

**Leaders Opportunity Fund / Fonds des leaders  
Backgrounder / Fiche d'information**

**Ontario**

The Canada Foundation for Innovation (CFI) Board of Directors approved a contribution of \$10,545,824 to support 72 infrastructure projects in the province. / Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 10 545 824 \$ en vue d'appuyer 72 projets d'infrastructure dans la province.

Project Title / Titre du projet	Maximum CFI Contribution / Contribution maximale de la FCI
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**Algoma University**

Biochemical and Molecular Infrastructure to Unlock the Secrets of Plant Extracellular Lipids: Manipulating Pathways to Create Novel Bio-products for Agriculture, Forestry and the Biofuels Industry	\$84,754
<b>1 project / projet</b>	<b>\$84,754</b>

**Carleton University**

Carleton's Human Oriented Research in Usable Security (CHORUS) Lab	\$100,000
Earthquake Simulation Facility with Network Interface Capabilities for Collaborative Earthquake and Vibration Research	\$100,000
Infrastructure for Microbial Evolutionary Genomics	\$150,000
Infrastructure for the Digital Rhetorics Laboratory	\$100,000
Research and Development for Optical Identification of Single Barium Ions	\$143,117
Water and Ice Research Laboratory (WIRL)	\$185,000
<b>6 projects / projets</b>	<b>\$778,117</b>

**McMaster University**

Cellular and Molecular Sensing Laboratory	\$110,000
Development of Innovative Methods for Wastewater Treatment Using Bioelectrochemical Systems for Biosolids Minimization and Effective Removal of Nutrients and Heavy Metals	\$44,334
Infrastructure for Developing New Imaging Technologies to Enhance the Sensitivity of Positron Emission Tomography (PET) for Molecular Imaging	\$80,000

## .../ McMaster University

Infrastructure to Study Brain Development Disorders Using Neural Cellular Models	\$400,000
Innovations in Automobile Design for an Aging Population	\$200,000
Organic Photovoltaics Laboratory	\$80,000
Sorption Phenomena of Actinides in Brine/Solid Interface - Development of Sorption Model and Evaluation of Sorption Data	\$100,000
<b>7 projects / projets</b>	<b>\$1,014,334</b>

## Queen's University

A Laboratory of Clinical Exercise Physiology in Chronic Cardiopulmonary Diseases (LACEP)	\$200,000
A Translational Research Pipeline for Personalized Diagnostics in Myelodysplastic Syndromes	\$206,000
Monkey Models of Movement Disorders: Electrophysiology and Neuromodulation Therapies	\$320,000
Movement for Performance Biomechanics and Ergonomics Laboratory	\$150,000
Research on Portable Multidimensional Micro-Nano Biological Sensing Devices	\$400,000
The Relevance of DNA Methylation Processes in Serotonin Genes for the Diagnosis and Treatment of Mental Illness	\$60,319
<b>6 projects / projets</b>	<b>\$1,336,319</b>

## Royal Military College of Canada / Collège militaire royal du Canada

Inert Atmosphere Glovebox for the Synthesis of Arsenic Compounds and the Live-Harvesting of Environmental Samples	\$25,167
<b>1 project / projet</b>	<b>\$25,167</b>

## University of Guelph

Attention Laboratory for High Temporal Resolution Behavioural, Eye Movement, and Electrophysiological Recording	\$124,983
Challenging Depression in Canadian Youth: Building Mobile, Online, and Interactive Assessment and Intervention Tools	\$103,215
Development of a Comparative Hemostasis Laboratory at the Ontario Veterinary College Health Sciences Centre	\$91,908
Infrastructure for Bionanotechnology Laboratory	\$160,816
Infrastructure for the Characterization and Analyses of Sedimentary Processes	\$90,231
Infrastructure to Support Integrated Circadian-Cardiovascular Research	\$124,442
Intestinal Mucosal Immunity and Host-Pathogen Interactions During Mycobacterial Infection in Cattle	\$124,881
<b>7 projects / projets</b>	<b>\$820,476</b>

