



Events & Happenings

Connecting with Tomorrow's Innovators

Adventures In Agriculture

On October 7th, Danielle Rocheleau, the Innovation Cluster's Program Officer presented at the Adventures in Agriculture educational day hosted by the Rotary Club of Peterborough, with the assistance of the Greater Peterborough Area Economic Development Corporation (GPA EDC), and the Workforce Development Board.

The educational forum provided over 300 grade seven and eight students the opportunity to learn about various careers in the agricultural industry. The students participated by attending 1/2 hour workshops on milk, grain, meat, fruits & vegetables, the Innovation Cluster, as well as soil and crops.

Grade 12 Physics Students Visit

On October 21st, the Innovation Cluster hosted a group of 30 grade 12 physics students and their teacher, Monica White, from Holy Cross Catholic Secondary School. Dr. Andrew Vreugdenhil and Dr. Ralph Shiell introduced the students to opportunities in chemistry and physics. Lauren Gogo, the Innovation Cluster's Commercialization Officer, provided an overview of the Cluster followed by a discussion on the forensics program with Dr. Joanna Freeland. The event finished with a demonstration from the MNR on rabies testing for animals.

Ontario Young Farmers Tour

On November 21st, a group of 10 members from the Ontario Young Farmers arrived at the Innovation Cluster/DNA building. They were given a presentation on the Cluster services, followed by a presentation by Dr. Barry Saville on his work in the agricultural sector and an overview of Dr. Neil Emery's research. The group was then given a tour of the DNA automation lab and Aurora Greenhouse.

EuroBio Conference

Dr. Tom Phillips, the Innovation Cluster's Economist & Sustainability Director, had the opportunity to attend the EuroBio conference in Paris, France in early October. Over one hundred experts offered their perspectives on current challenges ranging from medicine to agriculture.

One theme, Dr. Phillips observed, is that the economy of the 21st century will be based on a whole new set of priorities. Recent advances in biology, particularly from DNA research, have exposed more complexity than it has provided solutions. How we act on the vast amounts of information that is coming out of DNA research is a challenge we must face.

An area of concentration at the conference was agriculture. Much of the discussion

surrounded the emerging conflict between food and biofuels. However, this only revealed the importance of some of the research being supported by the Innovation Cluster. By ensuring greater crop yields, ensuring crop nutrition and safety, and fighting disease through crop development, the research we are doing here can lead to very positive impacts on people lives, globally.

Overall, the issues discussed at the conference confirmed that the Innovation Cluster is on the right track. The Cluster is supporting research in areas that are global in scope, and contributing to the call for innovations that will impact positively on people's lives.

Community Outreach Workshops

The Innovation Cluster hosted Community Outreach workshops in Lindsay and Belleville in November. The workshops are intended to raise awareness about the Cluster's service offerings in surrounding communities. The workshops also provide a setting where discussion of partnership with surrounding businesses and facilities can take place.

The Lindsay workshop had an audience of representatives from City of Kawartha Lakes, Chamber of Commerce, Federation of Agriculture, local businesses, local Community Futures Development Corporation and the Ontario Ministry of Agriculture, Food and Rural Affairs. The workshop in Belleville was a collaboration with fellow Regional Innovation

Network (RIN) and ELORIN (Eastern Lake Ontario Regional Innovation Network).

Speakers in Belleville included Andy Mitchell, Innovation Cluster President, John DiPaulo, ELORIN Senior Manager and Denis Ferkany, Director of Corporate Strategy for the International Consortium on Anti-Virals. The workshop in Lindsay was also a success and the speakers included Andy Mitchell, Dr. Barry Saville from Trent University, and Dr. Brent Wootton from the Centre of Alternative Wastewater Treatment at Fleming College. The final workshop will be in Cobourg on January 29th.



Danielle Rocheleau, Innovation Cluster Program Officer, presents to a group of grade seven and eight students during "Adventures in Agriculture"

The Innovation Cluster's mandate is to facilitate an economic environment in which wealth can be generated, high paying jobs created, and an improved quality of life achieved in the GPA.

