the year then ended in accordance with generally accepted accounting principles.

PKF Hill LLP

May 10, 2000

## BALANCE SHEET &lt;as at March 31, 2000&gt;

|                                                                         |    |             |
|-------------------------------------------------------------------------|----|-------------|
| Assets                                                                  |    |             |
| Current assets                                                          |    |             |
| Cash                                                                    | \$ | 43,024      |
| Accrued interest receivable                                             |    | 427,400     |
| Prepaid expenses                                                        |    | 5,560       |
| Short-term financial investments                                        |    | 257,747,750 |
|                                                                         |    | 258,223,734 |
| Capital assets (note 3)                                                 |    | 90,948      |
|                                                                         | \$ | 258,314,682 |
| Liabilities and Capital                                                 |    |             |
| Current liabilities – accounts payable and accrued liabilities          | \$ | 57,789      |
| Capital                                                                 |    |             |
| Invested in capital assets                                              |    | 90,948      |
| Restricted for approved investments in research (internally restricted) |    | 158,337,444 |
| Unrestricted                                                            |    | 99,828,501  |
|                                                                         |    | 258,256,893 |
|                                                                         | \$ | 258,314,682 |
| See accompanying notes                                                  |    |             |

## STATEMENT OF OPERATIONS AND CAPITAL &lt;Year Ended March 31, 2000&gt;

|                                                                                                    |    |             |
|----------------------------------------------------------------------------------------------------|----|-------------|
| Revenue                                                                                            |    |             |
| Interest income                                                                                    | \$ | 11,236,021  |
| Expenses                                                                                           |    |             |
| Investment custody services                                                                        |    | 185,400     |
| Consulting and management services                                                                 |    | 117,122     |
| Salaries and benefits                                                                              |    | 84,602      |
| Professional fees                                                                                  |    | 36,587      |
| Supplies and related expenses                                                                      |    | 20,550      |
| Travel to Research Institutions                                                                    |    | 7,674       |
| Rent                                                                                               |    | 4,855       |
| Amortization                                                                                       |    | 2,338       |
|                                                                                                    |    | 459,128     |
| Excess of revenue over expenses                                                                    |    | 10,776,893  |
| Sponsor contribution from the Government of Ontario,<br>Ministry of Energy, Science and Technology |    | 250,000,000 |
| Eligible project disbursements                                                                     |    | (2,520,000) |
| Capital, end of year                                                                               | \$ | 258,256,893 |
| See accompanying notes                                                                             |    |             |

STATEMENT OF CHANGES IN CAPITAL <Year Ended March 31, 2000>

|                                                          |    | Invested in<br>Capital Assets | Restricted for<br>Approved Grants | Unrestricted  | Total          |
|----------------------------------------------------------|----|-------------------------------|-----------------------------------|---------------|----------------|
| Sponsor contribution                                     | \$ | –                             | –                                 | 250,000,000   | \$ 250,000,000 |
| Excess of revenue over expenses                          |    | (2,338)                       | –                                 | 10,779,231    | 10,776,893     |
| Purchase of capital assets                               |    | 93,286                        | –                                 | (93,286)      | –              |
| Investments in research approved (internally restricted) |    | –                             | 160,857,444                       | (160,857,444) | –              |
| Eligible project disbursements                           |    | –                             | (2,520,000)                       | –             | (2,520,000)    |
| Capital, end of year                                     | \$ | 90,948                        | 158,337,444                       | 99,828,501    | \$ 258,256,893 |
| See accompanying notes                                   |    |                               |                                   |               |                |

STATEMENT OF CASH FLOWS <Year Ended March 31, 2000>

|                                                               |    |               |
|---------------------------------------------------------------|----|---------------|
| Operating activities                                          |    |               |
| Excess of revenue over expenses                               | \$ | 10,776,893    |
| Add amortization, not involving cash                          |    | 2,338         |
| Eligible project disbursements                                |    | (2,520,000)   |
|                                                               |    | 8,259,231     |
| Changes in:                                                   |    |               |
| Accrued interest receivable                                   |    | (427,400)     |
| Prepaid expenses                                              |    | (5,560)       |
| Accounts payable accrued liabilities                          |    | 57,789        |
| Cash flows from operating activities                          |    | 7,884,060     |
| Financing activities                                          |    |               |
| Sponsor contribution and cash flows from financing activities |    | 250,000,000   |
| Investing activities                                          |    |               |
| Capital assets purchased                                      |    | (93,286)      |
| Short-term financial investments                              |    | (257,747,750) |
| Cash flows from investing activities                          |    | (257,841,036) |
| Net increase in cash position and cash, end of year           | \$ | 43,024        |
| See accompanying notes                                        |    |               |

NOTES TO FINANCIAL STATEMENTS <Year Ended March 31, 2000 >

1. Purpose and Creation

The Ontario Innovation Trust, an inter-vivos trust, was created on March 31, 1999 and commenced operations on April 1, 1999. The trust was sponsored by the Government of Ontario, Ministry of Energy, Science and Technology. However, as part of the terms of the trust agreement, the Government of Ontario is precluded from amending the trust agreement or exercising control over the Trust. The object of the Ontario Innovation Trust is to invest in qualifying projects that increase the capacity to conduct important, high-quality research in Ontario. Eligible recipients are Ontario hospitals, universities, community colleges and non-profit organizations that carry on (or in the opinion of the Board are capable of carrying on) research.