## University of Toronto

Astronomical Instrumentation Development for Large Optical and Future Giant Segmented Telescopes	\$259,840
Creation of the Diabetes Discovery Core to Facilitate Innovative New Directions in Understanding Diabetes Pathophysiology and in Developing New Clinical Modalities to Manage the Disease	\$386,202
Electrical Neuromodulation of Spinal and Supraspinal Reflexes for Treatment of Lower Urinary Tract Dysfunction	\$99,452
Gene-Environment Interplay Research Laboratory	\$399,752
Integrated Million Death Study e-Platform	\$186,144
Laboratory for the Study of the Psychophysiological Effects of Stress on Physical Health	\$36,683
Microstructured Surfaces and Adaptive Materials Engineering	\$123,852
Muscle Stem Cell Bioengineering Laboratory	\$149,872
Nanomechanics and Nanotribology Platform for Characterizing Energy Efficient Materials	\$146,500
Neuromuscular Recovery after Stroke: Assessment and Intervention	\$111,113
Structural and Systems Pharmacology Laboratory for Drug Discovery	\$197,340
Tracking Nanoparticles with Whole-Animal Imaging and Hyperspectral Microscopy: A Novel Strategy for Identifying Biomarkers and Treating Diabetes	\$397,628
<b>12 projects / projets</b>	<b>\$2,494,378</b>

## University of Waterloo

A Testbed for Empirical Cloud Computing Research	\$198,359
Cluster Computing Infrastructure for Scalable Big Data Management and Analysis	\$215,414
Computing Infrastructure for Control of Complex Physical Systems	\$57,722
Data Analytics and Computational Biostatistics	\$207,103
Design Environment for Creating Physical Interactive Technology	\$50,000
Evaluating the Anti-Cancer Treatment Applications of Nutraceuticals	\$40,000
Functional Significance of Binocular Vision	\$50,000
Hardware-in-the-Loop Simulation Platform for Intelligent Hybrid Cars	\$49,981
Imaging Infrastructure for Engineering Materials and Biological Tissues Characterization	\$150,000
Infrastructure for a Bioelectronic Systems Laboratory	\$50,000
Infrastructure for the Biomechanical Analysis of High Flexion Activities of Daily Living	\$55,000
Printed Flexible Electronics: Transformational Technology for Electronics Manufacturing	\$50,000

## .../ University of Waterloo

Quantitative Data Collection for Model-Based Biotechnology	\$140,000
Refill Friction Stir Welding of Lightweight Materials	\$47,666
Research Infrastructure for Computational Analytics on Big Data in the Cloud	\$159,158
Research Infrastructure for Continuous Data Stream Analytics in the Cloud	\$34,740
Reverse-Engineering Platform for Human Visuo-Motor System	\$50,000
Understanding the Role of Block Copolymers in Metal Coordination Polymerization for Prussian Blue Nanoparticle Design	\$80,000
<b>18 projects / projets</b>	<b>\$1,685,143</b>

## University of Western Ontario (The)

Biodiversity - Ecosystem Function Laboratory	\$135,804
Infrastructure for Molecular to Whole-Animal Analysis of Inflammation, Infection and Immune Function	\$199,975
Migration, Gender, and International Development Research Laboratory	\$181,474
NeuroPsychiatry Imaging Lab (NeuroPIL) Hybrid PET/MRI Infrastructure	\$149,895
Personalizing Drug Therapy to Increase Safety and Efficacy of Medications	\$284,149
Technology for Exploring Cellular Mechanisms Underlying Cognitive Function in Health and Disease	\$197,390
<b>6 projects / projets</b>	<b>\$1,148,687</b>

## University of Windsor

Advanced Development & Test Facility for Heavy-Duty Electrified Transportation Systems and Components	\$280,000
Universal Testing Facility for Advanced Characterization of Automotive Materials	\$350,000
University of Windsor Occupational Biomechanics Research Facility	\$134,500
<b>3 projects / projets</b>	<b>\$764,500</b>

## Wilfrid Laurier University

Developing Broad Antiviral Strategies to Protect the Health of Canadians and their Environment	\$44,374
Investigating Microbial Biosynthetic Capacity	\$30,901
Musculoskeletal Spinal Disorders Laboratory	\$76,997
<b>3 projects / projets</b>	<b>\$152,272</b>

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## York University

A Laboratory for Freshwater Chemistry and Northern Permafrost Change	\$135,148
Electrical Synapses: From Genes to Functions Using Transgenic Zebrafish	\$106,529
<b>2 projects / projets</b>	<b>\$241,677</b>