ACCELERATE Ontario: Ontario's Graduate Research Internship Program

ACCELERATE Ontario is a unique program which connects the province's up-and-coming highly-skilled researchers – grad students and post-doctoral fellows – with Ontario companies through short-term applied research projects.

The formula is simple; a 4-month research project is identified which is of interest to an Ontario company, a graduate student or post-doctoral fellow - the intern - and his/her supervising professor. Over the 4 months, the intern undertakes research on the identified business issue under the supervision of the professor, all the while remaining a student at his/her university.

Half of the intern's time is spent on site with the partner company, researching the identified issue, collecting data and gaining an in-depth understanding of the challenge. While the balance of his/her time is spent at the university, further advancing the research under the guidance of a professor and developing an innovative tool, technology or solution to the company's challenge.

For each four month internship, the partner company contributes \$7.5K, which is matched dollar-for-dollar by ACCELERATE Ontario, through the support of the Government of Ontario, the NCE Program and NSERC. The result is a \$15K research grant to the intern's supervising professor with the intern receiving a minimum of \$10K for the 4-month period. The remaining \$5K can support other costs associated with the internship, such as intern travel, computer equipment, laboratory materials etc. The program is managed by MITACS, a federally-funded research network connecting Canadian researchers with companies, government agencies and other organizations through collaborative research projects.

Any faculty is eligible for an ACCELERATE Ontario internship – from nursing to computer science, engineering to biology and anthropology to social work. For more information, visit www.acceleratecanada.ca and click on "Ontario".

Research & Funding

Peterborough Region Angel Network Update

On October 8th, the Peterborough Region Angel Network (PRAN), in partnership with the Innovation Cluster, hosted its first breakfast event at the Holiday Inn Waterfront Peterborough.

The breakfast provided the opportunity for Executive Administrator, John MacDonald, Chair of the PRAN Board of Directors, Bill Lockington, and President/CEO of the Innovation Cluster, Andy Mitchell, to express to the attendees the importance and relevance of the growing angel network. The intent of the event was to

generate discussion, identify potential new investors, and reach out to possible new investment opportunities within the community.

Over the next year, PRAN will host a number of these events, increasing their membership and ability to offer strategic business counsel, management advice and connections to financial resources, ultimately stimulating growth and prosperity within the community. Visit www.peterboroughangels.ca for more information.

Funding for International Partnership

The Cluster received funding through the Ministry of Research and Innovation's International Strategic Opportunities Program (ISOP) to foster a partnership between Trent University researcher Dr. Neil Emery and the world renowned Riken Institute in Japan.

Over the past year the Innovation Cluster has been working closely with Dr. Neil Emery on developing partnerships for his work in improving crop productivity in legume and

cereal crops. The funding ensures that a research project will be developed and that milestones are met, by covering the costs of travel to Japan and Canada for both parties, attendance at international bio conferences, as well as hosting a cytokinin conference in the Peterborough region in 2010.

A formal funding launch with further details will take place in early 2009.



Dr. Tom Hutchinson and Sarah Majeski tour a biofuel plant in Germany. See story on next page.

The Innovation Cluster provides services for innovative initiatives in the area of wildlife, DNA, forensics, alternative wastewater treatment, health, water quality, agriculture, and biomaterials.

Business Development

On the Road with Business Development

In October, Sarah Majeski, Business Development Officer and Dr. Neil Emery traveled to Japan to attend the 2008 Bio Japan conference. The purpose of this trip was to further the pre-project relationship with Dr. Sakakibara and his research team. Since returning, Dr. Emery has become the recipient of funding from the Ministry of Innovation's International Strategic Opportunities Program (ISOP) (see article on page 2).

The next stop for Sarah was Monterrey, Mexico where she made some great head way specific to water quality/environmental diagnostics.

During November, Sarah, Professor Emeritus Tom Hutchinson and a Canadian commercial prospect went to Germany to tour biofuel plants and attend the Eurotier conference. Germany is using 9% biogas that is generated by approximately 3,900 digesters that use organic matter and manure.

