

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

Ontario

The Canada Foundation for Innovation (CFI) Board of Directors approved a contribution of \$14,853,518 to support 83 infrastructure projects. / Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 14 853 518 \$ en vue d'appuyer 83 projets d'infrastructure.

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

An Electrophysiological Approach to the Developmental Trajectories of Working Memory Functions	\$125,617
Establishment of the Balance and Gait Laboratory to Investigate the Neural Strategies Used for Postural and Locomotor Control	\$148,790
Neurovisceral Models of Mental Health and Personality	\$35,965
The Development of Face Perception	\$170,790
The Physical Property Measurement System (PPMS) for Research on Electronic and Magnetic Properties of Materials and Thin Films of Compounds	\$245,850
5 projects / projects	\$727,012

Carleton University

Establishing a Research Facility to Study Cellular Responses to Neuronal Injury and Mechanisms to Promote Functional Repair	\$179,218
Infrastructure for Impact Performance Evaluation of Advanced Materials	\$39,250
2 projects / projets	\$218,468

Lakehead University

Protecting the Health of Canadian Waterways Using Modern Toxicological Techniques: Upgrade of the Lakehead University Aquatic Research Laboratory	\$171,621
1 project / projet	\$171,621

Laurentian University / Université Laurentienne

A Trace Element Mapping Facility for Geological Samples	\$170,901
1 project / projet	\$170,901

McMaster University

Brain-Imaging in an Immersive Motion Simulator	\$235,407
Drug Development in a Post-Antibiotic World: Infrastructure to Develop Novel Immunomodulatory Therapies for Treatment of Infectious Disease	\$130,472
Infrastructure for Metabolic Research within the Neonatal Intensive Care Unit	\$396,905
Infrastructure to Establish a Research Laboratory for Bone Adaptation and Biomechanics	\$250,000
Laboratory for Development of X-Ray Analysis Systems for Characterisation of Biological Materials and Body Composition	\$100,000
Laboratory for Membrane and Protein Dynamics	\$180,000
Laboratory for Mining Microbial Genomes for Bioactive Natural Products	\$248,575
Mechanisms Underlying the Regenerative Capacity of Skeletal Muscle in Health and Disease	\$249,396
Non-Invasive Imaging of Healthy and Diseased Human Skeletal Muscle	\$100,000
9 projects / projets	\$1,890,755

Queen's University

Control of Cell Surface Channel Density by Potassium as a Novel Mechanism for hERG Regulation	\$200,000
Cryogenic Detectors for Dark Matter and Brittle Fracture	\$185,102
Establishing a Queen's GeoComputation and Analysis Laboratory (GCAL) for Population Health and Disease Modeling	\$100,882
Forest-Tundra Dynamics in a Changing Climate	\$104,000
Gender Differences in Sexuality	\$91,572
Paleolimnological Approaches to Environmental Issues	\$50,000
Targeting Ischemic Depolarization in Acute Stroke	\$142,000
7 projects / projets	\$873,556



Ryerson University

Ryerson University Combined X-Ray Diffraction and Differential Scanning Calorimetry Facility for the Evaluation of Phase Changes in Foods and other Materials	\$264,401
1 project / projet	\$264,401

University of Guelph

A High-Performance Computer Facility to Support Research into the Genealogical and Physiological Basis of Multivariate Trait Variation and Evolution	\$126,866
Ecological Studies of Wildlife Reservoirs of Emerging Zoonotic Diseases	\$87,609
Infrastructure for the Study of Oncogenic Betaretroviruses	\$120,711
Integrative Neurophysiology Laboratory	\$124,571
Multi-Species Comparative Cancer Genetics	\$117,954
Peat Resources, Boreal Ecosystem Function, and Terrestrial Carbon Cycling Under a Changing Climate	\$176,453
Single-Crystal X-Ray Diffractometer	\$165,694
Women's Health and Wellbeing: Social Psychology Research Suite	\$85,460
8 projects / projets	\$1,005,318

University of Ottawa / Université d'Ottawa

High Resolution Still, Moving, and Stereo Image Capture and Dissemination through the Creation and Exhibition of Innovative Interactive Artworks	\$54,964
Imaging Memory Formation	\$399,939
Laboratory for Micro- and Nano-Scale Biophysical Sensing	\$189,282
Molecular Determinants and Behavioral Implications of Neurogenesis Throughout the Lifespan in Naïve and Pathological Conditions	\$325,325
Molecular Structures for the Chemistry of Tomorrow	\$322,524
Nanophotonics Research Facility	\$399,942
Neurolipidomics: Targeting the Metabolic Underpinnings of Neurodegenerative Disease	\$363,608
Virtual Health Populomics Lab	\$273,926
8 projects / projets	\$2,329,510