2. Summary of Significant Accounting Policies

The financial statements have been prepared by management in accordance with generally accepted accounting principles, the more significant of which are outlined below. The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses. Actual results could differ from these estimates.

Fund Accounting

(a) Unrestricted

Unrestricted capital includes sponsor contributions and the excess of revenue over expenses of the Trust.

(b) Restricted for Approved Investments in Research (internally restricted)

When eligible project funding is approved, the related capital is transferred from unrestricted capital to capital restricted for approved investments in research. Eligible project disbursements, in accordance with the terms of the investment in research, are charged to capital restricted for approved investments in research.

Capital Assets

Capital assets are recorded at cost. The Trust provides for amortization at annual rates, which are expected to amortize the cost of capital assets over their estimated useful lives on a straight-line basis, as follows:

|                         |                   |
|-------------------------|-------------------|
| Computer equipment      | 3 years           |
| Furniture and equipment | .5 years          |
| Leasehold improvements  | life of the lease |

Short-term investments

Short-term investments are recorded at cost. Investments include term deposits, money-market funds and bankers' acceptances. Market value approximates cost.

3. Capital Assets

Capital assets consist of the following:

|                         | 2000      |                             |           |
|-------------------------|-----------|-----------------------------|-----------|
|                         | Cost      | Accumulated<br>Amortization | Net       |
| Leasehold improvements  | \$ 8,825  | 245                         | \$ 8,580  |
| Furniture and equipment | 25,883    | 216                         | 25,667    |
| Computer equipment      | 58,578    | 1,877                       | 56,701    |
|                         | \$ 93,286 | 2,338                       | \$ 90,948 |





# Financial Statements, Year Ended March 31, 2001

## AUDITORS' REPORT <To the Directors of Ontario Innovation Trust>



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Fax (416) 449-7401  
www.pkfhill.com

### Auditors' Report

To the Directors of  
Ontario Innovation Trust

We have audited the non-consolidated balance sheet of **Ontario Innovation Trust** as at March 31, 2001 and the non-consolidated statements of operations and capital, changes in capital, and cash flows for the year then ended. These non-consolidated financial statements are the responsibility of the Trust's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these non-consolidated financial statements present fairly, in all material respects, the financial position of the Trust as at March 31, 2001 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles except that they are prepared on a non-consolidated basis as explained in note 1.

PKF Hill LLP

July 11, 2001

NON-CONSOLIDATED BALANCE SHEET <as at March 31, 2001>

|                                                                         | 2001           | 2000           |
|-------------------------------------------------------------------------|----------------|----------------|
| Assets                                                                  |                |                |
| Current assets                                                          |                |                |
| Cash                                                                    | \$ 21,745      | \$ 43,024      |
| Accrued interest receivable                                             | 4,407,399      | 427,400        |
| Accounts receivable                                                     | 195,451        | —              |
| Prepaid expenses                                                        | 233,536        | 5,560          |
| Short-term financial investments                                        | 670,108,424    | 257,747,750    |
|                                                                         | \$ 674,966,555 | \$ 258,223,734 |
| Capital assets (note 3)                                                 | 140,816        | 90,948         |
|                                                                         | \$ 675,107,371 | \$ 258,314,682 |
| Liabilities and Capital                                                 |                |                |
| Current liabilities – accounts payable and accrued liabilities          | \$ 402,019     | \$ 57,789      |
| Capital                                                                 |                |                |
| Invested in capital assets                                              | 140,816        | 90,948         |
| Restricted for approved investments in research (internally restricted) | 245,990,763    | 158,337,444    |
| Unrestricted                                                            | 428,573,773    | 99,828,501     |
|                                                                         | 674,705,352    | 258,256,893    |
|                                                                         | \$ 675,107,371 | \$ 258,314,682 |
| See accompanying notes                                                  |                |                |