At the local level, additional work has been done on Dr. Emery's behalf to formalise a commercial partnership. This will begin in February and be specific to soybean crop yields.

The Cluster has been creating partnerships within Peterborough and the GTA regarding a waste diversion plan that would support Dr. Tom Hutchinson's intellectual property (IP) related to waste processing.

Finally, the Cluster has been Dr. Andrew Vreugdenhil's anticorrosive coating technology. His relationship with one private sector company is currently being developed into a formal research agreement. The Cluster also brought in a company from California and after discussions, Dr. Vreugdenhil is working with some of their samples.

Conferences and Workshops

During Q4, Innovation Cluster staff attended a number of key conferences and workshops. Attendance at these events is essential to provide staff the opportunity to network and interact with key academic and industry leaders and also provide opportunity to discuss collaboration with fellow Regional Innovation Networks.

MaRS Best Practices

On October 9th, Cluster staff Amber Liberty-McPhee and Lauren Gogo, attended a workshop at the MaRS Discovery District as part of the Best Practices Series. The workshop, entitled "How to Design Business Strategy: Blueprints for Competitive Advantage and Growth", was taught by renowned business model designer, Alexander Osterwalder, Ph.D., and involved

the interactive dissection of current business models and an analysis of successful corporate case studies. Of particular interest was the process of constructing a "business model canvas", which ensures that various targets are laid out correctly, such as customers, competitors, stakeholders, revenue streams, etc.

Research 2 Receptor Workshop

In October, C4, MaRS Landing, the Golden Horseshoe Biosciences Network and ELORIN (Eastern Lake Ontario Regional Innovation Network) hosted the Research 2 Receptor Series in London, Guelph, Hamilton and Kingston, Ontario. Amber Liberty-McPhee, Business Development Administrator attended on behalf of the Cluster.

The program included sessions with many keynote speakers and panel discussions focusing on functional food and natural health product programs from the discovery side to launching into the market and beyond. Some of the speakers included:

Dr. Kevin Gellatly from Performance Plants who presented on the Development of International Food and Biofuel businesses from Canadian academic research; Heather Priestly, President of Bueno Bean Roastery, who shared her challenges in food and beverage innovation in a local market; Grant Tipler, Head of RBC's Life Sciences & Health Services Division, who spoke to the banking perspective on commercialization of innovation and; Dr. Jagdish Kumar, Principle Soybean Breeder for Hendrick Seeds, who presented on design of soybeans to be used as medicine.

Engineering in a Climate of Change

On October 16th, Amber Liberty-McPhee, attended the Ontario Society for Professional Engineers' Climate Change Symposium at the Ontario Science Centre in Toronto.

The goal of the one-day, international symposium was to highlight the skills and capabilities of engineers and the engineering profession in applying contemporary scientific and technological advancements in the mitigation and adaptation of climate

change effects. What remained an immense focus throughout the days' presentations were the global implications of climate change and the opportunities that are being presented as a result.

The topics ranged from water management and infrastructure to failing crop yields and wildlife extinction – all of which lend themselves to the Cluster's research focuses at Trent University.

The Innovation Cluster presents an opportunity to involve you and your company in building a knowledge-based economy in the Peterborough region. Contact info@innovationcluster.ca

Members & Partners

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Membership Events

As part of the Cluster's 2009 programming, members can anticipate the following events throughout the year. Dates to be announced.

February 27, 2009 MaRS Agreement Anniversary Event

March 12, 2009 2nd Annual Innovation Summit

March 2009 Quarterly Breakfast (date TBA)

Upcoming Community Outreach Workshops

Cobourg, Ontario: January 29, 2009



On December 16th members and staff of the Innovation Cluster gathered at the Alumni House at Trent University to celebrate the Holiday Season. Andy Mitchell, President and CEO of the Cluster welcomed guests and thanked everyone for their dedication and support over the past year. Pictured above left to right are: Gary Lounsbury, Dan Gall, Tom Phillips, Neil Emery and Al Heritage.

