

Government of Canada G Networks of Centres R of Excellence d

Gouvernement du Canada Réseaux de centres d'excellence



FIVE NEW CENTRES OF EXCELLENCE FOR COMMERCIALIZATION AND RESEARCH



(Left) Jean-Claude Gavrel (Networks of Centres of Excellence), Aaron Fenster (CImTeC), Charles Randell (CEO C-Core), Peter Zandstra (CCRM), Jim Maynard (Wavefront), Chad Gaffield (Social Sciences and Humanities Research Council), The Honourable Tony Clement, Minister of Industry, Normand Bourbonnais (MIC2), Suzanne Fortier (Natural Sciences and Engineering Research Council)



Creating a Commercialization Pipeline for New Medical Technologies: Centre for Commercialization of Regenerative Medicine (CCRM), Toronto, Ontario



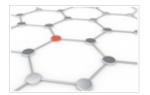
Bringing Canada's Medical Imaging Experts Together: Centre for Imaging Technology Commercialization (CImTeC), London, Ontario



Building Canada's Remote Monitoring Technologies Industry: Leading Operational Observations and Knowledge for the North (LOOKNorth), St. John's, Newfoundland and Labrador



MiQro Innovation Collaborative Centre (MIC2), Bromont, Quebec



New Wireless Connections: Wavefront Wireless Commercialization Centre, Vancouver, British Columbia

Creating a Commercialization Pipeline for New Medical Technologies: Centre for Commercialization of Regenerative Medicine (CCRM), Toronto, Ontario



The Centre for Commercialization of Regenerative Medicine (CCRM) is one of five new centres to be funded by the Government of Canada through the 2010 Centres of Excellence for the Commercialization of Research (CECR) competition. The CECR program is administered by the Networks of Centres of Excellence (NCE) Secretariat, which supports successful research partnerships between universities, industry, not-for-profit organizations and government.

The centre was awarded \$15 million over five years, allowing its members to address the barriers faced by the Canadian

regenerative medicine (RM) industry, such as the licensing of early-stage RM technologies to companies outside of Canada before their market value is realized.

Hosted by the University of Toronto, CCRM brings together leading RM experts from the University of Toronto and McMaster University, with researchers from the Hospital for Sick Children, the University Heath Network, the Ottawa Hospital Research Institute and Mount Sinai Hospital, to accelerate RM research and development, and create a commercialization pipeline that rapidly brings RM technologies to market. These researchers are working to harness the power of stem cells, biomaterials and molecules through innovative technologies to treat, and perhaps cure, diseased cells, tissues and organs.

Dr. Peter Zandstra, from the Institute of Biomaterials and Biomedical Engineering at the University of Toronto, is the Scientific Director of CCRM.

"CCRM will incubate early stage RM technologies and develop them into products," says Zandstra. "This way they will have much more value when they get licensed or are incorporated into Canadian companies. Our goal is to build a cluster of Ontario- and Canadian-based RM companies to capture the excellent RM science and innovation taking place in our partner institutions."

CCRM will leverage partnerships and substantial resources from the private sector, attract major public investment and scientific expertise, and generate significant intellectual property. This will position Canada as the best place in the world to invest in RM. The high-value products and nextgeneration drugs will treat many of the devastating diseases that affect our aging population, and will change the paradigm of health care in Canada. The CECR program is an initiative of three federal granting agencies—the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes for Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC)—in partnership with Industry Canada.

Bringing Canada's Medical Imaging Experts Together: Centre for Imaging Technology Commercialization (CImTeC), London, Ontario



The Centre for Imaging Technology Commercialization (CImTeC) is one of five new centres to be funded by the Government of Canada through the 2010 Centres of Excellence for Commercialization and Research (CECR) competition. The CECR program is administered by the Networks of Centres of Excellence (NCE) Secretariat, which supports successful research partnerships between universities, industry, not-for-profit organizations and government.

The centre was awarded \$13.3 million over five years, allowing its members to address barriers faced by Canadian medical

imaging companies, such as limited access to medical imaging equipment, that prevent the rapid commercialization of diagnostic imaging technologies emerging from Canadian universities and research centres.

Diagnostic imaging—such as ultrasounds, magnetic resonance imaging (MRI), and computerized axial tomography (CAT)—is used in more than one-quarter of medical cases throughout the world. In 2008, the global market for these technologies was estimated at over \$20 billion.

CImTeC will help small and medium-sized enterprises (SMEs) capture more of this market by bringing together Canadian researchers and technical experts in medical imaging and providing them with greater access to resources and infrastructure. This concentration will not only accelerate research and development in the medical imaging sector, but it will also attract new investments from both the public and private sector, leading to jobs and economic growth, and generate valuable intellectual property.

Dr. Aaron Fenster is the Centre Director for CImTeC and he says the centre will change the landscape of the medical imaging technology sector by helping SMEs become successful and accelerating innovations coming out of universities.

"We would like to make Canada, particularly Ontario, a hub of activity in medical imaging," says Dr. Fenster. "Once we have a successful cluster of SMEs, it's going to feed on itself and generate more innovation and commercialization."

Hosted by The University of Western Ontario, with another site at the Sunnybrook Health Sciences Centre in Toronto, CImTeC will be housed in the two largest medical imaging centres in Canada (among the largest in the world). CImTeC provides the greatest opportunity for the Canadian medical imaging sector to establish and sustain world leadership in innovation and technological development, and to make tremendous impacts on the economy and healthcare system.

The CECR program is an initiative of three federal granting agencies—the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes for Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC)—in partnership with Industry Canada.

