

# ROI

## RETURN ON INNOVATION

Ontario Centres of Excellence Inc.

ANNUAL REPORT 2011/2012



Ontario Centres of  
Excellence

Where Next Happens



Ontario Centres of Excellence (OCE) is funded by the Government of Ontario.

# The OCE story

■ **ECONOMIC TRANSFORMATION** — Over the past quarter century, Ontario and Canada have seen their traditional economic foundation shift from a North American-focused and commodities-based economy to one that is globally oriented and knowledge-based. OCE is playing a key role as a catalyst in advancing Ontario's economic transformation.

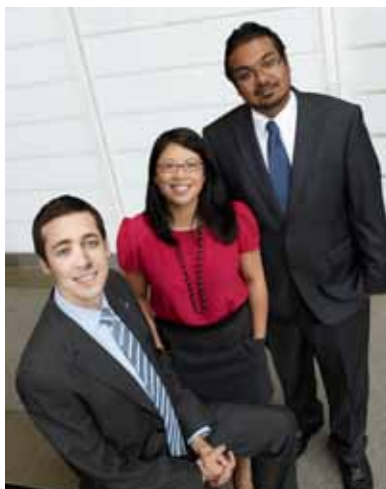
■ **THE CHALLENGE** — Prior to the creation of Ontario Centres of Excellence, connections amongst universities, colleges, research hospitals and industry were limited. Academic and research institutions were producing quality research that was not being utilized to its full potential by industry.

Now, OCE bridges that gap and creates productive working partnerships between Ontario industry, university and college research departments, and research hospitals.

■ **HOW ONTARIO BENEFITS** — Today, OCE drives the commercialization of cutting-edge research across strategic market sectors to build the economy of tomorrow and secure Ontario's and Canada's global competitiveness. OCE focuses on areas that will deliver the greatest social and economic benefits including jobs to communities across the province.

■ **OUR KEY PARTNERS AND FUNDERS** — OCE is funded by the Government of Ontario, is a member of the Ontario Network of Excellence (ONE) and is a key partner in delivering Ontario's Innovation Agenda.

OCE, through its Centre for Commercialization of Research (CCR) – an initiative financially supported by the federal government - also acts as a catalyst that allows innovative businesses to grow and achieve sustainable, commercial success and global competitiveness.



■ **COVER: Pictured on our cover are three of our OCE-supported young entrepreneurs:**

(From left) **Alex Levy**, CEO of MyVoice; 2011 OCE Martin Walmsley Fellowship; 2011 PROFIT Magazine's FuEL Awards for young business leaders; Entrepreneur of the Year; and 2012 Autism App of Distinction from Wynsum Arts. **Jessica Ching**, CEO of Eve Medical; 2011 OCE Martin Walmsley Fellowship Recipient (One Year); and 2011 Up-Start! Competition Winner. **Ibraheem Kahn**, CTO of Smarter Alloys; 2011 OCE Martin Walmsley Fellowship (One Year); and 2011 CleanTech North's Innovation Company of the Year Award.

## Our pathway

**1987**

| The Ontario Centres of Excellence (OCE) not-for-profit program is formally established

**2004**

| OCE's seven independent centres are amalgamated under the Ontario Centres of Excellence Inc.

**2006**

| OCE holds its first Discovery event which becomes an annual award-winning event being named Canada's Best Trade Show in 2010 and 2011

**2008**

| OCE establishes the Centre for Commercialization of Research (CCR) under the federal government's Networks of Centres of Excellence program to support the growth of early-stage companies

**2009**

| Ontario establishes the Ontario Network of Excellence (ONE) – a collaborative network of organizations across Ontario including OCE – a key step in delivering Ontario's Innovation Agenda

# Our unique approach to accelerating innovation and turning ideas into income

We advance innovation through game-changing research leading to successful commercialization and vibrant collaborations between industry and academia.

## Under our unique approach, we:

- Work directly with academia and industry to identify partnerships for turning ideas into income.
- Seek breakthrough investments with the potential to

leapfrog current technologies and techniques  
Broker connections, identifying and facilitating investment transactions

- Invest in the people and ideas that can generate jobs
- Help companies connect the dots to ensure the business basics are properly covered

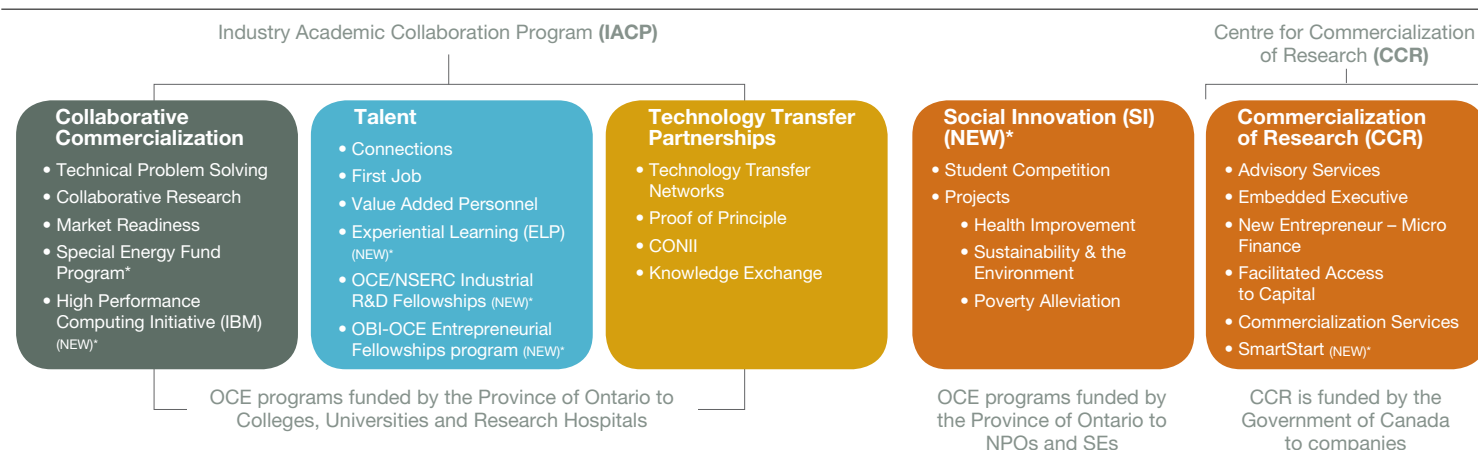
## Our programs and services

In June 2009, Ontario introduced the Ontario Network of Excellence (ONE) – Ontario's revitalized, client-focused, province-wide network. As part of ONE, OCE administers the provincially funded Industry Academic Collaboration Program (IACP). Our business development specialists (BDs) find out what industry needs and what is being discovered in academic labs to ensure we are leveraging the full capacity of Ontario's research institutions by commercializing research discoveries and helping technology-based companies create jobs and prosperity.

Under IACP, OCE offers programs that are responsive, flexible and adaptive to change to ensure we are meeting the needs of researchers, entrepreneurs and high-potential companies that show strong promise for commercial success.

OCE's Centre for Commercialization of Research (CCR), funded by the Government of Canada, complements the IACP to span the full innovation continuum from research outcomes to sustainable market success.

## Programs and Services Delivered by Ontario Centres of Excellence Inc. (OCE)



### 2009

Ontario hands OCE responsibility for administering the Industry Academic Collaboration Program (IACP), becoming ONE's provincial coordinator for industry-academic collaboration programs and services

### 2009

OCE establishes four sector networks in alignment with Ontario's Innovation Agenda: Advanced Manufacturing; Advanced Health Technologies; Energy and Environment; and Information, Communications and Digital Media

### 2009

As part of IACP, OCE assumes responsibility for managing Technology Transfer Partnerships (TTP) comprised of the four Technology Transfer Networks representing many of Ontario's universities and the Colleges Network for Industry Innovation (CONII)

### 2012

OCE supports experiential learning for entrepreneurs and introduces Social Innovation program to link Ontario's business community with nonprofits to collaborate on innovative projects

### 2012

Formally established in 1987 with seven independent centres that evolved and amalgamated into the Ontario Centres of Excellence Inc. in 2004, OCE celebrates 25th anniversary

## Letter from the Chair

# Celebrating a new generation of entrepreneurs



The Ontario government and its federal counterpart continue to make forward-looking, strategic investments to advance innovation despite current economic pressures.

One positive outcome of the current fiscal restraint is how our two levels of government have come together on a number of fronts to maintain momentum for transforming our economy. There is a new willingness to recognize that we can no longer do business in North America in the same way if we are to remain globally competitive.

We need only consider our daily lives for evidence of how the business model has changed dramatically in ways that impact everything from how we get our news and our music to how we heat our homes and fuel our cars. In the energy and environment sectors, for example, incalculable resources have been expended in extracting energy resources from the ground or the rivers and streams of the country. We now live with an environmental imperative that demands change. As a result, we can see many exciting examples of innovation occurring in water and energy, some of the most significant areas of activity for OCE in recent years.

This creative energy was evident earlier this year when OCE and the Centre for Excellence in Mining Innovation (CEMI) held a mining forum in Toronto to explore partnership opportunities for developing the Ring of Fire in Northern Ontario. University and college researchers and industry discussed potential collaborations for undertaking transformative research and development. OCE, CEMI and NSERC will co-fund projects for up to \$400,000 each (including a required industry cash and in-kind contribution to a total of \$2 million).

In Ontario and Canada, we excel in research and development but lag behind in commercializing these breakthroughs. We need to be more aggressive about adopting our own home-grown, state-of-the-art technologies. We shouldn't have to go to Singapore or Brazil to see creative Canadian water technology.

This speaks directly to our mandate at OCE of connecting academic researchers and industry to identify and foster the innovative breakthroughs that can drive global competitiveness. Through our Industry Academic Collaboration Program, we are attempting to leverage the full capacity of Ontario's research institutions through the commercialization of discoveries that lead to jobs and prosperity. In 2011-12, we saw an unprecedented level of industry engagement. OCE leveraged \$51.6 million in investment from our industry partners, the highest in OCE history. Over the same period, we worked with 659 researchers and investigators across the province.

As noted in the Jenkins Report with its focus on narrowing Canada's innovation gap, we can improve the rate of innovation by being more focused and consistent in our program offerings. We have to be smarter, more efficient and more collaborative than in the past. That's

why it's so encouraging to see the Ontario and federal governments collaborating on the high performance computing program announced this year and both funding talent development initiatives under OCE. The more our governments can come together to support academic-industrial collaboration and young entrepreneurs the better.

The emphasis our provincial government has given to experiential learning as well as social innovation is well placed. This is how so many of our bright students will discover their calling, whether in the private sector or the third sector, where there is also a great need for leadership and ingenuity. They might very well find fulfillment in helping the United Way of Canada or by working in a non-profit health-care organization.

This is my last year on the OCE board, having served eight years – the last two as Chair. I have been privileged during that period to work alongside some of Canada's most committed and influential innovation leaders. I have also been witness to the unrelenting energy and dedication of the OCE team in striving to build and effectively manage programs that bridge the innovation gap, support new companies and promote a culture of entrepreneurship.

As a member of the Ontario cabinet in the late 1980s when OCE was created, I am gratified to see that our conviction about becoming aggressive in supporting innovation proved prescient. Our investment then was important and worthwhile and becomes even more so going forward.

A handwritten signature in black ink, appearing to read 'Sean Conway'.

**Sean Conway**, Chair, Board of Directors



## Letter from the President

# Forging new partnerships, supporting entrepreneurial aspirations



This has been a rewarding year for OCE and our stakeholders on many fronts. We have launched exciting new programs, forged some major new partnerships and benefitted from a spirit of collaboration amongst funding agencies. We also reached new levels of investment from our industry partners and had a record year in terms of OCE's investment in programs and projects. And, let's not forget, we set a Guinness World Record.

My participation in the speed mentoring event at this year's Discovery was a personal highlight this year. The event so aptly captured a key element of our mandate: creating opportunities for young entrepreneurs. The enthusiasm and competitive spirit displayed by our 328 mentors and up-and-coming entrepreneurs were truly impressive. Our Discovery protégés were extremely fortunate to have the opportunity to connect with such a distinguished group of innovation leaders from across many fields. One young participant told me he had come away with two potential investors and three potential business partners. Setting a Guinness record was fun; but it was these tangible outcomes that made the event so meaningful.

