

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

Ontario

The Canada Foundation for Innovation (CFI) Board of Directors approved a contribution of \$15,574,462 to support 84 infrastructure projects in the province. / Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 15 574 462 \$ en vue d'appuyer 84 projets d'infrastructure dans la province.

Project Title / Titre du projet	Maximum CFI Contribution / Contribution maximale de la FCI
---------------------------------	--

Carleton University

Platform for the Study of Bioactive Compounds in Health and Environmental Sciences	\$124,998
1 Project / Projet	\$124,998

Lakehead University

Hyperpolarized Gas MRI for Collaborative Studies on Asthma	\$124,128
Signal Analyzer, Tunable Laser and Optical Spectrum Analyzer for Photonics, Biophotonics and Nanophotonics Research Facilities	\$105,141
2 projects / projets	\$229,269

McMaster University

Dance: Quantifying Interpersonal Synchronization of Movement and Social Interaction	\$208,401
High Speed Test Cell for Next Generation Electric and Hybrid Powertrain	\$400,000
Infrastructure for a Cutting-Edge Integrative Physiology Laboratory for Examining the Effects of Environmental Stress on Animals	\$125,000
Infrastructure for Studying Amphibian Pathogens, Genomics, and Diversity	\$164,183
Laboratory for Low Temperature Magnetic and Electronic Characterization of Novel Materials	\$374,000
Laboratory for the Development and Study of Extracellular Matrices	\$279,999
Paleogenomics: State-of-the-Art High-Throughput Enrichment and Sequencing Facility for Fossil and Forensic Remains	\$293,550
The Role of Exercise and Mitochondrial Dysfunction in Neuromuscular Disorders and Aging	\$394,006
8 projects / projets	\$2,239,139

Nipissing University

Establishment of the Sensory-Movement Behaviour Lab to Examine the Visual-Motor Regulation of Upper Limb Actions	\$57,402
1 project / projet	\$57,402

Queen's University

*Digital Tools for Music Education	\$168,994
1 project / projet	\$168,994

** Funding for Research Infrastructure Associated with a SSHRC Major Collaborative Research Initiative
 Financement de l'infrastructure liée aux Grands travaux de recherche concertée du CRSH*

Royal Military College

High Pressure Pump and Imaging Equipment for Gas Hydrate Experimentation	\$70,689
Research Centre for Environmental Toxicology & Molecular Physiology (RCETMP)	\$147,249
2 projects / projets	\$217,938

Ryerson University

Application of High Performance Parallel Computing to the Numerical Simulation of Biofuel Combustion and Combustion-Generated Emissions	\$119,092
1 project / projet	\$119,092

Trent University

Laboratory for Non-Linear Optical Characterization of Biomaterials	\$100,000
1 project / projet	\$100,000

University of Guelph

Comparative Epilepsy Program Infrastructure Development	\$62,349
Establishing a Laboratory to Study the Influence of Parent-Child Feeding Interactions on Children's Dietary Intake and Weight Outcomes	\$118,074
Food, Health and Aging for Reduced Health Care Costs	\$122,215
Guelph Biomass Conversion and Characterization Facility	\$124,076
Infrastructure for an Integrative Laboratory Studying Normal and Aberrant Cerebral Cortical Development	\$124,833
Therapeutic Interaction Research Lab	\$40,053
Veterinary Regenerative Medicine Laboratory	\$300,101
7 projects / projets	\$891,701

University of Ontario Institute of Technology

X-Ray Diffractometer for Materials Characterization	\$49,672
1 project / projet	\$49,672

University of Ottawa / Université d'Ottawa

Broadband Seismograph Network for Passive Seismic Imaging of Earth Structures	\$203,879
Creative Practices Centre / Centre de pratiques créatives	\$105,631
Laboratoire de biofluides et de biorhéologie	\$144,371
Placental Pathophysiology Research Laboratory	\$238,850
Tomographic Time-Resolved Particle Image Velocimetry (TR-PIV) System	\$170,778
5 projects / projets	\$863,509

University of Toronto

Advances in Magnetic Resonance Neuroimaging Technology	\$499,952
Examining Protein:Protein Interactions in Cellular Membranes Relevant to the Treatment of Human Diseases	\$697,765
*Genomic Technologies for Mapping Pathways and Understanding Diseases	\$798,765
Advanced Simulation of Critical Structures under Extreme Loading	\$200,000
An Advanced, Integrated Instrumented Vehicle Laboratory for Assessing and Improving Driver Behaviour Through On-Road Experimentation	\$199,772
Analysis of Signaling Networks Evolution, Function and their Role in Disease	\$334,400
Analysis of Developmental Cell Fate and Function Through Application of Advanced Flow Cytometry and Microscopy	\$399,351
Atherothrombosis and Hemostasis: Roles of Platelets, Immune System, and Stem Cells	\$380,581
Connecting DNA Dynamics to Gene Expression One Molecule at a Time	\$93,833
DLL4-Notch as a Novel Strategy to Improve Tumor Radiation Response	\$68,413
Dissection of Legionella Pneumophila Virulence Factors Through the Integration of Experimental Adaptation and High-Throughput Genomics	\$150,000
Evolutionary Consequences of Losing Recombination and Segregation in Plants: Infrastructure for Interdisciplinary Research	\$80,000
Facility for Research in Structural Dynamic Performance of Advanced Aero-Engine Systems	\$171,702
High Resolution Mass Spectrometry for Metabolic Profiling to Discover Enzymes and Observe Cell Growth Regulation	\$399,699
High-Repetition-Rate Laser Diagnostic Facilities for Studies of Flow and Combustion Dynamics	\$199,887