Building Canada's Remote Monitoring Technologies Industry: Leading Operational Observations and Knowledge for the North (LOOKNorth), St. John's, Newfoundland and Labrador



Leading Operational Observations and Knowledge for the North (LOOKNorth) is one of five new centres to be funded by the Government of Canada through the 2010 Centres of Excellence for Commercialization and Research (CECR) competition. The CECR program is administered by the Networks of Centres of Excellence (NCE) Secretariat, which supports successful research partnerships between universities, industry, not-for-profit organizations and government.

LOOKNorth is an initiative of C-CORE, a Canadian research and development corporation at Memorial University in St. John's,

Newfoundland and Labrador. The centre was awarded \$7.1 million over five years to enable its network of industry and research partners to build on Canada's monitoring technologies industry, helping to ensure safe and sustainable resource development in remote, challenging and environmentally sensitive northern regions.

LOOKNorth's initial focus will be on Earth observation (EO) satellite technology, as it has great potential to provide the information needed to advance exploration and development projects through regulatory, environmental, and economic hurdles.

Dr. Charles Randell is the CEO of C-CORE. He says because many Canadian EO service companies are fairly small (with fewer than 25 people), they have a limited ability to expand outside of their niche markets. LOOKNorth will help grow Canada's small and medium-sized enterprises (SMEs) by offering resources and serving as a commercialization pipeline for new, innovative technologies that support natural resource industries.

"LOOKNorth will assist Canadian SMEs by defining industry needs, developing business cases for new technologies that address those needs, supporting technology development, and generating opportunities to secure markets," says Dr. Randell.

By assisting SMEs to export highly-valued products and services to an international market increasingly interested in northern resources and operations, LOOKNorth will also help position the Canadian monitoring technologies industry as an international leader.

The CECR program is an initiative of three federal granting agencies—the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes for Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC)—in partnership with Industry Canada.

MiQro Innovation Collaborative Centre (MIC2), Bromont, Quebec



The MiQro Innovation Collaborative Centre (MIC2) is one of five new centres to be funded by the Government of Canada through the 2010 Centres of Excellence for Commercialization and Research (CECR) competition. The CECR program is administered by the Networks of Centres of Excellence (NCE) Secretariat, which supports successful research partnerships between



universities, industry, not-for-profit organizations and government.

MIC2 was awarded \$14.1 million over five years, allowing its members to foster the growth of the microelectronics industry in

Quebec and across Canada, which will generate wealth and employment in the knowledge sector.

Canada is a hotbed for high-technology, and Canada's microelectronics industry is currently worth \$4.1 billion. Electronic components, specifically integrated circuits or microchips, form the core of all high-tech devices, from mainstream technologies such as PCs to technologies of the future such as GPS chips sewn into children's clothing.

Normand Bourbonnais is the centre director for MIC2. He says the synergy of the collaborative partnerships will allow SMEs to tap into a large talent pool that will generate innovations.

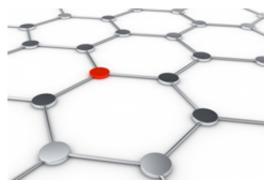
"SMEs will have access to skills development, resources for developing strategic business plans, legal IP rights protection, guidance and funding for commercialization," says Mr. Bourbonnais.

MIC2 is supported by an initial \$218 million from its three founding partners―Université de Sherbrooke, IBM Canada Ltd. and DALSA Semiconductor―as well as the federal and Quebec governments. The centre is located in Bromont, Quebec, home of IBM's largest chip assembly plant worldwide, where the majority of IBM's value-added internal assembly and test operations for its most technologically complex products are performed.

Encouraging integration in the microelectronics innovation chain, MIC2 will provide new training opportunities for university researchers, accelerate international marketing of Canadian innovations, stimulate development and encourage the creation of microelectronics companies in Canada.

The CECR program is an initiative of three federal granting agencies—the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes for Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC)—in partnership with Industry Canada.

New Wireless Connections: Wavefront Wireless Commercialization Centre, Vancouver, British Columbia



The Wavefront Wireless Commercialization Centre is one of five new centres to be funded by the Government of Canada through the 2010 Centres of Excellence for Commercialization and Research (CECR) competition. The CECR program is administered by the Networks of Centres of Excellence (NCE) Secretariat, which supports successful research partnerships between universities, industry, not-for-profit organizations and government.

Wavefront was awarded \$11.6 million over five years becoming the unifying entity in the Canadian wireless industry, providing

SMEs with access to resources normally beyond their reach and helping connect researchers from Canadian academic institutions with commercially viable innovations to suitable industry partners. This approach to commercialization will strengthen domestic collaboration, grow companies and the economy, and create jobs.

As the worldwide market for the wireless industry approaches \$1 trillion, Wavefront will enable

Canadian companies to succeed on a global scale, capitalizing on the next wave of wireless innovation and driving Canada's digital economic strategy.

James Maynard is the centre director for Wavefront. He says the centre will meet several challenges faced by the Canadian wireless industry, such as understanding global markets and innovating products and services that bridge multiple and evolving wireless standards.

"We hope to create a single brand for Canada's wireless SME's that transcends regional boundaries," says Maynard. "It will present a single connection point for global wireless markets to discover business opportunities with the rich capability of all of the wireless development clusters in all the regions across Canada."

Wavefront has already established 20 international partnerships designed to accelerate the entry of Canada's wireless SME community into the global market, and is currently working with 27 universities from across Canada to help them convert their academic research into commercially viable products and services.

The CECR program is an initiative of three federal granting agencies—the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes for Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC)—in partnership with Industry Canada.

Date Modified: 2010-10-20