## NON-CONSOLIDATED STATEMENT OF OPERATIONS AND CAPITAL &lt;Year Ended March 31, 2001&gt;

|                                                                                                 | 2001                  | 2000                  |
|-------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Revenue                                                                                         |                       |                       |
| Interest income                                                                                 | \$ 34,932,495         | \$ 11,236,021         |
| Rental income                                                                                   | 12,000                | –                     |
|                                                                                                 | <u>34,944,495</u>     | <u>11,236,021</u>     |
| Expenses                                                                                        |                       |                       |
| Investment custody services                                                                     | 501,039               | 185,400               |
| Consulting and management services                                                              | 805,947               | 117,122               |
| Salaries and benefits                                                                           | 216,269               | 84,602                |
| Professional fees                                                                               | 57,788                | 36,587                |
| Supplies and related expenses                                                                   | 128,828               | 20,550                |
| Travel to Research Institutions                                                                 | 62,740                | 7,674                 |
| Rent                                                                                            | 62,260                | 4,855                 |
| Amortization                                                                                    | 63,964                | 2,338                 |
|                                                                                                 | <u>1,898,835</u>      | <u>459,128</u>        |
| Excess of revenue over expenses                                                                 | 33,045,660            | 10,776,893            |
| Sponsor contribution from the Government of Ontario, Ministry of Energy, Science and Technology | 500,000,000           | 250,000,000           |
| Eligible project disbursements                                                                  | (116,597,201)         | (2,520,000)           |
| Increase in capital during the year                                                             | 416,448,459           | 258,256,893           |
| Capital, beginning of year                                                                      | 258,256,893           | –                     |
| Capital, end of year                                                                            | <u>\$ 674,705,352</u> | <u>\$ 258,256,893</u> |
| See accompanying notes                                                                          |                       |                       |

## NON-CONSOLIDATED STATEMENT OF CHANGES IN CAPITAL &lt;Year Ended March 31, 2001&gt;

|                                  | 2001                          |                                                                               |                    |                       | 2000                  |
|----------------------------------|-------------------------------|-------------------------------------------------------------------------------|--------------------|-----------------------|-----------------------|
|                                  | Invested in<br>Capital Assets | Restricted for Approved<br>Investments in Research<br>(Internally Restricted) | Unrestricted       | Total                 | Total                 |
| Capital, beginning of year       | \$ 90,948                     | 158,337,444                                                                   | 99,828,501         | \$ 258,256,893        | \$ –                  |
| Excess of revenue over expenses  | (63,964)                      | –                                                                             | 33,109,624         | 33,045,660            | 10,776,893            |
| Sponsor contribution             | –                             | –                                                                             | 500,000,000        | 500,000,000           | 250,000,000           |
| Purchase of capital assets       | 113,832                       | –                                                                             | (113,832)          | –                     | –                     |
| Investments in research approved | –                             | 204,250,520                                                                   | (204,250,520)      | –                     | –                     |
| Eligible project disbursements   | –                             | (116,597,201)                                                                 | –                  | (116,597,201)         | (2,520,000)           |
| Capital, end of year             | <u>\$ 140,816</u>             | <u>245,990,763</u>                                                            | <u>428,573,773</u> | <u>\$ 674,705,352</u> | <u>\$ 258,256,893</u> |
| See accompanying notes           |                               |                                                                               |                    |                       |                       |



NON-CONSOLIDATED STATEMENT OF CASH FLOWS <Year Ended March 31, 2001>

|                                                               | 2001          | 2000          |
|---------------------------------------------------------------|---------------|---------------|
| Operating activities                                          |               |               |
| Excess of revenue over expenses                               | \$ 33,045,660 | \$ 10,776,893 |
| Eligible project disbursements                                | (116,597,201) | (2,520,000)   |
| Add amortization, not involving cash                          | 63,964        | 2,338         |
|                                                               | (83,487,577)  | 8,259,231     |
| Net change in non-cash working capital                        |               |               |
| Accrued interest receivable                                   | (3,979,999)   | (427,400)     |
| Accounts receivable                                           | (195,451)     | -             |
| Prepaid expenses                                              | (227,976)     | (5,560)       |
| Accounts payable accrued liabilities                          | 344,230       | 57,789        |
| Cash flows from operating activities                          | (87,546,773)  | 7,884,060     |
| Financing activities                                          |               |               |
| Sponsor contribution and cash flows from financing activities | 500,000,000   | 250,000,000   |
| Investing activities                                          |               |               |
| Capital assets purchased                                      | (113,832)     | (93,286)      |
| Short-term financial investments                              | (412,360,674) | (257,747,750) |
| Cash flows from investing activities                          | (412,474,506) | (257,841,036) |
| Net increase (decrease) in cash position during the year      | (21,279)      | 43,024        |
| Cash, beginning of year                                       | 43,024        | -             |
| Cash, end of year                                             | \$ 21,745     | \$ 43,024     |
| See accompanying notes                                        |               |               |