Supporting the entrepreneurial aspirations of Ontario's students is high on our agenda. This year, we launched the Experiential Learning Program (ELP) to help students from a variety of educational backgrounds get the training and real-world experience they need to turn their ideas into market-ready products and jobs. The early outcomes (from July 2011 to March 2012) are outstanding with 170 projects funded, close to 1,000 young entrepreneurs engaged; 281 start ups created or on their way; 325 jobs created and \$10 million in follow-on investment.

Also introduced this year was the Social Innovation Program. An entirely new area of focus at OCE, this program builds partnerships amongst industry, not-for-profit, social entrepreneurs and academic partners to support development of innovative products, services, and business models. The three social innovation forums held this fiscal year, one in health improvement, one in the environment and sustainability and one in poverty alleviation, have generated many fresh ideas that will be commercialized with funding support from OCE.

A major development this year was the federal-provincial partnership that led to Ontario successfully competing worldwide for a high performance computing centre. The province's commitment of \$15 million in support of the IBM Canada Research and Development Centre in conjunction with a consortium of academic institutions in Ontario will position Ontario at the forefront of research and development. This includes \$7 million through OCE to facilitate the participation of small and medium-sized enterprises. We become the primary link for enabling SMEs, academia and partner organizations to access advanced, applied research capacities previously beyond their reach. The resulting new intellectual property will allow us to expand commercialization opportunities and, ultimately, create jobs and economic benefits for Ontario.

Our Sector Advisory Boards have proven successful in helping us identify major new initiatives in areas that align with Ontario's Innovation Agenda. This includes our work in the energy sector on modernizing the electricity grid through Smart Grid projects and our partnership with the Natural Sciences and Engineering Research Council of Canada and the Centre for Excellence in Mining Innovation to jointly support a \$2 million mining research initiative.

At the same time, we continue to work closely with our university and college partners to increase the flow of people and ideas between the research environment and business sector and to identify how we can further improve the results of these technology transfer programs.

Interest in entrepreneurship at our universities and colleges is clearly on the rise, as evidenced by the strong engagement in our Experiential Learning and CCR's Smart Start programs. Hundreds of start-up companies are coming out of academic institutions as a result of these programs. This reflects a growing trend amongst students to set a goal of graduating with a degree – and a company. It is a testament to Ontario's success in fostering a new culture of entrepreneurship where creating your own jobs is seen as part of the solution.

Our industry-academic collaborations, the add-on investments and the development of talent all fit together as part of the continuum of commercialization. And at the moment, the innovation ecosystem is blossoming.

OCE's achievements can be attributed to the extremely talented members of our team who impress me every day with their insights and drive to achieve results for our stakeholders. We are all thankful to our volunteer board members for their wisdom in helping to steer the direction of the organization. It is with considerable regret that I must acknowledge the departure of our Board Chair Sean Conway, who has fulfilled his term of office with us after eight years on the board, the last two as chair. He has been invaluable to us in helping to open the right doors and provide the connections that inevitably translate into opportunities for OCE to create more value for Ontarians and beyond.

A handwritten signature in black ink, reading "Tom D. Corr".

**Dr. Tom Corr**, President and CEO

# Delivering a Return on Innovation 2011/12

OCE co-invests in commercialization, technology transfer and talent development projects in the segments of the economy that will drive Ontario's future prosperity and global competitiveness. These segments include energy and environment; advanced manufacturing; advanced health technologies and information, communications and digital media.

**\$29 million**  
OCE invested  
in 509 research,  
commercialization  
and talent projects

**\$51.6 million**  
amount leveraged in  
investment from industry  
partners, the highest in  
OCE history

**\$125 million**  
amount of follow-on  
investment received

**5,440**  
researchers, students and private-sector  
employees whose knowledge and skills  
were enhanced through their work with OCE

**509** number of active  
projects

**659** researchers and  
investigators  
engaged

**692** partnerships  
formed

**315** start-ups  
established\*

**1,193** challenges/  
opportunities  
identified

**36** new  
licences

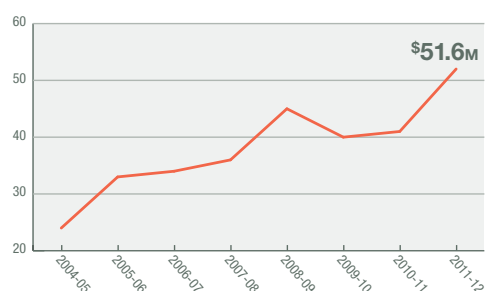
**1,784** jobs created  
or sustained  
in industry  
as a direct  
result of  
OCE-funded  
projects

**1,517** introductions  
between  
academia and  
industry

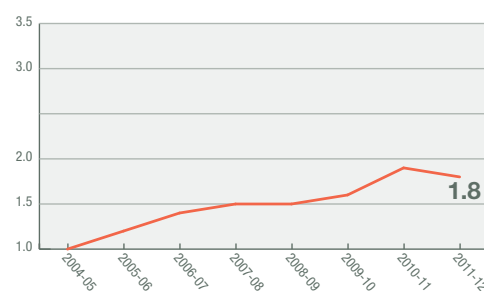
\* this includes ELP  
figures which are new  
this year and refer to  
launched or engaged  
start-ups

## Attracting matching and follow-on investments

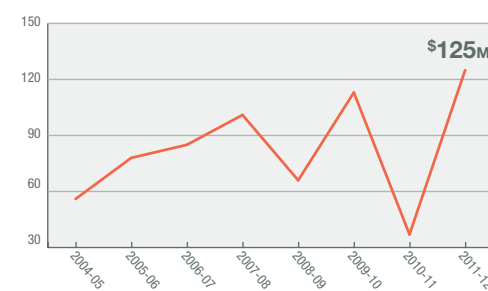
Leverage (\$ Million)



Leverage Ratio



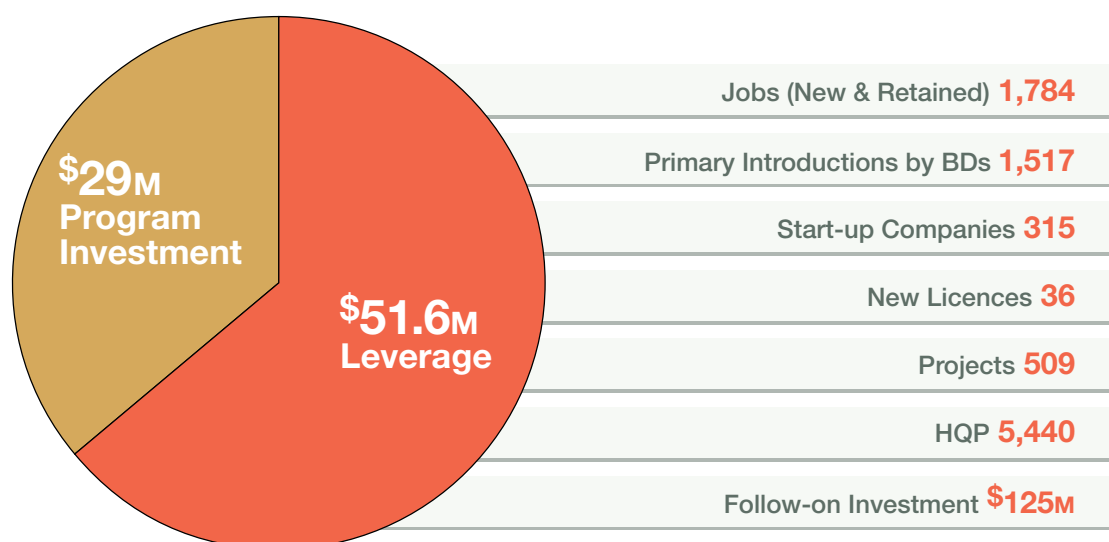
Follow-on Investments (\$ Million)



OCE's impressive leverage ratio shows how successful it has been in attracting matching investments, ensuring a strong rate of return for taxpayers. Research programs attracted the largest amount of leverage (\$10 million) while our Centre for Commercialization of Research (CCR) had the highest leverage ratio of 6.8.

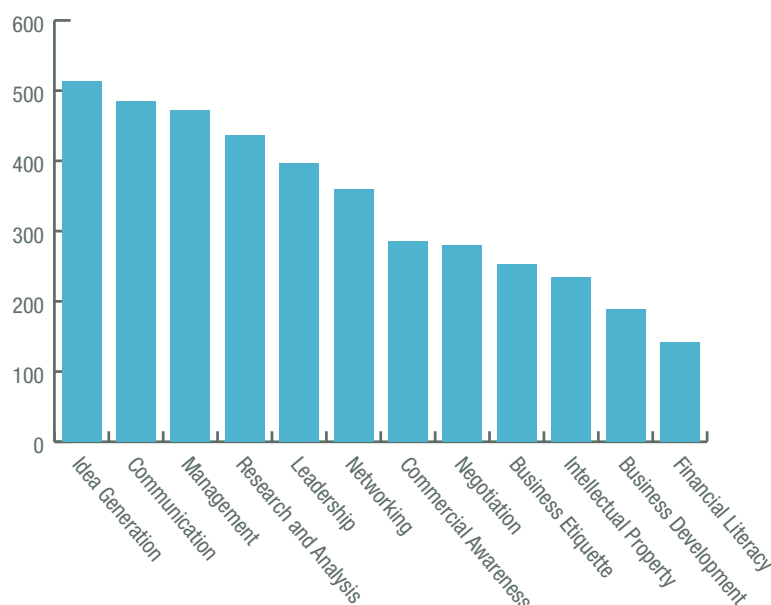
OCE had a strong showing in follow-on investment in 2011/12, tangible evidence of the confidence in our projects. Figures in 2007/08 exclude Stormfisher.

## Return on Innovation Outcomes



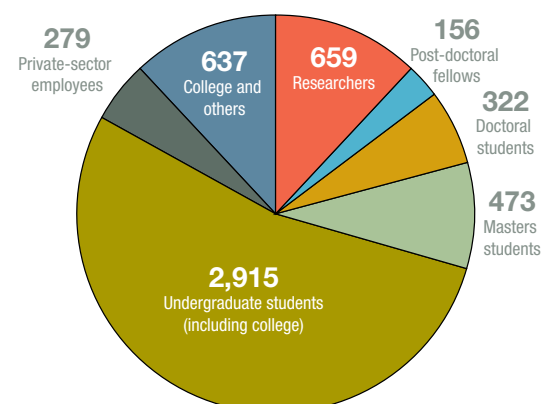
Here we see the return-on-innovation outcomes OCE has achieved as a result of the original Ontario government investments combined with co-investments from partners.

## Students Rank Benefits



A student survey of over 600 participants of OCE talent programs conducted in 2011/12 indicates the areas where they felt they received the most benefit

## Developing Talent



OCE helps further develop and enhance the skills of some of Ontario's most valuable and highly qualified people. We are also contributing significantly to the development of a new generation of young entrepreneurs through our work with undergraduate students participating in our Experiential Learning Program (new in 2011/12) and Connections program.

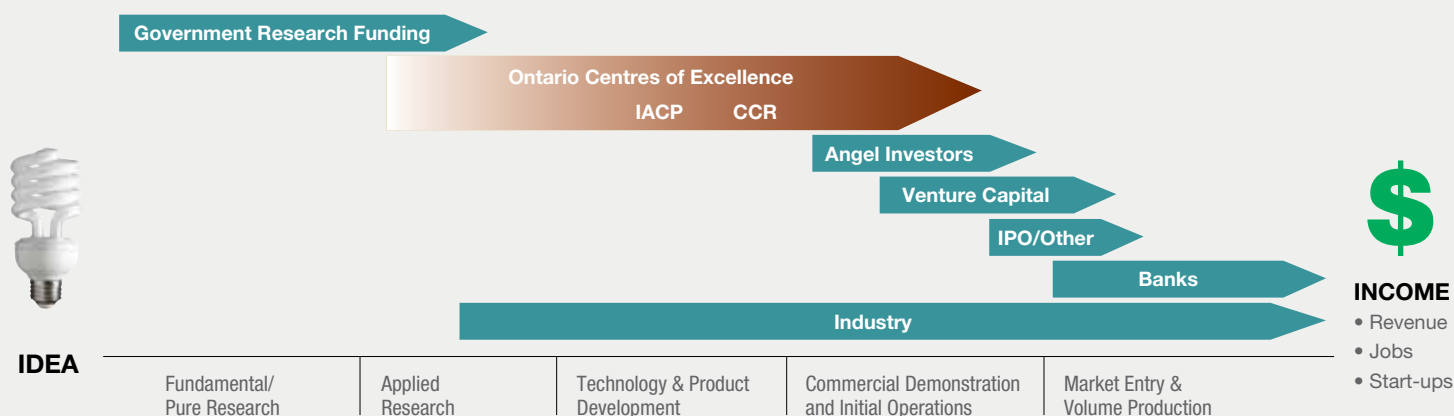
# More about OCE

## Accelerating Commercialization and De-risking Start-ups for Our Stakeholders



Known for de-risking innovation, OCE has developed expertise in this area. A number of small- and medium-sized companies typically overlooked by traditional investors have achieved market success through OCE support.

