

**John R. Evans Leaders Fund / Fonds des leaders John-R.-Evans
Backgrounder / Fiche d'information**

Ontario

The Canada Foundation for Innovation (CFI) Board of Directors approved a contribution of \$22,090,076 to support 114 infrastructure projects in the province. / Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 22 090 076 \$ en vue d'appuyer 114 projets d'infrastructure dans la province.

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

From the sea to the Museum and Beyond: Maritime Heritage at Marzamemi, Italy	\$43,302
Urgent Replacement of Critical Infrastructure: Console for 600MHz NMR Instrument	\$268,376
Scanning Electron Microscope for New Generation Applied Research	\$144,132
3 projects / projets	\$455,810

Carleton University

Influence of Coupled Physical and Biogeochemical Processes on Metal Transport in Groundwater	\$85,000
Development of the Centre for Health Behaviours and Well-being in Daily Life	\$118,350
2 projects / projets	\$203,350

Lakehead University

Lakehead University Driving Simulator	\$15,707
1 project / projet	\$15,707

Laurentian University / Université Laurentienne

High Accuracy Gene Expression Quantification: Digital Droplet PCR	\$134,240
Neutron Detector Characterization Facility for Supernova Physics	\$150,788
2 projects / projets	\$285,028

McMaster University

Development of AML-Relapse Therapeutics (DART)	\$451,712
Mobile User Experience Lab	\$300,464
Lab to Assess Food Web Fate and Effects of Aquatic Contaminants	\$400,000
The Syntax Laboratory	\$73,566
High-throughput Whole Genome Sequencing for Improved Disease Risk Prediction	\$699,965
AI + Democracy Lab	\$242,774
6 projects / projets	\$2,168,481

Queen's University

Uncovering the Function of Glycans: Examining Interactions with their Biological Binding Partners at the Cellular Level	\$150,000
Gas-Fluid-Mineral Interactions: Implications for Element Cycles and CO2 Storage	\$200,000
High Temperature Oxidation and Corrosion Laboratory	\$125,000
Mechanisms Underlying the Optimization of Human Walking	\$150,000
Establishing the Snow and Ice Research Laboratory at Queen's University	\$100,000
Discovery and Development of Crystalline Radiation Detection Materials	\$200,000
Long Term Performance of Bituminous & Modern Geomembrane Liners with High Interface Shear Strength	\$200,000
Optical Metasurface for Optoelectronics and Renewable Energy Applications	\$125,000
Enhancing CAR Cell Immunotherapy of Brain Tumours with MRI-guided Focused Ultrasound	\$150,000
High-intensity and High-resolution X-ray Diffraction Laboratory	\$200,000
Seismic Behaviour of Retrofitted Continuous Concrete Slabs	\$150,000
Advances in the Search for Dark Matter with Bubble Chambers and Spherical Proportional Counters	\$200,000
Analysis of Infectious Diseases Systems with Long-lasting Transient Dynamics and Feedback Delays	\$150,000
Patient Specific Bone and Joint Health Technologies	\$200,000
Neurocomputational Approaches to Individual Differences in 'Virtuous' Decision-making	\$100,000
Social Neuroendocrinology Lab	\$250,000
16 projects / projets	\$2,650,000

Ryerson University

Industry 4.0 Smart Factory System	\$79,956
1 project / projet	\$79,956

Trent University

Laser Source for Label-free Nonlinear Biomaterial Imaging	\$158,579
Centre for Biomedical Research and Biosensing	\$86,317
2 projects / projets	\$244,896

University of Guelph

Laboratory to Study and Combat Antibiotic Resistant Pathogenic Bacteria	\$70,857
Chemical Mapping of Complex Soft Matter	\$127,500
Systems Biology of Host-pathogen Interactions	\$75,500
A Microbial Pheno-genomics Platform to Assess Microbiome Effects on Virulence of Salmonella	\$180,001
Quantitative Proteomics to Study Microbial Systems	\$420,000
Impact of Learning History on Individual Susceptibility to Developing an Addiction Phenotype	\$101,903
A Protein Engineering Laboratory to Probe and Rewire Cell Signaling	\$75,504
7 projects / projets	\$1,051,265

