





The Advanced Analytics Initiative

Improving the Health of Military Personnel, Veterans and their Families

Through the joint efforts of the Canadian Institute for Military and Veteran Health Research (CIMVHR), IBM Canada Ltd., and Babcock Canada Inc., the Advanced Analytics Initiative was established for the purposes of funding cutting-edge research focused on improving the health of Canadian military personnel, Veterans, and their families. The establishment of the Advanced Analytics Initiative was made possible through the Industrial and Technological Benefits (ITB) credits program.

"IBM Canada has a long and proven history of supporting veterans through initiatives like our Veteran's Employment reskilling. By working with CIMVHR and Babcock, we are able to advance this support in new and important ways using modern AI and analytics technologies and related expertise." – Regan Watts, Head of Innovation, Citizenship and Government Affairs, IBM Canada.

"We are very proud of the work we do in maintaining the naval platforms and equipment that keep our Canadian military personnel safe, both at home and when deployed abroad. This important collaboration with IBM Canada and CIMHVR is an extension of taking care of these same people after they return home." - Mike Whalley, President of Babcock Canada.

To date, six projects have been selected for support in the form of funding for staff and in-kind access to IBM advanced analytics tools and expertise. The research being supported through the initiative leverages 'big data' analytics, machine learning, and other approaches to health solutions for Canadian military personnel, Veterans, and their families. Particular areas of research being investigated through the initiative include:

- Improving the diagnosis and treatment of PTSD, mental health issues, concussion and other related conditions through the use of machine learning, natural language processing, and other novel advanced analytics tools.
- Promoting timely access to mental health care through the development of a smartphone counselling application, enabled by IBM cognitive capabilities.
- Exploring data extraction and linkage opportunities from relevant datasets to facilitate more advanced and complete military, Veteran, and family health research.

"The smartphone application has the potential to extend access to mental health support for military personnel and family members, particularly those who are interested in self-help solutions for personal or family distress" — Dr. Heather Stuart, Principal Investigator funded through the Advanced Analytics Initiative

The research teams are composed of partners from multiple sectors and academic disciplines, bringing together Canada's best brains on military, Veteran, and family health. Specifically, certain research projects are being supported by collaborative partners, including the Centre for Advanced Computing at Queen's University, True Patriot Love, Homewood Research Institute, and Calian Group Ltd. Additionally, many of the projects will make use of Ontario's advanced research computers in partnership with SOSCIP. The initiative also supports the training and skill development of highly qualified personnel through the ability to leverage Mitacs funding.

Quick facts

- The Advanced Analytics Initiative is driving the development of innovative health solutions for Canadian military personnel, Veterans, and their families.
- Six projects are being supported through the initiative, with involvement from the following institutions: Carleton University, Lawson Health Research Institute, Queen's University, St. Michael's Hospital, The Ottawa Hospital Rehabilitation Centre, The University of Alberta, The University of Manitoba, The University of Toronto, and Western University.
- Relevant areas of research include improving the diagnosis and treatment of mental health disorders and other related conditions, improving access to mental health care, concussions, and improving access to relevant datasets for research purposes.
- The research teams are composed of partners from multiple sectors and disciplines.
- The initiative is supporting the skill development and training of highly qualified personnel through the provision of Mitacs funding.

For more information, please contact:

Madelaine Meehan

Project Manager, CIMVHR

madelaine.meehan@queensu.ca, 613-533-6000 ext. 74533