### Sources of Finance and Stages of Commercialization within the Industry/Academic Space



OCE occupies a critical space in the commercialization continuum helping to bridge the gap between industry and academia.



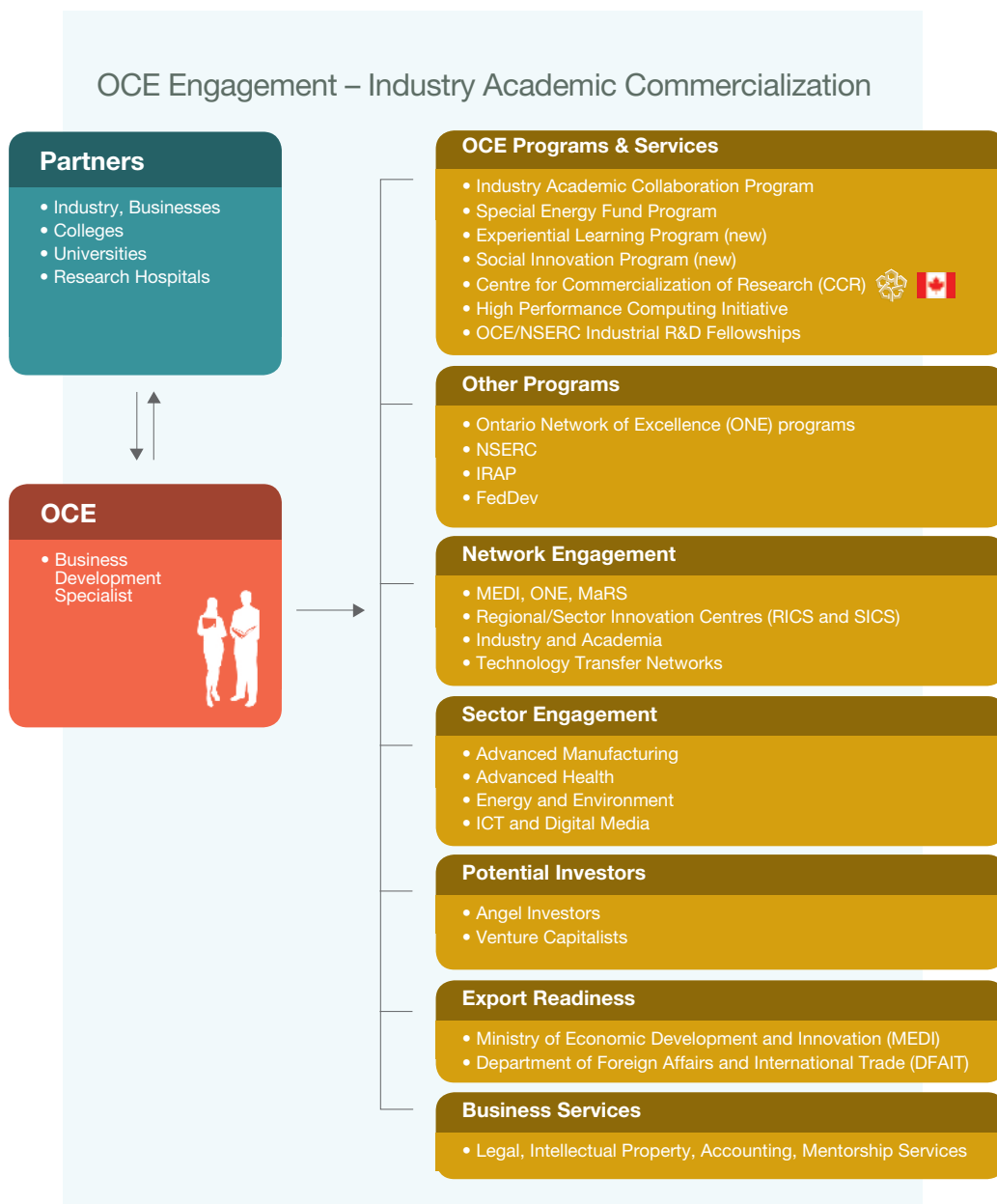
# Ontario Centres of Excellence (OCE) connects the dots...

What makes OCE so effective in helping turn ideas into income is its business development capability, which starts with our people. Our business development specialists go out and ask industry what's needed. They also literally explore the academic halls and labs and ask researchers "What's new?"

More than just "new and improved," OCE seeks breakthrough investments with the potential to leapfrog current technologies and techniques. We are investing in people and ideas that have the potential to generate jobs. This is a natural sweet spot for OCE. It leverages our long-term strengths and relationships with industry, stakeholders in key sectors, the innovation space and the colleges, universities and research hospitals.

All of our investments are made with industry partners who are committed to matching, and in most cases exceeding, the initial funding provided by OCE. This is excellent value for Ontario companies, providing them with the opportunity to develop top-tier intellectual property and to work with talented researchers who have access to unparalleled networks, equipment and resources. These collaborations form lasting partnerships that drive industry research, empower companies and help generate jobs and economic prosperity that benefit all Ontarians.

With our focus on relationships, OCE has recently evolved into a broker of connections. For example, OCE and the Natural Sciences and Engineering



Research Council (NSERC) are partnering to give both recent PhD grads and SMEs in Ontario a boost with the launch of a new pilot program, called the OCE/NSERC Industrial R&D Fellowships (IRDF), to provide financial support to recent doctoral (PhD) students in science and engineering so they can pursue R&D careers in the private sector.

In this way OCE is helping connect the dots for researchers and companies: researchers are put in a paid position where they can apply their research skills and companies can benefit from fresh ideas and gain increased competitiveness in the global marketplace.

# What's New 2011/12

Ontario continues to make strategic investments in innovation as evidenced by the new programs and partnerships OCE launched this past year. As part of a new partnership, we will be making sure Ontario SME companies get in on the action associated with the introduction of high performance computing capacity to the province. With provincial and some federal funding we expanded our talent offerings to include two new training programs for young entrepreneurs and one that contributes to the professional development of post graduate students. OCE has also expanded its cross-sector partnership to work in Social Innovation with nonprofit organizations. And across our sectors -- energy, manufacturing, digital and health – we also saw some major new developments with significant economic impact.

## Big Challenges... Big Ideas... Big Data

Whether the challenge is aging infrastructure, dwindling energy supplies or spiralling healthcare costs, the solution depends on the ability to assimilate and grasp immense volumes of information.

Now industry, government and universities have come together to create a virtual network and – using high performance and cloud computing infrastructure to manage massive data sets – begin solving critical world challenges while accelerating commercialization opportunities.

The recently announced Ontario-based \$210 million research and development initiative is a partnership between IBM, the Government of Ontario, the Government of Canada, Ontario Centres of Excellence (OCE), and seven academic institutions: University of Toronto, Western University, University of Waterloo, McMaster University, University of Ontario Institute of Technology (UOIT), Queen's University and the University of Ottawa.

Named for IBM's \$175-million investment, The IBM Canada Research and Development Centre is also being supported through a \$15-million investment from Ontario's Ministry of Economic Development and Innovation (MEDl), including a \$7-million contribution through OCE.

Under the partnership, OCE will deploy its expertise in helping small- to medium-sized companies in Ontario increase their competitiveness and productivity through access to this unprecedented research capacity and worldclass research partners. OCE will also work with other Ontario research organizations to source innovative company projects and broker the research and development collaboration.



### The announcement of the IBM Canada Research and Development Centre.

*From L-R: Pat Horgan, Vice President, IBM Canada; Don Aldridge, General Manager, IBM Canada; Paul Young, Vice President, Research, University of Toronto; Tom Corr, President and CEO, Ontario Centres of Excellence; Steven N. Liss, Vice-Principal (Research), Queen's University; Dan Sinai, Director Research Services, Western University; The Honourable Gary Goodyear, Minister of State (Science and Technology) (Federal Economic Development Agency for Southern Ontario); Janice Deakin, Provost & Vice-President (Academic), Acting Vice-President (Research), Western University; Dr. Michael Owen, Associate Provost, Research, UOIT; Mona Nemer, Vice President, Research, University of Ottawa; The Honourable Brad Duguid, Ontario Minister of Economic Development and Innovation.*

# Experiential Learning Program (ELP)

## Graduating with cap and company

For many of today's students, it's not enough to be handed a university or college degree. They want to graduate with a degree and a company.

An emerging trend points to strong entrepreneurial spirit amongst higher education students. And OCE's new Experiential Learning Program is producing solid evidence of that ambition.

With OCE funding in 2011/12 of \$1.8 million (leveraged to \$4 million), ELP helps students across Ontario get the training and experience they need to turn their ideas into market-ready products and jobs. The program links postsecondary students and recent graduates to industry, leading to new innovations and start-ups.

In July, 2011, OCE awarded ELP funding to nine programs representing 12 Ontario colleges and universities. Since then, the ELP-funded programs have created many start-ups.

The early outcomes (from July 2011 to March 2012) of this learning-by-doing approach are impressive. One hundred and seventy projects have been funded; 910 young entrepreneurs have been engaged; 281 start-ups have been created or are on their way; 325 jobs have been created and \$10 million in follow-on investment has been secured.

OCE awarded \$25,000 to each of the three finalists of the ELP competition at Discovery 12. These emerging entrepreneurs showcased their business model to a panels of esteemed judges. Competition winners were

### List of awarded programs:

- Ottawa Young Entrepreneurs (OYE) at Carleton University, University of Ottawa/ Université d'Ottawa, La Cité Collégiale and Algonquin College
- Innovation Humber Incubator (IHI) at Humber Institute of Technology and Advanced Learning
- The Xerox Centre for Engineering Entrepreneurship & Innovation at McMaster University
- iDeaWORKS at Mohawk College
- Digital Media Zone at Ryerson University
- The Institute for Optical Sciences (IOS) Entrepreneurship Education Program at the University of Toronto
- VeloCity at University of Waterloo
- Entrepreneurship Acceleration Program (EAP) at Wilfrid Laurier University
- The Centre for Enterprise and Law (CEL) at University of Windsor



**Arash Zarrine-Afsar**

**Verto Analytical (VNA)** | Institute of Optical Sciences (IOS), University of Toronto



**Peyman Moeini, Taras Koulik, Alireza Moeini**

**Peytec** | Ryerson Digital Media Zone (DMZ), Ryerson University



**Dave Inglis, Matt Reid**

**The Concussion Toolbox** | Entrepreneurship Acceleration Program (EAP) at Wilfrid Laurier University



Ontario  
businesses  
gain access  
to highly  
skilled  
graduates

Through a partnership with the Natural Sciences and Engineering Research Council of Canada (NSERC), OCE is able to support the professional development of new PhD graduates while giving Ontario's SMEs access to highly qualified researchers with cutting-edge knowledge in specific areas of experience.

Announced in February 2012, OCE/NSERC Industrial R&D Fellowships (IRDFs) provide financial support to recent doctoral graduates in science and engineering to pursue R&D careers in the private sector.

Candidates are eligible for a maximum salary of \$75,000 per year for a two-year period. NSERC and OCE will each commit up to \$30,000 and \$20,000 per year, respectively. The qualifying industrial partner is responsible for committing \$25,000 per year and any additional benefits they choose to offer. Ten awards will be bestowed in 2012-13.

**“By hiring recent doctoral graduates, companies will not only benefit from fresh ideas and perspectives, they will also contribute to the creation of jobs, support the province's economic growth, and increase their overall competitiveness in the global marketplace. This partnership is a great example of government leadership for the benefit of Ontario and Canada's economy.”**

— Dr. Tom Corr, President and Chief Executive Officer, Ontario Centres of Excellence

## CCR's SmartStart Off to a smart start

There's no need for a middleman anymore and no storefront set up required.

Start-up ShopLocket is turning the traditional destination commerce model on its head by making selling online as easy as embedding a video or sharing a link through popular social media sites such as Facebook, Twitter and Pinterest.