NOTES TO NON-CONSOLIDATED FINANCIAL STATEMENTS <Year Ended March 31, 2001>

1. Purpose and Creation

The Ontario Innovation Trust ("the Trust"), an inter-vivos trust, was created on March 31, 1999. The Trust was sponsored by the Government of Ontario, Ministry of Energy, Science and Technology. However, as part of the terms of the trust agreement, the Government of Ontario is precluded from amending the trust agreement or exercising control over the Trust. The object of the Ontario Innovation Trust is to invest in qualifying projects that increase the capacity to conduct important, high-quality research in Ontario. Eligible recipients are Ontario hospitals, universities, community colleges, and non-profit organizations that carry on (or in the opinion of the Board are capable of carrying on) research.

On April 27, 2000, the board approved the creation of the Innovation Institute of Ontario ("IIO"). While the IIO is a subsidiary of the Trust, it has not been consolidated in these financial statements.

The IIO was incorporated under the Canadian Corporations Act without share capital by letters of patent dated June 13, 2000. The IIO was incorporated as a not-for-profit organization and is, therefore, exempt from taxes.

The IIO provides client support, proposal assessment, financial services, communications, public relations assistance, administrative and related support services and expertise to the Ontario Innovation Trust, The Ontario Research and Development Challenge Fund of the Ministry of Energy, Science and Technology and other organizations or groups with similar objects on a not-for-profit basis.

The following are the balances of the IIO for the year ended March 31, 2001:

|                                      |    |           |
|--------------------------------------|----|-----------|
| Assets                               | \$ | 715,476   |
| Liabilities                          |    | 448,895   |
| Net assets                           |    | 266,581   |
| Revenue                              |    | 592,000   |
| Expenditures                         |    | 325,419   |
| Cash flows from operating activities |    | 623,728   |
| Cash flows from investing activities |    | (266,320) |
| Cash flows from financing activities |    | —         |

2. Summary of Significant Accounting Policies

The financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles, the more significant of which are outlined below. The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses. Actual results could differ from these estimates.

Short-term financial investments

Short-term financial investments are recorded at cost. Investments include term deposits, money-market funds, and bankers' acceptances. Market value approximates cost.

Capital assets

Capital assets are recorded at cost. The Trust provides for amortization at annual rates, which are expected to amortize the cost of capital assets over their estimated useful lives on a straight-line basis, as follows:

|                         |                        |
|-------------------------|------------------------|
| Leasehold improvements  | .....life of the lease |
| Furniture and equipment | ..... 5 years          |
| Computer equipment      | .....3 years           |

## NOTES TO NON-CONSOLIDATED FINANCIAL STATEMENTS <Year Ended March 31, 2001>

Capital is comprised of the following components:

(a) Invested in capital assets

Invested in capital assets represents the net book value of capital assets less any indebtedness thereon.

(b) Restricted for approved investments in research (internally restricted)

When eligible project funding is approved, the related capital is transferred from unrestricted capital to capital restricted for approved investments in research. Eligible project disbursements, in accordance with the terms of the investment in research, are charged to capital restricted for approved investments in research.

(c) Unrestricted

Unrestricted capital includes sponsor contributions and the excess of revenue over expenses of the Trust.

### 3. Capital Assets

Capital assets consist of the following:

|                         | 2001              |                             | 2000              |                  |
|-------------------------|-------------------|-----------------------------|-------------------|------------------|
|                         | Cost              | Accumulated<br>Amortization | Net               | Net              |
| Leasehold improvements  | \$ 8,825          | 3,187                       | \$ 5,638          | \$ 8,580         |
| Furniture and equipment | 38,065            | 7,829                       | 30,236            | 25,667           |
| Computer equipment      | 160,228           | 55,286                      | 104,942           | 56,701           |
|                         | <u>\$ 207,118</u> | <u>66,302</u>               | <u>\$ 140,816</u> | <u>\$ 90,948</u> |

### 4. Operating Lease Commitments

The Trust is committed under operating leases for rental of its premises and office equipment that extend to the year 2005. Minimum annual payments required during the next four fiscal years are as follows:

|      |                   |
|------|-------------------|
| 2002 | \$ 62,790         |
| 2003 | 58,108            |
| 2004 | 6,604             |
| 2005 | 6,054             |
|      | <u>\$ 133,556</u> |

### 5. Subsequent Event

Subsequent to the year ended March 31, 2001, the Board of Directors approved a one time payment to the IIO of \$250,000 to pay for a portion of the renovation costs for the office located at 149 College Street. The balance receivable to the Trust at March 31, 2001 of \$206,416 was offset by this amount and the net balance was paid subsequent to the year end.

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