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INNOVATION NOW

A MONTHLY SHOWCASE OF CANADIAN RESEARCH THAT IS TRANSFORMING LIVES

At work for the economy

Joint injuries get some relief

Retired Montreal Canadiens defenceman Serge Savard put his joints to the test with a new gel discovered by researchers at **École Polytechnique de Montréal**. The gel adheres to damaged cartilage in knees and other joints, allowing cartilage to rebuild and repair itself. Piramal Healthcare (Canada) Ltd., which employs 18 people in Laval, Que., and approximately 125 at its plant in Aurora, Ont., has commercialized the natural gel, called BST CarGel®, in Europe and is awaiting approval in Canada. Piramal is vying for a piece of the global market for cartilage repair, which it estimates to be worth about $1 billion. READ MORE

Caring for Canada's aging population

According to an Institute for Research on Public Policy study, the number of elderly Canadians needing assistance is expected to double over the next 30 years, leaving the country facing a growing demand for care. The CFI-funded Maritime Data Centre for Aging Research and Policy Analysis at **Mount Saint Vincent University** in Halifax has helped implement a caregiver support program in Nova Scotia. It is the only province to offer monthly financial compensation to informal caregivers, such as family and friends. The Centre has also become a fertile training ground for future leaders in gerontology. Nearly 30 graduate students who worked in the lab over the past five years are now employed in roles ranging from policy analysts for the Nova Scotia government to directing home care in Nunavut. READ MORE

Biomedical hub grows in Winnipeg

Manitoba's international leadership in infectious disease, medical devices and pharmaceutical research has led to the steady growth of a biomedical technology cluster in Winnipeg. About 100 life sciences-related companies and organizations generate sales of more than $400 million annually and employ 4,200 highly skilled people. A number of companies, including Biovail Corporation, IMRIS Inc., Intelligent Hospital Systems and Cangene Corporation have had global success. The cluster has gained international recognition thanks to pioneering research in infectious diseases by scientists working at institutions such as the University of Manitoba's Faculty of Medicine, the International Centre for Infectious Diseases and the Public Health Agency of Canada's National Microbiology Laboratory. READ MORE

STATS AT A GLANCE

The many shades of caregiving

As the baby boom generation inches closer to retirement, elder care has become a pressing issue for Canada's health care system. In 2011, more than 3.4 million Canadians provided care to a senior, and an estimated 1.2 million people make use of formal home care services annually. An Institute for Research on Public Policy study suggests the market value of Canada's informal caregivers — the family and friends of seniors in need — was between $24 and $31 billion in 2007.

Read the full story…

Spotlight on research

Manufacturing quiet

How one engineer is improving the flying experience by silencing cabin noise

Constant exposure to industrial noises can cause myriad health problems — trouble concentrating, headaches, hypertension and hearing loss have all been linked to noise pollution.

But Alain Berry's research is reducing the auditory overload of our industrial society, especially when it comes to air- and car-traffic noise.

Montréal-based Bombardier Inc. became interested in Berry's work after visiting McGill University's Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT), where he conducts some of his studies. Funded in part by the Canada Foundation for Innovation, CIRMMT's system of highly sensitive microphones and sophisticated hardware and software allows Berry to simulate industrial noises, analyze sound waves and test active control systems.

For the past four years, the Université de Sherbrooke mechanical engineer and his team have been working with Bombardier to simulate the true acoustic experience of being a passenger in a private jet that was designed to generate as little noise as possible. READ MORE

CFI-funded research in the news

PHYSICS — The coldest place in Canada; Hint: it's at the University of Alberta
(Canadian Geographic, October 2012)
LINK TO STORY

HEALTH — University of Toronto scientists are developing a new electronic chip that could detect cancer earlier and without invasive biopsies.
(Global Montréal, September 26, 2012)
LINK TO STORY

PHOTONIQUE ET GÉOSCIENCES — L'Université d'Ottawa lance la construction d'un complexe de calibre mondial en sciences et en génie : Ottawa en voie de devenir une super puissance en photonique et en géosciences.
(L'Université d'Ottawa, le 25 septembre 2012)
LIEN VERS L'ARTICLE

SANTÉ — Plus de grossesses problématiques pour les femmes nées prématurées.
(Radio-Canada.ca, le 24 septembre 2012)
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