The innovative new start-up is one of the first nine companies to receive funding under an exciting new program for science technology, engineering and math (STEM) graduates and graduate students, funded through the Federal Economic Development Agency for Southern Ontario (FedDev).

The \$1.1 million SmartStart program will allow these young entrepreneurs to work with OCE's Centre for the Commercialization

of Research (CCR) to improve their business and management skills through access to financial and business support services. In all, the program is expected to result in the launch of up to 30 new STEM companies in southern Ontario.

Extreme Startups, a new small-business accelerator program is collaborating with OCE by providing matching private investment for some companies as required under SmartStart.

For its part, ShopLocket secured \$1 million in seed financing through five international venture firms and a handful of private investors.

## Social Innovation Innovating for social good

OCE is helping breathe new life into the innovation ecosystem with the unveiling of a new program that speaks directly to nonprofits, social enterprises and social purpose businesses.

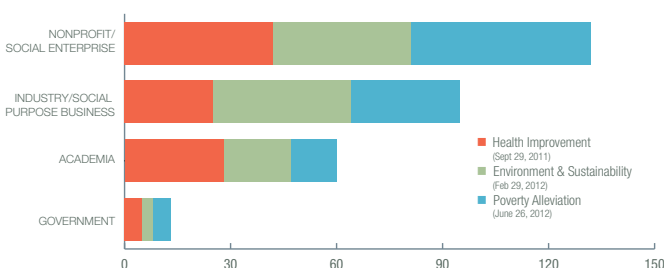
Innovative minds are being applied to causes that count.

Understanding the importance of innovation in the development of new ideas, products, services and processes to address tough social and environmental challenges, OCE is now playing a key role in nurturing cross-sector partnerships and entrepreneurial spirit in this emerging sector.

In 2011, OCE launched the Social Innovation program. In partnership with the Ministry of Economic Development and Innovation, Ministry of Children and Youth Services and the Ministry of Citizenship and Immigration, the program focuses on three strategic areas; health improvement, environment and sustainability; and poverty alleviation.

OCE held a Social Innovation Partnership Challenge Forum in each area attracting an impressive cross-section of close to 250 leaders from the not-for-profit, social enterprise, academic and industry sectors. The forums created networking opportunities and helped identify projects suitable for further development via an Expression of Interest (EOI).

Social Innovation Forums  
by Organization Type



### At the Social Enterprise Student Competition at Discovery 12, OCE awarded:

- \$25,000 to first-place winner Heather Wray, Rooftop Gardens, University of Toronto
- \$10,000 to second-place winner Howard Swartz, Carbon Savings, Queen's University
- \$5,000 to third-place winners Jaelin Lee and George Patrick Montgomery, Biopower Canada, University of Ottawa

“There was a lot to be gained just by developing a business plan and getting feedback from the judges, as well as working closely with a mentor and the connections and networking that came out of the Discovery conference. It was a great opportunity for students and recent grads to advance their business ideas.”

– Heather Wray, Social Enterprise Student Competition, Social Innovation Program



# Looking Across the Sectors

Aligning with Ontario's Innovation Agenda, OCE's sector networks focus on broad industry areas of strength and importance to the provincial economy with large-scale global market opportunities.

Sector Advisory Boards convened in 2011/12 to identify key issues and needs in their respective sectors and recommend strategic, sector-wide directions aimed at driving economic development, increasing industrial R&D capacity and developing highly qualified personnel (HQP).

## Advanced Health Technologies

### NEUROSCIENCE

OCE and Ontario Brain Institute (OBI) have partnered to give top young entrepreneurs the chance to turn their discoveries into neuroscience-based businesses.

- Up to 10 postgraduate (M.Sc., PhD and post-doctoral fellows) and early-stage entrepreneurs to be funded through OBI Entrepreneurs program.
- \$50,000 for one year to support commercialization of their discoveries to help diagnose, treat or cure brain conditions.
- Three OBI entrepreneurs to be jointly funded by the OBI and Ontario Centres of Excellence under the OBI-OCE Entrepreneurial Fellowships program.
- Opportunity for neuroscience-based businesses is strong in Ontario.
- Currently, Ontario is a leader in Canada with a number of world-recognized strengths in neuroscience research.
- Global market for central nervous system diagnostics and therapeutics is estimated at \$130 billion and is growing by 10 per cent per year.

**ADVISORY BOARD** - Dr. Ian C.P. Smith, Gail Garland, Paul Lem, Dr. Tofy Mussivand, Cameron Piron, Helen Findlay, Dr. James T. Posillico, Neil Fraser, Steve Rankin, Neil Godara, Dr. John Rowlands, Simon, Goulet, John Soloninka, Kelly Holman, Dr. Marcia Vernon. **SECTOR LEAD** - Mario Thomas

## Energy and Environment

### SMART GRID AND ENERGY ASSET MAP

To modernize Ontario's electricity grid, OCE launched Phase II of the Special Energy Fund program, focused on smart-grid technologies, and in April 2011 held an innovation forum attended by more than 130 industry and other key stakeholders.

- Under this phase, \$2.2 million to be invested in eight innovative smart-grid projects at 10 Ontario universities. OCE has leveraged additional funds from 15 partners, for a total program value of \$9.7 million.
- Three of the eight research projects with industry and academic partners announced at Discovery 12, one each in advanced technology in data communication, energy storage, and smart distribution systems.
- Successful projects will receive anywhere from \$70,000 to \$600,000 in funding through OCE (matched by industry) to support further R&D.

At the request of the province, OCE has developed an interactive, geographically coded Energy Asset Map showing emerging energy technology assets in the province.

- 1,351 documented organizations including companies, academic research groups and associations and utilities.
- Combined with a global market scan and sector profiles, the map enables Ontario to better identify opportunities for developing technology clusters and selling products and services to growing markets.

**ADVISORY BOARD** - David Butters, Hilda Mackow, Peter A. Bruijns, Cara L. Clairman, Dr. William (Bill) Cairns, David Curtis, John Lemay, Dr. Jatin Nathwani, Nick Parker, William (Bill) Smith, Alexander K. Stuart, Sarah Thorne. **SECTOR LEAD** - Carole Champion

## Information, Communications & Digital Media

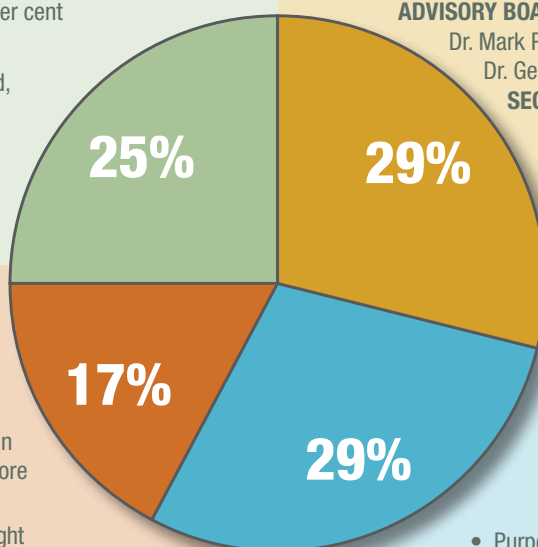
### HIGH PERFORMANCE COMPUTING

OCE is working to ensure Ontario companies benefit from an unprecedented high performance computing capacity.

- An Ontario-based \$210 million R&D initiative sees IBM, the province and federal government, OCE and seven academic institutions come together to create a virtual network.
- The IBM Canada Research and Development Centre, named for IBM's \$175-million investment, is also being supported through a \$15-million investment from Ontario's Ministry of Economic Development and Innovation, including a \$7-million contribution from OCE.
- University and IBM researchers will collaborate using high performance and cloud computing to manage massive data sets, solving critical world challenges and accelerating commercialization opportunities.
- OCE will do targeted outreach to Ontario companies, particularly SMEs, to identify high potential projects for research partnership.

**ADVISORY BOARD** - Leo Lax, Eugene Roman, Brian O'Higgins, Dr. Mark Pecen, Dr. Jonathan Rose, John Baker, Dr. Gerri Sinclair, Sally Daub.

**SECTOR LEAD** - John MacRitchie



## Advanced Manufacturing

### MINING INNOVATION

OCE and the Centre for Excellence in Mining Innovation (CEMI) held a major partnership event in Toronto in June, 2012.

- 163 participants from across industry and academia (about 40 per cent industry).

- Purpose was to explore ideas and identify partnerships aimed at transforming the mining industry given discovery of "Ring of Fire", a major find of nickel, copper, platinum, palladium and chromite in the muskeg in northern Ontario.

- OCE, CEMI and NSERC will fund \$2 million in industry cofounded university research in projects themed under Productivity, Energy, Water and Waste.
- OCE-CEMI-NSERC Mining Initiative generated 29 Expressions of Interests (EOIs) from across Ontario.
- Mining Review Panel with industry representation selected five to go forward as full NSERC Collaborative Research and Development (CRD) proposals. OCE and CEMI will be following the progress of approved projects with a view to assisting in post-R&D commercialization opportunities.

**ADVISORY BOARD** - David Pascoe, Ian Howcroft, Dr. Darren Lawless, Fred Mastroianni, Bruce Seeley, Pat van de Bospoort, Ihor Stech, Ron Harper, Roy Sunstrum, Dr. Don Hewson, Dr. David Wilkinson, Dr. Peter Kondos, Dr. Michael Worswick. **SECTOR LEAD** - Ross Bradsen



# Giatec Scientific Inc.

## Saving lives by preventing concrete infrastructure collapses



(From left) Giatec Scientific co-founder and CEO, Dr. Aali R. Alizadeh, co-founder and President, Dr. Pouria Ghods and OCE Business Development Manager, Dr. Philippa King, under a bridge near the Rideau Canal in Ottawa.

■ **THE CHALLENGE** – Crumbling concrete infrastructure is a challenge faced by many countries across the world. Structures, like bridges and dams, are deteriorating at a pace that could cause unexpected collapses and endanger lives. The need for accurate inspection and detection is vital.

■ **THE BREAKTHROUGH TECHNOLOGY** – Ottawa start-up, Giatec Scientific Inc. has developed a breakthrough hand-held device that detects areas of potential deterioration in concrete structures before it happens. Based on 10 years of award-winning academic research, the device provides an unprecedented level of accuracy, dramatically reducing maintenance costs and improving safety.

■ **HOW OCE HELPED** – The company founders built their business from the ground up with OCE's help, engaging programs like Market Readiness, as well as an Embedded Executive placement through the Centre for Commercialization of Research (CCR). Since then, Giatec Scientific has attracted \$100,000 of follow-on investment from IRAP, NSERC, MITACS and Invest Ottawa and is in preliminary talks with private investors.

■ **WHERE ARE THEY NOW?** – Giatec Scientific Inc. are working on expanding their product offering, increasing manufacturing capacity, developing new distribution channels, establishing partnerships with worldclass industry leaders, and building on strong sales in the Middle East, Europe, Australia and North America.

“OCE is one of the best programs we've had the benefit of accessing and it wasn't just about the funding. More importantly, it was the expertise and experience from our business development advisor that was critical in the whole process. Right from the beginning, OCE helped us refine our business model, setup meetings with potential clients, write applications and establish processes.”

– Aali R. Alizadeh, co-founder and CEO, Giatec Scientific Inc.

### ■ RETURN ON INNOVATION

- Currently employs nine people
- Plans to hire another 20-30 in the next 3-5 years
- Intends to create additional jobs through outsourced manufacturing facility



# Impakt protective

## Helping identify potential concussions with smartphone app



■ **THE CHALLENGE** – Concussions are known as the silent epidemic in sports like hockey, football, lacrosse and skiing. Many injuries go undetected until it's too late. Coaches and parents are often unaware of when they should evaluate players and remove them from play.

■ **THE BREAKTHROUGH TECHNOLOGY** – Ottawa-based Impakt Protective has developed an affordable and easy-to-use sensor device that integrates into sports helmets to alert coaches and parents when a player's head has been hit. A patented software algorithm then processes data sent to a smartphone app, providing information on direction and force of impact.

■ **HOW OCE HELPED** – OCE introduced Impakt Protective to Algonquin College and helped them secure FedDev funding. OCE then initiated and funded the partnership to help the company develop their Android and BlackBerry software apps. The results encouraged Impakt Protective to hire three students, one through OCE's First Job program. CCR also provided supported through its Facilitated Access to Capital program, helping the company attract additional capital.

