

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 \$21,213,705 to support 100 infrastructure projects in the province. / Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 21 213 705 \$ en vue d'appuyer 100 projets d'infrastructure dans la province.

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

Quantifying the Hidden Thaw	\$250,000
Regulation of Spinal Cord Excitability in Acute and Chronic Pain States	\$56,000
Understanding the Daily Lives of Purpose and Conscientiousness	\$30,000
3 projects / projets	\$336,000

Lakehead University

Laboratory for Forest Biorefinery and Biofuel Production	\$132,161
1 project / projet	\$132,161

McMaster University

Immunohistochemical Profiling of the Unfolded Protein Response in Chronic Respiratory Diseases	\$199,204
Atomic Force Microscopy for Force Measurements, Adhesion Studies, Nanotribology and Mechanical Testing of Cellulose Nanomaterials	\$140,000
Infrastructure to Support the Development of Peptide Vaccines for Peanut Allergy, Rheumatoid Arthritis and Transplant Rejection	\$80,000
Infrastructure to Establish an Injury Biomechanics Laboratory for Experimental and Numerical Investigations	\$80,000
ITRAX Core Scanner for Geoarchaeological and Paleoenvironmental Studies	\$326,053
Sensory Ethnography Research Laboratory	\$108,735
Infrastructure for Modeling Human Adipose Tissue Development in the Context of Metabolic Disorders	\$240,000
Software-Defined Radio Enabled Wireless Surveillance and Security	\$79,918
Control of Chromosome Dynamics and Genome Integrity	\$60,000

.../ McMaster University

Infrastructure for Advanced Business Analytics: Creating and Analysing Big Data for Canadian Distribution Channels	\$173,563
Time and Frequency Domain Hyperspectral Imaging for Photovoltaic Applications	\$399,940
Multi-Axis Dynamic Simulator for Testing Operational and Functional Components and Advanced Seismic Isolation Devices	\$100,000
A Facility for Multi-Stressor Biology on Aquatic Organisms	\$270,001
Infrastructure to Support Obesity and Metabolism Research	\$60,000
High Content Analysis Nanoscope to Study Neurodegeneration and Discover New Compounds for Neurodegenerative Disease	\$300,000
*Galvanizing Simulator Upgrade for NSERC-USSC IRC	\$110,000
16 projects / projets	\$2,727,414

**Funding for Research Infrastructure Associated with a NSERC Industrial Chair
Financement de l'infrastructure liée à une Chaire industrielle du CRSNG*

Nipissing University

Establishment of the Nipissing University Occupational Biomechanics and Ergonomics Laboratory	\$127,627
Infrastructure to Establish an Exercise Physiology Laboratory and to Study and Mathematically Model the Entrainment of the Heart, Lungs, and Locomotor Muscles in Humans Exposed to Environmental Stress	\$201,756
Establishing a Stable Isotope Mass Spectrometry Facility for Environmental Research in Northern Ontario	\$100,406
3 projects / projets	\$429,789

Queen's University

Optofluidic-Based Technology for Biomedical Diagnostics and Cell Studies	\$125,000
Creating QU-MOLTAH: Queen's University's MOBILE Laboratory for Technical Art History	\$154,224
The Translational Stroke Research Program	\$480,000
Dynamics of Coupled Wave-Current-Sediment Processes in Coastal Environments	\$150,000
A Tellurium Upgrade for the SNO+ Neutrinoless Double Beta Decay Search	\$400,000
5 projects / projets	\$1,309,224

Trent University

Innovative Sustainable Agriculture Research Laboratory	\$100,000
1 project / projet	\$100,000

University of Guelph

Remote Sensing for Advances in Terrestrial Hydrological Modelling	\$135,065
Developing Novel Cancer Biotherapies: Infrastructure to Support Translational Research in Companion Animals	\$124,985
High-Performance Computing Facility for Research in Theoretical Nuclear Physics	\$123,846
Advanced Equipment for Solid State NMR Studies of Biomedically Important Membrane Proteins	\$124,091
Continuous and Remote Aquifer Monitoring using Innovative Telemetry Systems: Enhancing Advanced Data Collection and Analysis Capabilities of G360 the Centre for Applied Groundwater Research	\$123,795
Unmanned Aerial Vehicle Technology to Evaluate Sustainable Cropping Systems	\$125,117
The Innovation, Design, and Consumption Laboratory	\$135,000
Cutting-Edge Echocardiogram: Understanding Heart Failure and Identifying Lifestyle Interventions	\$128,979
Massively Parallel Hardware Accelerators for Large-Scale Machine Learning	\$119,972
Drive Lab 2.0: Driving Simulator and Motion Capture System for a Multidisciplinary Team to Study Age-Differences in Collision Risk, Innovations in In-Vehicle Devices and Vehicle Controls	\$187,214
Infrastructure for the Culture of Complex, Human-Associated, Microbial Communities	\$86,906
Public Use Microdata Sample of the 1861 Canadian Census	\$125,000
Spinning Disk Confocal Microscope and Capillary Electrophoresis Coupled to Mass Spectrometry	\$147,545
Biocontainment Facility Enhancement	\$88,704
University of Guelph, Comparative Obesity Research Program Infrastructure Development	\$109,042
15 projects / projets	\$1,885,261

University of Ontario Institute of Technology

Establishment of DeCiMaL the Digital Culture and Media Lab at UOIT	\$54,000
1 project / projet	\$54,000