.../ University of Toronto

Infrastructure to Identify Drugs that Modulate Trinucleotide Repeat Expansions to Treat Neuromuscular Diseases	\$285,279
Laboratory for Fluidics and Energy	\$150,000
Lymphocyte Biology Laboratory for the Study of the Mechanisms of Immune Cell Activation and Signalling	\$124,997
Molecular Analysis and Imaging of the Ubiquitin-Proteasome-System Facility	\$160,000
Multidisciplinary Laboratory for Development of Next Generation MRI Contrast Agents for Biomedical Imaging	\$200,000
Protective Mechanisms of Treg Lymphocytes in Osteoimmunology: Investigation of Hypoxia Effects in Bone Resorption	\$168,767
Quantitative Morphogenesis and Wound Repair Laboratory	\$150,000
Refining Phenotypes and Endophenotypes of Alcoholism Risk and Treatment Response	\$135,659
Research Laboratory for Experimental Spatial Ecology	\$212,801
Role of Bacterial Toxins in Infectious Diseases: Molecular Mechanisms and Therapeutic Opportunities	\$298,200
Social Cognitive Science of Dynamic Evaluation	\$120,000
User Interface Feedforward and Feedback Supporting and Enabling Ubiquitous Computing	\$198,000
27 projects / projets	\$6,877,823

** Funding for Research Infrastructure Associated with a Canada Excellence Research Chair (CERC)
 Financement de l'infrastructure liée à une Chaire d'excellence en recherche du Canada (CERC)*

University of Waterloo

*WATGAME - Waterloo Game Analysis and Monitoring Environment	\$100,000
**Multi-Scale Environmental Particle Analysis Laboratory (MEPAL): A Core Facility of the CERC in Ecohydrology	\$218,716
A High-Performance Computing System for the Simulation of Multi-Scale Systems	\$80,000
Advanced Pharmaceutical Therapies: Developing Mechanism-Based Bioactive Molecules Through an Integrated Approach	\$75,252
Brewster's Angle Microscopy, PM-IRRAS, and Kelvin Probe Force Microscopy Facility for the Characterization of Mixed Lipid Monolayers	\$187,505
Computational Health Informatics Laboratory	\$176,165
Cooperative Autonomous Vehicle Network Test-Bed	\$50,000
Determining the Structures and Reactivities of Nanoclusters	\$220,000
Development of Micro and Nano-Structured Biomimetic Adhesion Technology	\$59,905
Direct and Indirect Regulation of NMDA Receptors by 5-HT7 Receptor Signaling	\$34,986
Discovery of New Genes in Brain Lipid Metabolism for Health and Disease	\$55,000

.../ University of Waterloo

Evaluation of Physical Activity, Cognitive Function, and Brain Correlates	\$55,000
Facility for Analysing Mixtures of Contaminants in Sediments and Groundwater for Remediation Studies	\$93,203
Multimodal Sensory Feedback and Learning for Synthesized Skilled Motion	\$50,000
Nanosized Air Pollution Research (Nano-APR) Laboratory	\$53,895
The Production of Biochemicals from Organic Wastewater Using Biocathode Microbial Electrochemical Cells	\$48,000
16 projects / projets	\$1,557,627

** Funding for Research Infrastructure Associated with a SSHRC Major Collaborative Research Initiative
 Financement de l'infrastructure liée aux Grands travaux de recherche concertée du CRSH*

*** Funding for Research Infrastructure Associated with a Canada Excellence Research Chair (CERC)
 Financement de l'infrastructure liée à une Chaire d'excellence en recherche du Canada (CERC)*

University of Western Ontario (The)

*From Cognitive Neuroscience to Clinical Practice	\$440,340
Behavioral Research Laboratory for the Study of Consumer Behavior, Consumer Welfare and Well-Being	\$114,039
Industrial Bioproducts Laboratory (IBL)	\$257,669
Large-Scale Experimental and Computational Infrastructure for Assessing Wind Effects on the Built Environment	\$249,803
4 projects / projets	\$1,061,851

** Funding for Research Infrastructure Associated with a Canada Excellence Research Chair (CERC)
 Financement de l'infrastructure liée à une Chaire d'excellence en recherche du Canada (CERC)*

University of Windsor

A Nanosecond Laser Spectroscopy Facility for Interdisciplinary Research	\$93,152
Laboratory for Integrated Transportation and Traffic Engineering Research	\$90,000
Laboratory for the Study of Structure and Dynamics in Solid Materials	\$239,664
3 projects / projets	\$422,816

York University

Advanced Biomolecular Materials Laboratory at York University	\$155,537
Attentional Control Functions in Neuronal Microcircuits and Large Scale Brain Networks	\$158,237
Laboratory for Atmospheric Remote Sounding Technology	\$135,671
Stereoscopic 3D Lab (S3DL)	\$143,186
4 projects / projets	\$592,631