■ **WHERE ARE THEY NOW?** – Impakt Protective has launched four products and is actively selling its Shockbox device in Canada and the U.S. The company just signed retail agreements with Source for Sports, Play it Again, and a number of online hockey retailers.

(From left) OCE Business Development Manager, Hindal Mirza, Impakt Protective Inc. CEO, Danny Crossman, and Director of Applied Research and Innovation at Algonquin College, Mark Hoddenbagh, at the company's head office in Ottawa.

“The OCE project was definitely successful. It developed the two software applications on time and we hired two engineering students from Algonquin College and another hardware engineer from Algonquin College through OCE's First Job Program.”

– Danny Crossman, Co-founder, Chairman and CEO, Impakt Protective

### ■ RETURN ON INNOVATION

- Currently employs eight people, three of which are Algonquin College students who participated in the OCE-funded project
- Plans to hire another four people in the next two years



## Simple Systems

## Mississauga company restoring hope to stroke survivors



(From left) Simple Systems Inc. CEO, Dr. Diana Pliura with OCE Business Development Manager, Matthew Johnson and Simple Systems Inc. Director and co-founder, Dr. Milos R. Popovic at the company's contract manufacturing facility in Mississauga.

■ **THE CHALLENGE** – Sixteen thousand people in Ontario experience a stroke every year. Many never regain arm function and become dependent on caregivers to perform routine daily tasks like bathing and eating. The economic burden of long-term care and management of stroke survivors in Ontario is estimated at \$1 billion annually.

■ **THE BREAKTHROUGH TECHNOLOGY** – Mississauga-based Simple Systems Inc. has developed a proprietary therapy that uses electrical stimulation to re-train the brain to restore voluntary arm and hand movements. Stroke and spinal cord injury (SCI) patients have realized dramatic gains in self-care independence after just eight weeks of treatment.

■ **HOW OCE HELPED** – OCE supported Simple Systems Inc., the University of Toronto, and Toronto Rehabilitation Institute at University Health Network through two rounds of Market Readiness funding in 2011. The investments catalyzed the development and implementation of a commercialization strategy and team. In August 2012, the company closed one of the largest life sciences angel investments reported in Ontario.

■ **WHERE ARE THEY NOW?** – Simple Systems Inc., together with Mississauga-based contract manufacturing partners, plans to field test beta prototypes early next year. Market clearance in Canada is anticipated by mid-2013 with submissions to European Authorities and the U.S. FDA planned during 2013.

“OCE was instrumental in getting us on the right track and helping us both financially and through connections and advice. I don't think we would be here today if it was not for OCE.”

– Dr. Milos R. Popovic, Director and co-founder,  
Simple Systems Inc.

## ■ RETURN ON INNOVATION

- Projects dramatic cost savings in Ontario healthcare system
- Employs two full-time and three part-time employees
- Plans to hire an additional seven full-time employees in the next 12 months
- Projects a total of 40 employees in three to five years



# Sortable (now Rebellion Media)

## Helping consumers make smarter purchasing decisions

(From left) Former OCE Business Development Manager, now Director of Digital Media Projects Management at Communitech, Glenn Smith, Sortable co-founder, Christopher Reid, and OCE Business Development Manager, Dave Doran, outside Sortable's new office at Rebellion Media in Waterloo.



■ **THE CHALLENGE** – Using the web to help make decisions on what products to buy can be frustrating. Important information is often hidden in forums, locked in reviews and buried in blogs that don't always come to light through a search engine. As a result, consumers lose time searching for relevant information.

■ **THE BREAKTHROUGH TECHNOLOGY** – Waterloo-based start-up, Sortable, has created a decision-making engine that aggregates information from around the web to help consumers make better purchasing decisions. Sortable's technology uses complex algorithms to transform web information into targeted personalized recommendations, generating quality advice and higher sales than competitors. In 2010, the company launched Snapsort, the largest independently owned, camera-comparison tool on the web.

■ **HOW OCE HELPED** – OCE worked with the founders early on and provided two rounds of Market Readiness funding to help establish proof of concept and leverage its unique concept across many domains. Sortable has also applied to OCE's First Job program.

■ **WHERE ARE THEY NOW?** – Sortable was recently acquired by another Waterloo-based company, Rebellion Media, to help facilitate the next phase of growth and become one of the largest digital media companies in Canada. Rebellion is planning to expand into entertainment, travel, finance and automobile decision-making websites.

“OCE was willing to step in at a very early stage when other people weren't and that allowed us to take our ideas and move them to commercialization.”

– Christopher Reid, co-founder, Sortable

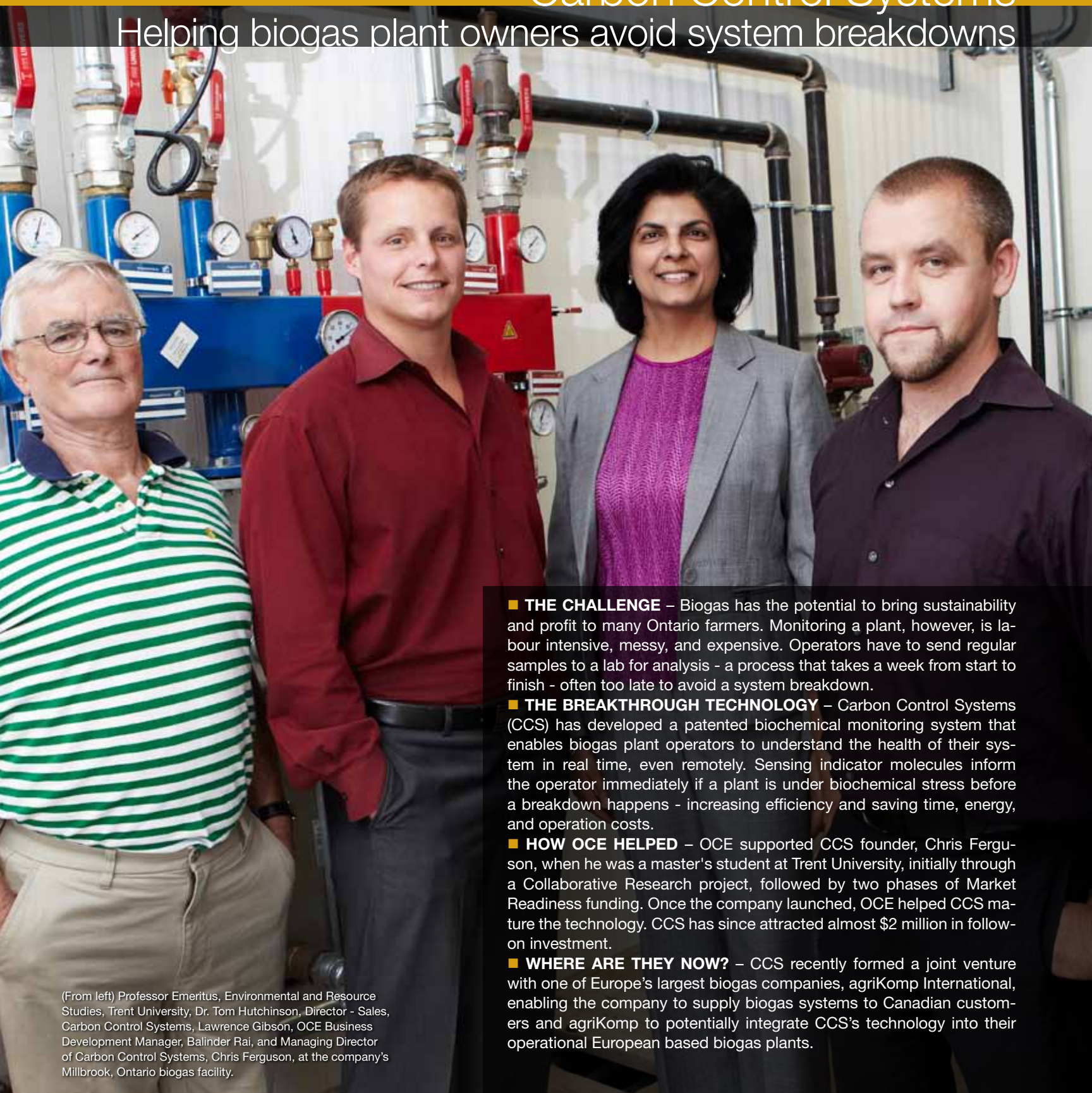
### ■ RETURN ON INNOVATION

- Building one of the largest consumer web businesses in Ontario
- Currently employs 11
- Plans to hire another 20 in the next 18 months



# Carbon Control Systems

## Helping biogas plant owners avoid system breakdowns



(From left) Professor Emeritus, Environmental and Resource Studies, Trent University, Dr. Tom Hutchinson, Director - Sales, Carbon Control Systems, Lawrence Gibson, OCE Business Development Manager, Balinder Rai, and Managing Director of Carbon Control Systems, Chris Ferguson, at the company's Millbrook, Ontario biogas facility.

■ **THE CHALLENGE** – Biogas has the potential to bring sustainability and profit to many Ontario farmers. Monitoring a plant, however, is labour intensive, messy, and expensive. Operators have to send regular samples to a lab for analysis - a process that takes a week from start to finish - often too late to avoid a system breakdown.

■ **THE BREAKTHROUGH TECHNOLOGY** – Carbon Control Systems (CCS) has developed a patented biochemical monitoring system that enables biogas plant operators to understand the health of their system in real time, even remotely. Sensing indicator molecules inform the operator immediately if a plant is under biochemical stress before a breakdown happens - increasing efficiency and saving time, energy, and operation costs.

■ **HOW OCE HELPED** – OCE supported CCS founder, Chris Ferguson, when he was a master's student at Trent University, initially through a Collaborative Research project, followed by two phases of Market Readiness funding. Once the company launched, OCE helped CCS mature the technology. CCS has since attracted almost \$2 million in follow-on investment.

■ **WHERE ARE THEY NOW?** – CCS recently formed a joint venture with one of Europe's largest biogas companies, agriKomp International, enabling the company to supply biogas systems to Canadian customers and agriKomp to potentially integrate CCS's technology into their operational European based biogas plants.

“

OCE's investment in the initial technology research and development, and follow-on market readiness funding allowed us to develop our early prototype, travel to Europe, assess industry technology, and meet with all the key biogas companies. Through that process we met agriKomp International. If it wasn't for OCE we never would have made that connection.”

– Chris Ferguson, President, Carbon Control Systems and Managing Director, CCS agriKomp

### ■ RETURN ON INNOVATION

- Global biogas market currently worth \$17.3 billion in global revenue - will double by 2022
- CCS to become the only complete biogas solution company in North America
- Will bring wealth and sustainability to Ontario farmers
- Currently employs four full-time and one part-time staff
- Potential to create 100 jobs over the next four years



# Elevator Cab Renovations

## Ottawa company leading way in elevator interior safety



(From left) Professor, Mechanical and Mechatronics Engineering, University of Waterloo, Dr. Beth Weckman, OCE Business Development Manager, Dr. Philippa King, and Jonathan Adair, Process Manager, Elevator Cab Renovations, in front of the Steiner Tunnel at The Waterloo Region Emergency Services Training and Research Complex (WRESTRC).

■ **THE CHALLENGE** – There are over 1.65 million elevator cabs in North America. Meeting fire safety standards is crucial. Testing for new innovative fire-safe materials and systems is uncommon, expensive and complex, often resulting in potentially unsafe products.

■ **THE SOLUTION** – Ottawa's Elevator Cab Renovations (ECR), in conjunction with Algonquin College and the University of Waterloo, designed and built a Steiner Tunnel, a unique apparatus intended to test, research, screen and optimize fire-proof panels. The tunnel allows ECR to inexpensively test new, more lightweight materials that make elevator interiors safer and more energy efficient.

■ **HOW OCE HELPED** – OCE linked ECR with Algonquin College and, through a series of Connections projects, final-year college students built the Steiner Tunnel. OCE then enlisted Professor Beth Weckman at the University of Waterloo and initiated a collaboration with NSERC and OCE's Technical Problem Solving program. In-depth fire studies and testing is now underway supported by OCE's Collaborative Research program.

■ **WHERE ARE THEY NOW?** – ECR is firing up the Steiner Tunnel for testing this fall and plans to have a range of new lightweight elevator interiors dominating the market in the next 18 months. The company recently opened a second facility in Mississauga, Ontario.

“

OCE has provided tremendous help in finding academic resources which can help us solve our R&D problems. Our Business Development Manager had great knowledge of the resources available and very successfully connected us to them so we could form long-term relationships.”