University of Ontario Institute of Technology

Materials Characterization Centre	\$397,675
1 project / projet	\$397,675

University of Ottawa / Université d'Ottawa

Neuromuscular Genomics and Health Research	\$200,472
Sustainable Chemical Manufacturing	\$251,547
Verification and Validation of Autonomous Software Systems	\$100,080
The Canadian Robotics and Artificial Intelligence Ethical Design Lab	\$39,390
4 projects / projets	\$591,489

University of Toronto

Exploration of Pathophysiological Mechanisms Underlying Diabetes and it's Related Complications	\$324,956
Harnessing Regulatory Immune Cells to Promote Transplantation Tolerance	\$204,231
Investigation of Organelle Dynamics and Remodeling Using Lattice Light-sheet Microscopy	\$738,411
Developing New Interventions for Breast and Lung Cancer	\$790,852
Infrastructure for Advanced Microfluidic Nanobiosensing	\$192,000
A Functional Approach to Stigmatization, Motivation, and Social Judgment	\$100,000

.../ **University of Toronto**

Moral Psychology and Global Affairs	\$93,198
Study of Disease-causing Mutations in NMDA Receptor Genes	\$148,573
It's All About Time: Optimising Infrastructure for Functional Brain Imaging in Children	\$636,802
Automated Apparatus for PET Radiopharmaceuticals to Image the Living Human Brain	\$608,092
High-throughput Facility for Design, Synthesis and Characterization of Novel Materials for Large-scale Energy Storage	\$153,449
Optimizing Motor Learning Through Music-based Behavioural Interventions	\$213,793
Regulation of Whole-body Metabolism by Nuclear Hormone Receptors	\$225,000
Expanding Cell Capabilities to Sense their Environment for Therapeutic Applications	\$100,000
Automation and Intelligent Design of Nanostructured Materials	\$250,000
DNA Damage and Cellular Physiology: Rewiring for a Cure	\$146,060
Spinning Disk Confocal Microscope to Probe Molecular Networks of Cell and Tissue Morphogenesis	\$200,000
Slide Scanner System to Study and Develop Novel Diagnostic Tools for Oral Fibrosis and Cancer	\$125,000
Multimaterial Characterization System for Developing and Testing Micro-/Nano-layered Composites and Foams	\$150,000
Multi-modal Functional Brain Technology	\$227,200
Live-cell Imaging of Inter-chromosomal Contacts by Confocal Super-resolution Microscopy	\$568,988
Facility for Advanced Non-destructive Testing / Imaging Instrumentation Development	\$440,474
Platform for Antibiotic Discovery and Investigation	\$150,000
MAXimizing MILk In A Changing Food eNvironment (MAXIMILIAN)	\$700,000
Design Observation Studio	\$100,000
Generation of Stem Cell-derived Pacemaker Cells for Biological Pacemaker Applications	\$322,305
The Origins of Social Learning and Behavior	\$318,422
Infrastructure for Image-guided Magnetic Micromanipulation of Cells and Tissues	\$300,000
Exercise Oncology and Cognition Lab (EOCL)	\$213,793
Measurements of Atmospheric Gases Using a Deployable Infrared Interferometer	\$175,000
Extrinsic Control of Neural Precursor Cells: Molecular Mechanisms of Brain Development and Repair	\$149,049
*MFARR-Asia Computer-assisted Survey Interview and Participatory Video Production Lab	\$61,200
32 projects / projets	\$9,126,848

** Funding for Research Infrastructure Associated with SSHRC Research Support
Financement de l'infrastructure liée au soutien à la recherche du CRSH*