University of Toronto

Critical Making: the Materialization of Digital Information	\$34,113
Dyadic Psychophysiology Lab: a Multi-Method Approach to Intergroup Relations	\$54,584
Establishment of a Laboratory for Research on the Evolutionary Genetics of Animal Behaviour	\$200,340
Establishment of a Live-Cell Imaging and Biochemistry Laboratory for Research in Organelle Biogenesis and Degradation	\$448,654
Establishment of a Protein Biochemistry and Molecular Biology Laboratory for Research in Plant Development and Stress Biology	\$150,000
High Performance Computing Infrastructure for Large-Scale Healthcare Optimization	\$91,324
Human Annotated Interaction Networks - A Resource to Analyze Genetic Variants and Disease Mutations	\$92,278
Infrastructure for DNA Damage and Neurotoxicology	\$170,884
Infrastructure for Molecular Genetics and Therapeutics in Sarcoma	\$390,188
Integrated Watershed Hydrology and Biogeochemistry Research Facility for the Study of Contaminant Transport and Transformation	\$220,000
Laboratory for Computational Structural Biology	\$200,000
Manufacture and Testing of Advanced Aerospace Materials	\$29,643
Massively Parallel Computation and Massive Storage for the Application of Deep Learning to Large Databases	\$37,214
Muscle Function and Performance in Children with Muscular Dystrophy	\$82,196
Ontario Child Abuse and Neglect Data System	\$277,335
PPARalpha as a Mediator of Sex Differences in Autoimmunity	\$102,828
Pharmacogenetics in Psychiatry: a New Era of Personalized Medicine	\$399,056
Research Laboratory for Mobile Genetic Elements in Eukaryotic Genomes	\$143,246
Studying the Role of Macro-Autophagy in Mediating Response to Antiangiogenic Tumour Therapy	\$45,037
19 projects / projets	\$3,168,920

University of Waterloo

A Parallel Multi-processor, Multi-Core Environment for Optimization	\$91,982
Analysis and Modelling of the Land-Atmosphere System for Understanding Climate and Air Quality	\$93,939

.../University of Waterloo

Computer Cluster for Quantum Molecular Dynamics Simulations: from Quantum Nanoclusters to Biological Systems	\$150,000
Fabrication Facility for Superconducting Quantum Devices	\$164,000
Macromolecular Crystallography at Waterloo	\$171,008
Organism-Environment Feedback Facility	\$125,000
6 projects / projets	\$795,929

University of Western Ontario (The)

A Live-Cell Fluorescent Imaging and Proteomic Laboratory for Studying Proteins Implicated in Aging and Neurodegenerative Diseases	\$169,304
A Novel High Speed Optical Flow Measurement System	\$201,189
Cellular Reprogramming Laboratory to Evaluate Epigenetic Programming Events During Development and in the Generation of Induced Pluripotent Stem Cells	\$208,254
Center for Study of Whole Body Vibration	\$251,423
Development of a Quantitative Laser Imaging Platform for Plant Canopies	\$275,200
Imaging Platform with Scanning Probe Microscopy: Unveiling and Manipulating Nature's Form and Function at the Nanoscale	\$198,679
Laboratory for Multifunctional Nanocomposites	\$216,342
Laboratory for the Assessment of Cardiovascular and Metabolic Phenotypes in Genetically Modified Mice	\$193,593
Laboratory of Neurochemistry of Dementia	\$398,227
Research Infrastructure to Study Rapid and Repeated Evolution of Salmonids	\$179,535
Studies in Behavioural Genetics: Infrastructure for Molecular Biology and Genomic Research	\$167,744
The CulturePlex: a Lab for the Study of Cultural Complexity	\$200,105
12 projects / projets	\$2,659,595



University of Windsor

Environmental and Geologic Sample Preparation and Infrared Microscopy Facility	\$135,528
Experimental Research Hatchery System for Studying the Evolutionary Ecology and Conservation of Genetic Quality in Fishes	\$149,093
Infrastructure to Generate Innovative Insights into Novel Risk Factors for Atherothrombotic Diseases	\$198,897
Noiseborder Multimedia Performance Laboratory	\$94,014
4 projects / projets	\$577,532