– Jonathan Adair, Process Manager,  
Elevator Cab Renovations

### ■ RETURN ON INNOVATION

- Steiner Tunnel testing will propel ECR into an industry leadership position in North America
- Currently employs 40 people
- Plans to hire 50 more in the next three to five years
- Will create 200-300 new jobs in Ontario over the next 10 years



## Kela Medical Inc.

Enabling Ontarians better control of medical records



(From left) Founder and CEO, Kela Medical, Arjun Kumar, CTO, Kela Medical, Daniel W. Sin, and OCE Business Development Manager, Balinder Rai at Kela Medical's head office in Whitby, Ontario.

■ **THE CHALLENGE** – Accessing paper-based medical records from health care professionals when it matters most can often result in long and frustrating wait times. Ontarians need a fast and secure way to carry their own medical records to help reduce duplicate testing and long wait times for treatment.

■ **THE BREAKTHROUGH TECHNOLOGY** – Whitby's Arjun Kumar from Kela Medical Inc. has created a portable wallet-sized card that allows Ontarians to carry their complete medical file with them at all times. Featuring a secure, encrypted microchip that connects without special software to any computer, the card empowers individuals to take control of their medical record-keeping and gain faster and more efficient healthcare service.

■ **HOW OCE HELPED** – In 2011, Ontario Centres of Excellence (OCE) supported a collaborative project between Kela Medical Inc. and the University of Toronto through OCE's Technical Problem Solving program. The company's technology has since generated significant interest from the healthcare, business and financial community.

■ **WHERE ARE THEY NOW?** – Kela Medical launched their Personal Health Record (pHR) card earlier this year and is currently working with providers like the Whitby Cardiovascular Clinic and Novus Health. The company has successfully converted more than five million sheets of medical records into electronic format.



Our collaborative work with the University of Toronto enabled us to consistently improve our technology and help patients in Ontario take control of their own healthcare. We have addressed the concern of privacy and security far beyond the level of our competitors, which would not have been possible without the support of OCE.”

– Arjun Kumar, founder and CEO of Kela Medical Inc.

## ■ RETURN ON INNOVATION

- Employs 13 with an expected growth by 2015 of 45 additional jobs
- Projects millions of dollars in savings for Ontario's healthcare system through elimination of duplicate tests
- Achieves compatibility with new eHealth initiatives launched by the Ontario government

# Modiface

Approved copy

# ModiFace

■ **THE CHALLENGE** – Trying on beauty and fashion products in a retail store or purchasing products online doesn't always yield the desired fit and style, and can result in consumers spending money on merchandise that can't be returned.

■ **THE BREAKTHROUGH TECHNOLOGY** – University of Toronto start-up ModiFace has developed a series of patented 'virtual makeover' mobile applications that combine image processing algorithms with advanced facial and body recognition to replace the need to physically apply beauty and fashion products. Users simply upload their photos to a mobile device and then scan it with the app to apply products to the photo, quickly and inexpensively simulating a 'real-time' shopping experience.

■ **HOW OCE HELPED** – OCE provided Market Readiness support to ModiFace early on, helping the company understand the market and commercial potential of the technology while also gaining a better understanding of the facial aesthetics space.

■ **WHERE ARE THEY NOW?** – ModiFace has offices in Toronto and New York and boasts multinational companies like Garnier, Vichy, Stila Cosmetics, Purminerals, Cosmopolitan, Harpers Bazaar and Proactiv as clients.

Founder and CEO of ModiFace, Dr. Parham Aarabi, with OCE Director of Business Development, John MacRitchie at ModiFace's Toronto office.

“OCE's support helped ModiFace to perform a detailed market exploration including meeting and securing key clients and partners, which in turn, helped us to establish our brand as the global leader in beauty and fashion applications.”

– Dr. Parham Aarabi, founder and CEO, ModiFace

## ■ RETURN ON INNOVATION

- Employs 30
- Projects 100 additional jobs in the next three years



# Technology Transfer Partnerships: Bridging Research and Business

OCE's Technology Transfer Partnerships (TTP) program accelerates the flow of people and ideas between the research environment and business sector. There are four program components:

Connecting business to the research and commercialization expertise of universities and colleges are The Technology Transfer Networks (TTNs) representing Ontario's universities and the Colleges Ontario Network for Industry Innovation (CONII), a 23-member college network. OCE also supports Institutional Proof-of-Principle (IPoP) to help public research institutions advance research discoveries to market-ready innovations through early-stage Proof of Principle (PoP) fund and positions discoveries for further support by services under OCE's Industry Academic Collaboration Program (IACP). We also run TTP networking events for the whole commercialization community in Ontario (TTOs, industry, investors and government).



## FUEL UP FROM WASTE BREAKDOWN

### C4 – Agri-Therm

The need to meet increased worldwide energy demands in environmentally friendly, efficient and cost effective ways has fuelled an interest in biomass conversion technologies. With the support of C4, a spin-off company from Western University called Agri-Therm, has developed the first mobile process to use heat to chemically decompose almost any waste material like wood, corn stocks, tires and plastics into high-value biofuels. The resulting bio oil and bio char can be used to meet world fuel needs while also conforming to biofuel legislation and carbon footprint reduction requirements. Agri-Therm's patented process called fast pyrolysis is inexpensive to build and maintain, easy to operate and capable of generating its own power, which has resulted in global interest and sales potential.

#### ROI

- Revenues anticipated to reach \$150 million within next five years
- Potential to generate 100-150 sustainable manufacturing jobs in the London region



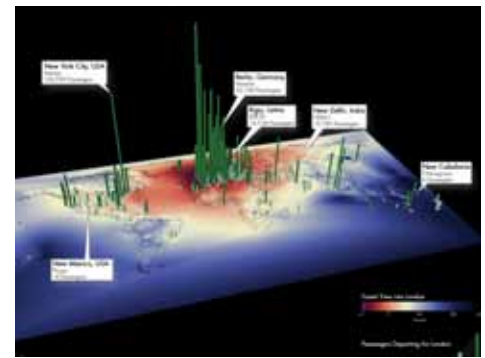
## COOL AS A CUCUMBER

### Colleges Ontario Network for Industry Innovation (CONII) – Garde Manger

With help from CONII, a cross disciplinary team of faculty and students from Niagara College's Culinary, New Media and Computer Programming programs and professional chef Michael Olson have developed an easy-to-use and cost-effective method for digitally monitoring refrigeration. Called Garde Manger, the system tracks refrigeration temperatures through individual temperature sensors that wirelessly send alerts to a manager's computer or mobile device in the event of a serious temperature change. This ensures food served in restaurants remains at the right temperature to avoid food-borne illnesses. As a result of successful testing, Garde Manger has been licensed by Quick Service Software for use by A&W.

#### ROI

- Immediate economic development in Niagara
- Three jobs created



## TRACKING GLOBAL OUTBREAKS IN REAL-TIME

### MaRS Innovation – Bio.Diaspora

Air travel has created such an interconnected world that infectious diseases can rapidly spread with profound health and economic consequences. To help track the spread of deadly diseases, Dr. Kamran Khan has created an easy-to-use, customizable, web-based application that forecasts the impact of infectious diseases worldwide by integrating global information on outbreaks, insect, animal and human populations, climate conditions and commercial air travel. Known as Bio.Diaspora, Khan's system accurately replicated the H1N1 virus's spread and assisted public health officials as they prepared for the 2012 Summer Olympic Games in London. MaRS Innovation is working with Khan to translate this technology to the marketplace.

#### ROI

- Khan and a part-time person are working actively to commercialize Bio.Diaspora, with support from a 10-person academic research team at St. Michael's Hospital
- Khan plans to hire two software developers in the near future



## STRENGTH IN NUMBERS

### Ontario Partnership for Innovation and Commercialization (OPIC) – Strengths Assessment Inventory (SAI)

Establishing where a child's talents lie is the dream of parents and educators alike. With the help of OPIC, researchers at Lakehead University have developed a unique questionnaire that enables examiners to uncover children's strengths. The Strengths Assessment Inventory (SAI), comprised of 124 questions in 11 categories, is used to help struggling students do better in school and deal with emotional and behavioural issues related to experiences like being bullied. It can also help address addiction issues in adolescents. SAI is being used by youth service agencies, area public schools and some Ontario school boards with further deployment to schools across Ontario expected soon. An Early Childhood SAI and a Postsecondary SAI are now being piloted with various agencies.

## ROI

- Created two jobs
- Helping Ontario students identify and excel in their strengths



## A BORN LEADER

### Rideau Commercialization Network Partner – Ottawa Technology Transfer Network – Privacy Analytics

About 140,000 babies are born and screened for diseases and risk factors in Ontario each year. This data is stored in the Better Outcomes Registry and Network (BORN) and used by researchers to understand emerging trends in the health of children and mothers. To allow researchers to better and more securely access this data, the University of Ottawa and RCN Partner OTTN helped Privacy Analytics' CEO, Dr. Khaled El Emam provide the technology to facilitate the sharing of this data for secondary purposes (e.g., research and public health) in a manner that preserves privacy of mothers and babies. BORN is one of the most comprehensive, secure and coveted mother-child registries in Canada. The Privacy Analysis Risk Assessment Tool (PARAT), when applied to BORN's research data, makes Ontario the national leader in population studies.

## ROI

- Created 14 jobs
- Giving Ontario a research edge



## DECELLULARIZED ADIPOSE TISSUE

### Rideau Commercialization Network Partner PARTEQ Innovations

Soft tissue deformity caused by traumatic injuries, birth defects or surgery can seriously affect an individual's mental wellbeing and physical mobility. A new process developed by Dr. Lauren Flynn of Queen's University holds promise for reducing or even eliminating these problems. Her process of decellularizing human adipose tissue (i.e. fat) produces a "bioscaffold" that, when implanted in the body, stimulates the natural regrowth of healthy tissue. The technology provides a more stable and effective alternative to existing soft-tissue repair strategies, and has the potential to be used in a wide range of procedures, from tumour resections, burn repairs, and the correction of congenital defects to breast augmentation and facial rejuvenation. RCN partner PARTEQ Innovations is currently helping Dr. Flynn commercialize the technology.

## ROI

- Will create 20 highly skilled jobs within three years
- Making Ontario a leader in the reconstructive and cosmetic surgery markets

## Highlights 2011-12:

- In the TTP's first full year of operation, OCE invested a total of \$6.5 million in 107 university/research hospital Proof of Principle projects and 46 CONII projects.
- Three networking forums were held attracting 226 participants in total
- CONII Program approved 46 projects for funding in the amount of \$730,287.84 (leveraged \$1,201,239.69 in company and other matching contributions).

## Investments

- Institutional Proof of Principle (iPoP) Program approved 75 projects for funding in the amount of \$1,825,231 (leveraged \$2,916,003 in company and other matching contributions)
- Competitive Proof of Principle (CPoP) Program received 24 applications and approved 13 projects for funding in the amount of \$1,024,231 (leveraged \$1,325,491 in company and other matching contributions).

- Medical Sciences Competitive Proof of Principle (MSC PoP) Program received 39 applications and approved 19 projects for funding in the amount of \$3,000,000 (leveraged \$3,122,300 in company and other matching contributions).



# Next Generation of Innovators

There are few things more rewarding than working with extremely bright and passionate young people with both eureka ideas and the drive to turn their discoveries into tangible products and services. With developing and nurturing talent as one of our primary mandates, OCE supports and invests in early-stage projects and young entrepreneurs where the probability of commercial success and potential return on innovation are substantial.



## Rooftop Gardens Inc. | Planting and raising the roof

Social Innovation Program – Social Enterprise Student Competition

### ROI

- Supplies fresh vegetables to the University of Toronto community
- Advancing the future of urban sustainability

For a generation raised more on Ronald McDonald than “Old MacDonald Had a Farm,” choosing to be an agri-preneur may be out of the ordinary. For a civil engineer, it may also be unusual, but for University of Toronto Civil Engineering PhD candidate Heather Wray, who grew up in a farming community, it just makes sense. The Delhi, Ontario native took home first place in OCE’s inaugural Social Enterprise Student Competition this year for her business venture, Rooftop Gardens Inc. The burgeoning start-up aims to transform unused spaces into centres of urban food production. The company develops, sells, and installs modular and customizable gardens to enable vegetable production year-round in urban areas. Rooftop Gardens’ technologies are lightweight, made with sustainable and recyclable materials, easy to use, and suitable for rooftop, balcony and backyard use. The testing ground for these new technologies and designs is Sky Garden, a pilot rooftop garden in operation at the University of Toronto since 2009. This garden, which Wray designed with two other founders, produces approximately 500 pounds of fresh, organic vegetables every year.

