

Hello,

We will be attending the Digital Health Round Table tomorrow and we are from uOttawa from **CREATE BEST** and **MEDICAL DEVICES INNOVATION INSTITUTE**

About Create Best

The NSERC CREATE funded “Biomedical Engineering Smartphone Training” program (CREATE-BEST) provides professional training and practical employment-ready skills to engineering graduate students to meet the needs of the growing mHealth marketplace and enable innovation. mHealth is the practice of clinical healthcare and public health supported by mobile devices, which includes mobile device applications for collecting community and clinical health data; healthcare information delivery to practitioners, researchers, and patients; real-time patient monitoring; and direct provision of care via mobile technology.

The potential types of mHealth applications are wide ranging, from digital epidemiology to monitoring patient gait. With proper design, the app becomes an information and communication bridge that serves to close the gap between the home and the clinic, granting more freedom to patients, lower costs to the healthcare system, and gapless health monitoring for clinicians.

Three universities collaborate in CREATE-BEST.



About Medical Devices Innovation Institute

About

Canada needs consumer health moonshot!

Canada's healthcare system is under massive strain. It faces the combined challenges of aging demographics, population growth, and design built for episodic care in a pre - computer age. In 2017, the Commonwealth Fund released a report that compared healthcare systems in 11 developed countries. Canada ranked ninth. A moonshot, in a technology context, is a project or proposal that:

- Addresses a huge problem
- Proposes a radical solution
- Uses breakthrough technology

Four breakthrough technologies that are converging rapidly offer Canada a remarkable opportunity to transform its consumer health and healthcare system. They are:

- Artificial Intelligence driven analytics
- Mixed Reality, Haptics & Seamless Interactions
- Cybersecurity, Biometrics, Privacy
- Nano-technology, IoT, Wearables & Cyber - physical systems

To become leader in eHealth, Canada needs:

- Investments in diverse people and partnerships
- Inter - disciplinary training and investing in next generation of engineers and digital health - care professionals
- Strong financial incentives to invest in and adopt our technology
- To increase technology experimentation in non - traditional ways
- Open access to health data
- Concentrate our resources to build areas of excellence
- Export our consumer health products and services internationally

Our Mission

MDII fosters collaboration among the key stakeholders to address their needs, find solutions to sector specific barriers and challenges, and drives the development of leading edge innovative wellbeing systems and talent, ultimately bringing innovative ideas from concept to deployment.

Our Work

The Medical Devices Innovation Institute MDII is bringing together the Ottawa science, engineering, health and medical communities to create a cogent core of excellence to:

- Research:** producing high quality interdisciplinary research related to the wellbeing of citizens with particular reference to Internet of Things, wearables and multi-sensory data; Intelligent and cognitive analytics; Augmented Reality (AR) /Virtual Reality (VR) /Haptics and Human Interaction with digital media
- Training:** encouraging the development of Highly Qualified Personnel (HQP) by promoting a nurturing environment for our higher degree research students
- Services:** holding a yearly meeting (workshop/forum) to bridge the gap between academia and industry in wellness systems and offering short courses for industry around wearable technologies, software, medical IT, machine learning (big-data), augmented/virtual reality, and decision-making in connected health settings

Our collaboration philosophy

The Medical Devices Innovation Institute (MDI2) in collaboration with affiliated partners from across Canada can combine forces and play an important role in finding effective solutions to these challenges and to help establish Canada as a leading authority for research, development and training in order to enhance the wellbeing of citizens.

The Medical Devices Innovation Institute has consulted with and engaged a wide cross section of key stakeholders and established their support for the Institute and related activities. Additional partners with an interest in the wellness systems and service sector are welcomed and currently being recruited from across Canada in a number of specific areas including:

- Educational Institutions
- Research Institutes
- Hospitals & Clinics
- Medical Device Industry
- Government Agencies
- Other areas



Medical Devices Innovation Institute