

# Research Canada Update

News for Parliamentarians on Canadian Health Research

Fall 2012



# Health Research Caucus Session to Showcase Regional Economic Performance Among Canada's Health Innovation Clusters

Join us on Oct. 1st for one-on-one discussions with scientists and business leaders



On Monday, Oct. 1, 2012, Research Canada and the non-partisan Parliamentary Health Research Caucus (HRC) will host an event for parliamentarians on Health Innovation Clusters Across Canada. HRC events are convened under the Chairmanship of Senator Kelvin K. Ogilvie and the Vice-Chairmanship of Ms. Megan Leslie, Member of Parliament (Halifax) and Dr. Kirsty Duncan, Member of Parliament (Etobicoke North).

#### What are Health Innovation Clusters?

Today's economic map of the world is characterized by clusters: critical masses— in one place or across geographic boundaries—of linked industries and institutions—from suppliers to universities to government agencies—that enjoy unusual competitive success in a particular field. The most famous examples of regional clusters are found in Silicon Valley and Hollywood, but clusters exist around the world.



Due to Canada's small population relative to its geographic size, often economic development as a result of linked industries and institutions takes place across geographic boundaries creating the critical mass of people and ideas needed to promote innovation across a network rather than a region. These network clusters are not unique to Canada; however, they are an important component of the Canadian innovation cluster landscape.

Clusters affect competition in three broad ways: first, by increasing the productivity of companies based in the area; second, by driving the direction and pace of innovation; and third, by stimulating the formation of new businesses within the cluster.

Geographic, cultural, and institutional proximity provides companies and institutions with special access, closer relationships, better information, powerful incentives, and other advantages. Competitive advantage lies increasingly in these clusters which bridge knowledge, relationships, and motivation regionally and across cluster networks.

#### **About The Event**

This event will feature a series of kiosk exhibits demonstrating to Members of Parliament how life sciences' research has successfully created economic benefits in specific regions and across a network of regions by generating high-paying jobs, wealth and increasing the quality of life in and across the regions within which they exist. Each kiosk will present the GAIN spectrum of partners—Government, Academe, Industry and the Not-for-profit sector— all of which are essential contributors towards enhancing economic performance in these clusters.

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# HEALTH RESEARCH CAUCUS

# **Coming Events**

Kiosk Session on Health Innovation Clusters

Oct. 1, 2012, 4 p.m. - 7 p.m.

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Annual Health Research Caucus Luncheon

in conjunction with Reseach Canada's Annual Meeting

Nov. 21, 2012, 12 p.m. - 2 p.m.

Guest Speaker: The Honourable Michael Wilson, P.C.

Mr. Wilson will share the recommendations of the Mental Health Commission which he recently chaired as well as talk about how the Government of Canada is expanding its partnerships to the philanthropic and broader health communities in Canada.

For more information, or to register for these events, please contact Ms. Ranjana Chopra at rchopra@rc-rc.ca or 613-234-5129.

Our web site: www.rc-rc.ca

# Oct. 1st Health Research Caucus Session to Showcase Regional Economic Performance

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## Kiosks and Presenters

#### **ATLANTIC REGIONAL CLUSTER**

## **Orthopedic Applications Using Stereo Radiography**



Researchers in Atlantic Canada have partnered with the private sector to develop a clinic-ready medical technology that improves outcomes for knee and hip replacements, resulting in better care, costs savings, and job creation. Scientists at Capital Health District Authority and Dalhousie University are working closely with Halifax Biomedical Inc., using a medical device

known as the Halifax Bead Inserter, an instrument designed to insert tiny tantalum bead implants into bone. It is a robust, fast, and easy to use product with no learning curve which allows surgeons to implant beads more efficiently. This device, used with a stereo radiography software suite, provides diagnostics that enable early intervention to address implant instability, leading to improved patient care and improved surgery outcomes.

#### **MONTREAL HEART INSTITUTE - REGIONAL CLUSTER**

# **Montreal Health Innovations Coordinating Centre**

The Montreal Health Innovations Coordinating Centre has



developed a novel system for coordinating clinical trials at the Montreal Heart Institute. The MIHCC specializes in the development and coordination of multicenter and multinational clinical trials of phase III with large pharmaceutical and biotechnological firms. The MHICC has coordinated 70 multicenter clinical

trials with 2000 participating clinical sites in 20 countries in North America, Europe, Asia (China and India) and Australia. To date, 40, 000 patients from around the world have participated in these trials and Canadian clinical sites are distributed across Canada.

## **ONTARIO BRAIN INSTITUTE - REGIONAL CLUSTER**

## NeuroTech Ontario: Developing Ontario's Neurotechnology Cluster

The Ontario Brain Institute is a not-for-profit virtual centre seeking to maximize the impact of neuroscience through research, commercialization, innovation, education and training. Scientists working as part of the OBI's NeuroTech Cluster have developed innovative medical devices and diagnostic tools to help treat a range of diseases and conditions, including Alzheimer's, sleep apnea, and childhood development disorders.

## A HEALTH RESEARCH LEADER IN CANADA

Improving health is one of the toughest challenges facing the world today. As a global biopharmaceutical AstraZeneca company, AstraZeneca has a key



contribution to make by providing innovative medicines for some of the world's most serious health challenges: cancer, heart disease, gastrointestinal disorders, infection, neurological disorders and respiratory conditions. Our product range includes some world leaders and last year alone, we invested over \$4 billion in the research and development of the next generation of medicines that will make a difference. We know that if we are to deliver medicines that people really need and value, we can't do it in isolation. We work closely with all our stakeholders to understand their challenges and how we can combine our skills and resources to achieve a common goal: improved health. Because health connects us all.

#### **RX&D - NETWORK CLUSTER**

#### Discover, Collaborate, Innovate

Canada's innovative pharmaceutical companies are collaborating with governments, academia, and not-for-profit organizations to develop new medicines and vaccines. Across the country, there are research-based companies partnering with public sector organizations and charities to bring new products to market that will improve the health of Canadians.

#### **UNIVERSITY OF CALGARY - NETWORK CLUSTER**

#### NeuroArm

Project neuroArm is a collaborative effort between researchers at the University of Calgary, industry, granting agencies, and the Calgary philanthropic community to develop a robot that can perform brain surgery inside an MRI machine. NeuroArm enables the surgeon to obtain real time images during surgery, which is important as the brain changes and



shifts as a result of the surgical procedure. A surgical robot that can operate inside the MRI machine enhances surgical precision, which is of utmost importance when operating on the brain. MacDonald Dettwiler and Associates was a primary technical partner in this collaboration, and the neuroArm system benefitted greatly from their aerospace research funded by the Government of Canada. IMRIS, a Canadian company based in Winnipeg, acquired the technology developed under the neuroArm project. The neuroArm technology is the foundation upon which IMRIS is developing a neurosurgical robotic system designed for commercialization to the global market. IMRIS employs over 150 people and is a world leader in the adoption of intraoperative MRI technology.

#### YORK UNIVERSITY - REGIONAL CLUSTER

## **Developing the Connected Wellness Platform for Chronic** Disease Care Management and Health Promotion

York University researchers and partners in the York region cluster have developed an eHealth mobile technology to help patients manage care for chronic diseases. The project will link patients and their families with hospitals, physicians and other healthcare professionals to enable new health and wellness services. The benefits of the project are increased healthcare system efficiency, health outcomes and economic growth through the creation of a new ecosystem and jobs for personalized healthcare services.

Research Canada wishes to thank the following partners and supporters that have contributed to the Health Research Caucus events program:

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