## Concussion Toolbox | Heads up on concussions

Experiential Learning Program (ELP)

Seven years ago hockey hopeful Dave Inglis from London, Ontario experienced an undiagnosed concussion along with a second head injury that ended his athletic career. But his love of sport led him to enroll in Wilfrid Laurier University’s Kinesiology and Physical Education program where he discovered the school’s concussion research community – and a new direction. Inglis partnered with Laurier Assistant Professor Michael Cinelli to cofound the Concussion Toolbox, a mobile application-turned-company with the tools to help athletes and their support crew proactively manage concussions. Through the web-based platform, athletes and physiotherapists can easily acquire objective baseline measurements of balance and neurocognitive coordination before season opens. With a head injury, clinicians can immediately compare post-concussion measures to baseline scores, drastically reducing the risk of putting an athlete back in play prematurely and secondary impact injuries. Inglis developed the start-up through Laurier’s Entrepreneurship Accelerator program, supported by OCE’s Experiential Learning Program (ELP). His entrepreneurial vision won him second place in the 2012 Laurier Entrepreneurship Competition in March and a nomination as finalist for the inaugural ELP competition in May when he was one of three \$25,000 prize winners.



### ROI

- Identifying brain injuries early to avoid long-term damage
- Potential to save the health-care system money and resources

“We found that the OCE Connections program facilitates a much-needed link between academia and ‘real-life’ work environments. The leveraging of networking opportunities, funding provided, client visits, and feedback proffered have already been beneficial to our post graduation endeavours.”

– Kris Harris, OCE/OPA Energy Connections



## Drawing on 'current' modes of transportation

### OCE/OPA Energy Connections Program

The entrepreneur, the executive, the Chancellor's scholar, the innovator – the antithesis of the Breakfast Club. As part of OCE's Connections program, this group of fourth-year Queen's University Engineering students, Kris Harris, Maclean Shea, John Sparks and Vaughn DiMarco, were assigned to electrical utility PowerStream to investigate electric vehicles as a power source. The team's task was to investigate opportunities for vehicle-to-grid (V2G) technology that would allow networks of electric vehicles to act as battery back-ups for the entire grid – supplying or drawing energy on demand. They concluded that the regulation services model, where electric vehicles (EVs) would be contracted to provide small amounts energy to match system generation with demand, was the most profitable option. The students developed a dynamic, easy-to-update, user-friendly economic model that could keep up with the electric car boom and the growing demand on the grid – a model which won them the Best Ontario Power Authority Project in this year's annual Connections Competition at OCE's Discovery trade show.

#### ROI

- Hands-on learning opportunity
- Helping Ontario's electricity grid adapt to change

## Zooming in on underwater energy storage

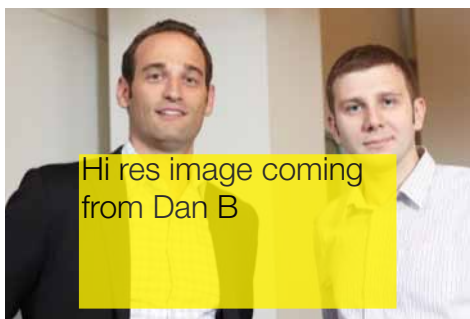
### Discovery 12 Student Video Competition

An artistic streak and a keen awareness of the importance of making complex information understandable might not be the most common skills associated with engineering. But University of Windsor engineering student and amateur filmmaker Brian Cheung has been well served by these two qualities. Along with friend and classmate Jamie Smith, Cheung produced a short video based on the work he is doing on underwater compressed air energy storage (UW-CAES) as a civil and environmental engineering master's student. The video explains a system that stores energy generated by wind turbines during off-peak hours by converting it into compressed air, pumping it into large underwater bags, and releasing it through tubes to the surface to regenerate electricity when demand is higher. Cheung's video earned him first place in OCE's student video competition at Discovery 12 – along with \$2,500. The UW-CAES research project has been awarded funding from OCE's Special Energy Fund to continue testing the system with industry partner Hydrostor Inc. in Toronto.



#### ROI

- Demonstrating a valuable energy storage method
- Hands-on learning experience



## Good Chemistry in First Job

### First Jobs Program

A newly minted PhD from the University of Toronto's Department of Medical Biophysics Anton Neschadim has been a perfect fit for his work with Armour Therapeutics Inc. (ATI) under OCE's First Job program. ATI is an Ontario biopharmaceutical company leading the development of a new class of anti-cancer therapeutics. With his experience in research related to the connection between cancer and a hormone called relaxin as well as his role in the development of Armour's platform technology for treating prostate cancer, Anton was an ideal candidate to conduct pre-clinical research at ATI and go on to lead the development of future R&D. Working with the broadly experienced management of Armour Therapeutics Inc., Anton is acquiring new knowledge and a wide range of new skills. This includes familiarity with industrial R&D, design of pre-clinical studies, and business development. The First Job program provides financial support toward the first year's salary of a master's or PhD graduate to assume a research and development role within the company. To his role of Director of Drug Development at ATI, Anton brings broad scientific expertise in molecular biology, immunology and chemistry as well as knowledge related to IP, and legal and business issues.

#### ROI

- Opportunity to apply knowledge in real-world situations
- Creating an opportunity to transition into the workplace



# OCE Event Highlights

Today, being connected commonly means being signed in, on-line or on skype. But few will deny the creative power and high energy that flows from being together in a room with colleagues, mentors and friends. Discovery, the largest innovation conference of its kind in Canada, is both the ultimate networking experience and time to celebrate the incredible work that has been done in the innovation sphere over the past year. OCE's many other events throughout the year often serve as the genesis of new ideas, breakthrough communications and collaborations leading to game-changing products, services and approaches. Let's look at what happened at OCE last year.



**Discovery**  
Ontario Centres of Excellence **12**

[ocediscovery.com](http://ocediscovery.com)

## For the second year in a row Discovery received the STAR Award Canada's Best Trade Show 2010 and 2011

Along with the World's Largest Business Mentoring Event, Discovery 12 featured secrets of business success from a CEO panel including Canadian tech legend Sir Terry Matthews, a career corner, a procurement marketplace representing numerous ministries from the Ontario, Federal and Municipal governments, an international cafe and panel discussions and compelling addresses on emerging trends in areas including: neuroscience, connected communities, social innovation, rapid prototyping and energy storage. Discovery also welcomed the Honourable Brad Duguid, Ontario Minister of Economic Development and Innovation as the keynote speaker at our student awards luncheon. Discovery attracted more than 2,400 attendees and 300 exhibitors.



## Going for Guinness

**Rows and rows of mentors paired with protégés - 328 in all - speed-networked their way to setting a new world record and being proclaimed by an official Guinness World Record adjudicator the first ever "Most People Attending a Business Speed Networking Event - Single Venue"**







## OCE hosted **20 events** in 2011/12 attracting participants from industry, academia and nonprofit sectors.

Along with Discovery, this included our forums for Social Innovation to facilitate the development of cross-sector partnerships and proposal development and for Experiential Learning to share best practices amongst those involved in entrepreneurship programs at institutions across Ontario.

A mining forum was held to build awareness of the mining sector, identify innovative approaches to mining issues related to water, energy, waste and productivity while fostering networking amongst potential academic and industry project collaborators.

We hosted the inaugural Ontario Technology Transfer Partnership Forum and a follow-up event to enable the technology transfer community in Ontario, including Technology Transfer Offices, CONII members, industry, government, Regional Innovation Centres, and investors, to generate ideas and forge new partnerships.

CCR held its second annual International Commercialization Forum with commercialization experts from across Canada, and innovation-centric nations such as Israel, the United States, China, India, the United Kingdom, Australia, Finland, Singapore and Switzerland and also launched the Global Marketplace.



# Focus on International

OCE is increasingly operating on an international stage to identify and open up new commercialization opportunities for the companies it serves. We are also frequently called upon to lend our expertise and advice on accelerating innovation to audiences around the world. Here are just a few highlights of our global efforts.

- OCE participated in a two-day Ontario (Canada)-India-Israel Trilateral Roundtable on Water Technologies to help Canadian innovators capitalize on the \$400 billion global water technologies market and improve the availability of fresh water in India.
- OCE participated in the Ontario-Israel Bilateral Roundtable on Brain Research aimed at jumpstarting powerful collaboration in the development and commercialization of novel neurotechnologies.
- OCE participated in the Canada-Brazil Smart Grid Match-Making Mission in Toronto aimed at helping Canadian companies capitalize on opportunities presented by Brazil.
- OCE hosts and provides opening remarks at an event on behalf of the U.S. National Academies of Sciences to explore Canadian approaches in promoting innovation in manufacturing.
- CCR hosts second annual International Commercialization Forum, attracting 85 participants from 22 countries to share and learn new ideas, approaches and practices to building robust, sustainable companies founded on the discoveries of publicly funded research.
- At Discovery 12, the International Café provides an opportunity for trade show delegates to expand their markets by connecting with Ontario's International Trade Branch and the Canadian Trade Commissioner Service of Foreign Affairs. Eighteen trade officials were on hand, representing a network of professionals from countries such as Italy, France, Great Britain, Germany, the Netherlands and the U.S., including Boston, New York and San Francisco.
- At Discovery 12, OCE hosted a gathering of international media and presented to an audience representing China, India, Japan, France, UK and Germany on why Ontario is attractive to investors from around the world and OCE's role in promoting a culture of innovation.
- OCE President met with Tianjin Science and Technology Delegation, including Chairman Haishan Zhao of the Tianjin Municipal Science & Technology Commission, to discuss potential joint research and

development between universities and research institutes; establish ties between industry clusters, science parks, incubators and accelerators; and form collaborations on international technology transfer.

- In partnership with the International Commercialization Alliance (ICA), CCR launches and helps lead a pilot project called the Global Marketplace to better connect companies and stimulate new business and investment partnerships in the global marketplace.
- CCR signs an agreement with Larta Institute, a leading U.S.-based innovation organization dedicated to advancing cross-border commercialization partnerships of innovative companies.

**“The economic landscape has changed dramatically around the world, Innovation will play a critical role as we work to navigate these new waters, which is why the Ontario government continues to foster innovation. The ICF is important because it provides the opportunity to learn from each other, build partnerships and collaborate on new and better way to do things.”**

*– Donna Cansfield, Parliamentary Assistant to the Minister of Finance*





# Ontario Centres of Excellence is proud to have worked with and supported this year's award-winning companies

## 360pi (formerly Gazaro)

- 2011 Finalist for New Business of the Year, Ottawa Business Achievement Awards
- 2011 Invest Ottawa Entrepreneurship Week Rising Star
- 2011 Branham300: Top 25 ICT Up and Comer
- 2011 TIE50 Awards, Finalist (TIE Silicon Valley)
- 2012 Red Herring 100 North America Finalist
- 2012 Carleton University Co-op Employer of the Year

## Aeryon Labs Inc.

- 2011 Kitchener-Waterloo Record Top 40 Under 40, David Kroetsch and Michael Peasgood
- 2011 Canadian Manufacturers & Exporters Regional Awards for New Technology, Ontario winner
- 2011 Ontario Centres of Excellence Mind to Market Award
- 2011 The Association of Public-Safety Communications Officials (APCO) International 25 Hot Products Award
- 2011 Ernst & Young Entrepreneur of the Year Finalist, David Kroetsch; Emerging Entrepreneur, Dr. Michael Peasgood

## ATS Automation Tooling Systems Inc.

- 2011 Corporate Knights Cleantech 10
- Avenir Medical
- 2011 Visa Canada's Gobiz Elevator Pitch Competition, Finalist
- 2011 TIEQuest Competition Finalist

## Benbria

- 2011 Golden Bridge Award, "Best New Products and Services" category
- 2011 Ernst & Young Entrepreneur of the Year, Young Entrepreneur Finalist, Mason Du
- 2012 Ottawa Business Journal and Ottawa Chamber of Commerce Top 40 Under 40, Mason Du

## BTI Systems Inc.

- 2011 OCRI Product of the Year Award
- 2011 PROFIT 200 Fastest Growing Companies (ranked 78)

## BufferBox Inc.

- 2011 the Queen's Entrepreneurs' Competition Innovation Award Winner
- 2011 Mechatronics Engineering Design Symposium (University of Waterloo), Best Overall Design
- 2011 Waterloo Nicol Award Competition, 1st Place