University of Waterloo

Ancient and Contemporary Environmental Bioindicators Laboratory (ACEBioLab)	\$91,500
Integrative Physiology Laboratory to Study Sex-differences During Exercise	\$100,000
Scalable Systems Software for Next Generation Architectures	\$101,000
Control and Protection of Next-generation Power Electronically Enabled Hybrid AC-DC Power Systems	\$100,000
Intelligent Connectivity Lab: Software-hardware Systems for the Internet of Things	\$150,000
Microalgae Biomanufacturing Laboratory	\$80,000
Electrical Drive and Detection System	\$80,000
Neuromechanics-based Assistive Robotics: Towards Optimal Personalized Robotic Assistance	\$182,000
Understanding Weld Cracking using in-Situ Thermography and Simulation	\$80,000
CogSim: An Interaction-aware Tri-simulator Facility for Research on Driver Behaviors and Cognitive Autonomous Driving	\$150,000
Infrastructure for Research on Social and Intelligent Robotics	\$350,000
GIS-based Virtual and Augmented Reality Tools	\$72,000
High Resolution NMR Facility for Structure Elucidation	\$352,810
Advanced Microbicide Research and Analysis Facility (AMRAF)	\$123,378
Infrastructure for Research on Next Generation Wireless Networks	\$80,000
The Virtual Physiological Human Project	\$100,000
A Therapeutic Device for Otitis Media	\$120,000
Scanning Electron Microscope	\$100,000
Rational Design of Multiphase and Multifunctional Renewable – Resourced Polymers	\$100,000
Engaging Technology and People to Achieve Advanced Building Performance	\$85,228
Haptic Computing Lab	\$80,000
Taking Superconducting Electronics to the Next Level of Integration	\$170,819
Resource Management in Heterogeneous Clusters: Maximizing Efficiency and Guaranteeing Security, Privacy, and Fairness	\$80,000
23 projects / projets	\$2,928,735

University of Western Ontario (The)

Characterizing a Neural Basis for Crossmodal Plasticity Following Sensory Loss	\$196,245
A Computational Platform for the Discovery of Predictive Brain Dynamics	\$200,000
An Integrated Platform for Pre-Clinical Testing of Melanoma Treatments	\$200,000
Multiphase Processes for Sustainable Energy and Chemicals	\$200,000
Joint Motion Simulation Using Hybrid Experimental-Computational Techniques	\$158,289
Social Observation Laboratory	\$185,005
6 projects / projets	\$1,139,539

University of Windsor

Establishing High Resolution Facility for Micro-component Dynamic Vibration Analysis	\$66,313
Facility for Research on Sustainable Energy and Battery Management Systems	\$100,000
FISHSPACE: Novel Cost of Life Metrics of Fish for Improved Understanding of Spatial Management	\$94,480
State-of-the-art Research Facility for Earthquake-resilient Infrastructure	\$106,000
4 projects / projets	\$366,793

Wilfrid Laurier University

Creating a Living Lab for the Optimization of Green Building Performance	\$59,419
Craft of Intelligence Analysis Lab (CIAL)	\$50,085
2 projects / projets	\$109,504

York University

Investigating the Role of Intracellular Calcium Dynamics on Skeletal Muscle Function in Aged Muscle	\$150,000
Characterization and Targeted Reversal of Synaptic Mechanisms Contributing to Autism Spectrum Disorder	\$125,000
2 projects / projets	\$275,000

NOTE:

As part of this announcement, an additional \$6,627,023 was awarded under the Infrastructure Operating Fund (IOF), a mechanism that assists institutions with the incremental operating and maintenance costs associated with the new infrastructure.

À NOTER :

Cette annonce comprend l'attribution d'une somme additionnelle de 6 627 023 dollars du Fonds d'exploitation des infrastructures. Les établissements utilisent ces montants pour assumer une partie des coûts d'exploitation et de maintenance de la nouvelle infrastructure.