University of Ottawa / Université d'Ottawa

Integrated Infrastructure for Avian Cognitive Ecology Research	\$72,814
*Innovation in Quantum Nonlinear Optics	\$799,844
2 projects / projets	\$872,658

**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 Toronto

Development of Sensory and Neural Cells in the Mammalian Cochlea	\$253,378
Drinking Water Treatment Laboratory and Tools	\$110,824
Microparticles as Biomarkers, Pathogenic Mediators and Novel Therapeutics in Acute and Chronic Lung Disease	\$228,834
Pilot Scale Water Flow Loop for Testing Water Treatment Systems and the Validation of Models	\$60,000
Structural and Mechanistic Studies of Nano Carbon Electrodes and Polymer Electrolytes for Electrochemical Supercapacitors	\$97,823
Research Infrastructure for an Integrative Research Program in Freshwater Ecology	\$80,000
Mechanical Characterization Platform for Integrated Computational Materials Engineering Laboratory	\$95,510
Establishing a Retinal Disease Translational Pipeline: From Pathways Governing Adult Retinal Homeostasis Towards Cone Photoreceptor-Based Therapies for Age-Related Vision Loss	\$399,735
Toronto Western "Investigational New Drug" Design & Discovery Lab (WIN-D3): An Innovative Centre of Drug Design and Discovery for Protein Misfolding Disorders, Stroke, Retinopathy and Epilepsy	\$396,071
Large Scale Analysis of Textual Respositories	\$27,609
Advancing Mobility Rehabilitation Treatments and Technologies	\$54,004
Centre for Arrhythmia Research in Toronto	\$374,908
Revolutionizing Electron Microscopy: Energy Filter with a Direct Electron Detector Added to Existing CFI Infrastructure	\$760,311
Enhancing Programmable Silicon: Increasing Efficiency and Ease-of-Use and Broadening its Application	\$149,957
Laboratory for Atmospheric Organics	\$158,932
Evaluating the Performance of Low Impact Development at the Catchment Scale	\$92,431
Infrastructure to Support Algorithm Development, Verification, and Proof of Principle for Wireless and Computing Systems	\$91,456
MPARC: Mental Health and Physical Activity Research Centre	\$582,714
Spinal Cord Injury Clinical Research Unit - Optimizing the Translation of Basic Discoveries	\$399,659
Respiratory Infection Secure Containment (RISC) Facility	\$229,999
A Super-Resolution Microscopy System for Dynamic Analysis of Multimolecular Complexes	\$795,483
Epigenetic Regulation in Cancer Development and Progression	\$355,865
Temporal Integration in Human Brain Networks	\$100,000
Science Operating Room Extension (ScORE)	\$798,840
Early Developmental Trajectories and Intervention for Life Long Well-Being	\$542,820
Mobile Mapping and Manipulation	\$100,616

.../ University of Toronto

Advancing Novel Small Molecule Strategies Towards Translational Medicine	\$159,860
The In Vivo Metabolic Characterization Laboratory	\$767,165
Wireless Transceiver Characterization Facility	\$100,000
Augmentation of Neurorehabilitation Training using Targeted Brain Stimulation	\$111,116
Laboratory for Evolution and Ecology of Disease	\$60,000
Q-Exactive Instrument to Advance the Drug Discovery Program	\$308,277
Infrastructure for Collaborative Decision Support in Complex Systems Design	\$148,991
Prevention and Personalized Treatment in Hereditary Cancer	\$158,285
Laboratory for Molecular Interfaces	\$160,000
Discovery of Oncogenic Mechanisms through Hospital-Based Molecular Profiling	\$398,400
Exploring the Secret Life of Indoor Particles	\$99,999
Real-Time Digital Simulation of Large, Renewable Powered Distribution Systems with Energy Storage	\$93,689
A Long Wavelength Instrumentation Laboratory	\$260,000
Toronto Western Investigational New Drug Design & Discovery (WIN-D3) Lab	\$778,366
Infrastructure for Optically Guided Laser Ablation with Integrated Surgical Navigation	\$360,000
Laboratory for Biomimetic Microchip Technologies	\$100,000
Failure Diagnosis Testbed	\$100,000
A Combined Microanalytical-Experimental Laboratory for Improved Understanding of Ore-Forming Processes	\$632,363
44 projects / projets	\$12,134,290

University of Waterloo

Engineered Quantum Systems for Quantum Information	\$50,000
The Sustainability Challenge for Global Food Security Governance	\$39,000
Infrastructure to Support Integrated Research of Wildlife Responses to Changing Habitats, Climate, and Human Activities	\$50,000
Geospatial Mobility Lab: A Testbed for Merging Geographic Information and Mobile Technology	\$28,500
Mass Spectrometry Laboratory for Solid Earth Geochemistry and Environmental Biogeochemistry Research	\$480,000
Infrastructure for Modelling Human-Environment Interactions in Agricultural Systems	\$50,000
6 projects / projets	\$697,500

University of Western Ontario (The)

Novel Molecular Imaging Platform to Elucidate the Role of Membrane Lipids in Neurodegeneration	\$261,452
1 project / projet	\$261,452

York University

Airborne Electromagnetic Sea Ice Thickness Sensor	\$139,999
Integrative Mitochondrial Bioenergetic Facility for the Study of Muscle Wasting Diseases	\$133,957
2 projects / projets	\$273,956