## Carbon Control Systems Inc.

- 2012 County of Peterborough Environmental Recognition Award

## Clearpath Robotics Inc.

- 2011 TIEQuest Awards, 2nd Place
- 2011 TieQuest New Entrepreneur Award
- 2011 CBET RISE Business Plan Competition, 1st Place

## EION Wireless Inc.

- 2011 Mobility Tech Zone Wireless Backhaul Distinction Award
- 2011 4GWE Wireless LTE Visionary Award
- 2011 Communications Solutions Product of the Year Award

## Electrovaya Inc.

- 2011 Ernst & Young Entrepreneur of the Year Finalist, Dr. Sankar DasGupta, Technology

## Eve Medical

- 2011 Ontario Centres of Excellence Martin Walmsley Fellowship
- 2011 Up-Start! Competition Winner

## Desire2Learn Incorporated

- 2011 Deloitte Canadian Technology Fast 50 List Leadership award
- 2011 Gold Level NFB-NVA Certification, National Federation of the Blind (NFB)
- 2011 Microsoft Worldwide Education Partner of the Year
- 2011 Top 50 Best Small & Medium Employers in Canada
- 2011&2012 Microsoft U.S. Public Sector Partner of the Year Award
- 2012 International Platinum MarCom Award
- 2012 Canada's Top 100 Employers for Young People

## DragonWave Inc.

- 2011 CATA CIO Leadership Award, Erik Boch
- 2011 Ottawa Business Journal Top 40 under 40, Greg Friesen, VP Product Management
- 2012 Branham300, Top 10 Canadian wireless solutions companies (ranked 42 of 250 overall)

## EidoSearch

- 2012 Winner, Backbone/Alpha Exchange Innovation Campaign Contest

## Flybits

- 2012 MIT's Technology Review World's Top 35 Innovators under 35, Dr. Hossein Rahnama

## Forming Technologies Inc.

- 2012 Canadian Innovation Awards: Intel SME Innovation Award

## Giatec Scientific Inc.

- 2011 University of Ottawa Polanyi Prize Nominee in Chemistry
- 2011 OCRI Student Entrepreneur of the Year Award, president, Pouria Ghods
- 2011 OCRI Student Researcher of the Year Award, CEO, Aali Alizadeh
- 2012 Bootstrap Award for Innovation in Engineering and Technology, Bronze Medal

## Gridcentric Inc.

- 2012 University of Toronto Inventor of the year award (Gridcentric founding team)

## gShift Labs Inc.

- 2011 Branham300: Top 25 ICT Up and Comer
- 2011 Canadian Technology Accelerator Winner (Canadian Innovation Exchange)

## Impakt Protective

- 2012 Explorium Entrepreneur Network Innovation in Engineering and Technology Award
- 2012 Ottawa Business Journal and Ottawa Chamber of Commerce Top 40 Under 40, Danny Crossman

## Kela Medical Inc.

- 2011 PROFIT Magazine FuEL Awards, Top 20 Under 30 honouree, Arjun Kumar

## Kim Geomatics

- Canadian Remote Sensing Society's Gold Medal, Bob Ryerson

## Komodo OpenLab Inc.

- 2012 TIEQuest TIE Institute Participant

## Miovision Technologies Inc.

- 2011 Corporate Knights Cleantech Next 10
- 2012 Peter Brojde Award for Canada's Next Generation of Executive Leadership, Kurtis McBride
- 2012 Ontario Business Achievement Awards Finalist

## Modiface Inc.

- 2012 PROFIT Magazine's HOT 50 (ranked 40)
- Morgan Solar Inc.
- 2011 Corporate Knights Cleantech Next 10
- 2011 Corporate Knights Clean Capitalism Clean16 R&D Award Winner

## MyVoice Inc.

- 2011 Ontario Centres of Excellence Martin Walmsley Fellowship
- 2011 PROFIT Magazine's FuEL Awards: Entrepreneur of the Year, Alex Levy
- 2012 Autism App of Distinction from Wynsum Arts

## NexJ Systems Inc.

- 2011 Deloitte Canadian Technology fast 50 list (ranked 4)
- 2011 Computerworld Honours Laureate
- 2012 PROFIT 200 Canada's Fastest Growing Companies, 1st place
- 2012 Branham300 Top 250 ICT Companies (ranked 122)
- 2012 Canadian Channel Elite Awards, Best Cloud Solution and Best Mobile Solution Gold Awards

## NIMTech Inc

- 2011 TIEQuest Awards, Second Place
- 2011 TIEQuest Best Clean Tech Venture Award
- 2011 TIEQuest Best Intellectual Property Award Joint Winner

## Nulogy

- 2011 Up Awards, Top Three Fastest Growing Companies
- 2011 Acetech Network of Top CEOs Award, Jason Tham
- 2012 York Technology Alliance (YTA) Technology Leadership Award for Scale-Up Company of the Year

## OtoSim Inc.

- 2012 TieQuest Awards, 3rd Place

## P&P Optica

- 2012 R&D Magazine, R&D 100 Award Winner

## Panacis

- 2011 Deloitte Technology Fast 50 "Technology Green 15" Award
- 2011 PROFIT Magazine, Canada's 100 Fastest Growing Companies (ranked 43)

## Peraso Technologies Inc.

- 2011 Branham300: Top 25 ICT Up and Comers
- PlantForm Corporation
- 2011 OCE Mind to Market Award finalist
- 2012 Venture Forum "Most Promising Technology"

## Polar Mobile Group Inc.

- 2012 Canadian Innovation Awards Ericsson Award for Outstanding Product Achievement (Content and Application Mobility Industry)
- 2012 Achievers' 50 Most Engaged Workplaces in Canada award

## Purifics ES Inc.

- 2011 Artemis Project Top 50, Water Tech Winner

## Quantum Dental Technologies Inc.

- 2011 Angel Capital Association Silvertip Award for Innovation
- 2012 CAP-INO Medal for Outstanding Achievement in Applied Photonics, Dr. Andreas Mandelis

## Rna Diagnostics Inc.

- 2011 TIEQuest Awards, Best Healthcare Industry Award and Best Intellectual Property Award

## Simple Systems Inc.

- 2012 University of Toronto Connaught Innovation Award
- 2012 TIEQuest Award Winner
- 2012 TIEQuest Award, Intellectual Property

## Smarter Alloys (formerly Innovative Processing Technologies)

- 2011 Ontario Centres of Excellence Martin Walmsley Fellowship
- 2011 CleanTech North's Innovation Company of the Year Award

## Temporal Power

- 2011 Corporate Knights Cleantech Next 10

## Top Hat Monocle Inc.

- 2012 Branham300, Top 25 Up and Coming ICT Companies

## Trojan Technologies

- 2011 Environmental Protection Award, New Product of the Year (Wastewater)
- 2011 International Ultraviolet Association Lifetime Achievement Award, Chief Scientist, Dr. William L. Cairns
- 2011 International Ultraviolet Association Innovations in UV Award – Green Award
- 2011 American Water Works Association (AWWA) ACE11 Green Ribbon Recipient
- 2012 AWWA ACE12 Green Ribbon Recipient

## Vive Nano

- 2011 New York Venture Summit Best Cleantech Presentation
- Xogen Technologies
- 2011 Corporate Knights Cleantech Next 10

## Zephyr Sleep Technologies

- 2011 Pride Institute's Best of Class Technology Award, Honoree in Emerging category
- 2012 TechRev Innovators Nomination

## Zighra

- 2012 Ottawa Business Journal and Ottawa Chamber of Commerce Top 40 Under 40, Deepak Dutt
- 2012 TIE50 Awards Finalist (TIE Silicon Valley)
- 2012 Backbone/Alpha Exchange Innovation Campaign Contest– top 10 finalist

# Ontario Centres of Excellence Governance

## Board of Directors 2011/12



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(Chair)  
Gowling Lafleur Henderson LLP,  
Policy Advisor

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ALTERNATIVE ENERGY SPECIAL  
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Tech Capital Partners Inc.,  
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President and CEO

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Professor, Chemical Engineering  
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York University  
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Management Initiatives Inc.

FINANCE & AUDIT COMMITTEE,  
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**Dr. Tom Corr, (ex-officio)**  
Ontario Centres of Excellence  
President and CEO

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**Wendy Tilford**  
Deputy Minister,  
Ministry of Economic Development and  
Innovation (MEDI)

**Bill Mantel**  
Assistant Deputy Minister,  
Ministry of Economic Development and  
Innovation (MEDI)

**Brigit Viens**  
Senior Program Manager, Networks of Centres  
of Excellence of Canada (NCE)

### Executive Team

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President and CEO

**Bob Civak**  
Senior Vice President, Business  
Development Operations

**Dr. Mario Thomas**  
Senior Vice President Strategy,  
Programs and Partnerships  
Managing Director, Centre for  
Commercialization of Research

**Narinder Dehal**  
Vice President, Finance and  
Administration

**Anne Wettlaufer**  
Vice President, Marketing and  
Communications

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photos  
Anne K

Ontario Centres of Excellence (OCE) Inc. is a member  
of the Institute of Corporate Directors (ICD).



Ontario Centres of Excellence (OCE) promotes  
a healthy workplace, which is key to wellbeing  
and, by extension, innovation.



For more information visit [oce-ontario.org](http://oce-ontario.org)



Ontario Centres of  
Excellence  
Where Next Happens



Ontario Centres of Excellence (OCE) is funded by the Government of Ontario.  
OCE is a member of the Ontario Network of Excellence (ONE)

# OCE at a glance

- The Ontario Centres of Excellence (OCE) **not-for-profit program** was formally established in 1987 with seven independent centres that evolved and amalgamated into Ontario Centres of Excellence Inc., in 2004.
- In partnership with industry and academia, OCE **co-invests to commercialize innovation** originating in the province's colleges, universities and research hospitals.
- OCE provides real-world commercialization experiences for **Ontario's next generation of innovators and entrepreneurs**.
- OCE **connects the dots between industry and academia**, while providing and identifying additional sources for funding and support. It all comes back to the province's main goal: **ensuring the best ideas get the support they need to get to market**.
- OCE deploys experienced teams of Business Development Managers to all corners of the province. OCE has a **province-wide footprint** with offices in Toronto, Mississauga, Waterloo, Ottawa and London.
- OCE is a member of the **Ontario Network of Excellence (ONE), Ontario's revitalized, client-focused, province-wide innovation network**.
- Within the ONE network, **OCE delivers the Industry Academic Collaboration Program (IACP)** and provides broader support to the province to drive Ontario's Innovation Agenda.
- Complementing and extending OCE's IACP research, talent and commercialization programs, **OCE's federally funded Centre for Commercialization of Research (CCR)** acts as a catalyst that enables innovative new businesses to grow and achieve sustainable commercial success and global competitiveness.
- This past year OCE **introduced a number of new initiatives**: the Experiential Learning Program (ELP), the Social Innovation program (SI), High Performance Computing Initiative (IBM), OCE/NSERC Industrial R&D Fellowships and OBI-OCE Entrepreneurial Fellowships program.
- OCE efforts converge on four key sector areas – **advanced manufacturing; advanced health technologies; energy and environment; and information, communications and digital media**.
- OCE manages programs to support the development of a **worldclass technology transfer system**.
- In 2011/12 OCE invested **\$29 million in 509 projects and leveraged \$51.6 million** from industry partners in further investments. OCE engaged 659 **researchers and co-investigators at institutions during the year**.
- OCE engaged **more than 5,440 researchers**, students and private sector employees in projects and initiatives in 2011/12.
- This past year **49 OCE-supported companies** were recognized with national or international awards including three recognized in the **Deloitte Fast 50 Awards**.
- OCE **excels at leveraging dollars** to help drive innovation in Ontario – near doubling the value of the original investment.
- Known for **"de-risking" innovation**, OCE has developed expertise in this area. **A number of small- and medium-sized companies** typically overlooked by traditional investors **have achieved market success through OCE support**.
- OCE's annual award-winning **Discovery conference is Canada's premier innovation and commercialization event showcasing** leading-edge technologies and research. At Discovery 12, OCE set a **Guinness World Record** for the "Most People Attending a Business Speed Networking Event - Single Venue." The event attracted more than 2,400 attendees and more than 300 exhibitors. Discovery won Canada's Best Trade Show for the second consecutive year at the 2012 Canadian Event Industry Star Awards.



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OCE is a member of the Ontario Network of Excellence (ONE).