

Leaders Opportunity Fund / Fonds des leaders

Institution / Établissement	Projects Approved / Projets appuyés
Acadia University	1
Algoma University	1
Brock University	1
Cape Breton University	1
Carleton University	1
Concordia University	3
Dalhousie University	4
École Polytechnique de Montréal	1
McGill University	7
McMaster University	10
Mount Allison University	1
Nipissing University	1
Queen's University	1
Simon Fraser University	2
St. Francis Xavier University	1
Université Laval	5
Université de Montréal	8
Université de Sherbrooke	5
Université du Québec - Institut national de la recherche scientifique	2
Université du Québec à Trois-Rivières	1
University of Alberta	7
University of British Columbia (The)	3
University of Calgary	2
University of Guelph	9
University of Lethbridge	1
University of Manitoba	8
University of New Brunswick	1
University of Northern British Columbia	1
University of Ontario Institute of Technology	4
University of Ottawa / Université d'Ottawa	7
University of Prince Edward Island	1
University of Regina	1
University of Saskatchewan	6
University of Toronto	6
University of Waterloo	5
University of Western Ontario (The)	6
University of Windsor	1
York University	6
Total Institutions / des établissements	38
	132

Leaders Opportunity Fund / Fonds des leaders

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

Human Motion Laboratory	\$322,291
1 project / projet	\$322,291

Algoma University

Wireless Acoustic Location System, Focal Recording, and Playback Technology for Studying Avian Communication Networks and Night Migration in Northern Ontario	\$26,460
1 project / projet	\$26,460

Brock University

Bioorganic Laboratory	\$149,525
1 project / projet	\$149,525

Cape Breton University

Electric Fish Behavioural Neuroendocrinology Laboratory	\$228,582
1 project / projet	\$228,582

Carleton University

High-energy X-ray Micro-computed Tomography Scanning System for Earth Material Research	\$185,000
1 project / projet	\$185,000

Concordia University

Dynamic Layers for Electronic Textiles	\$160,834
Genetic Analyzer for High-throughput Research in Molecular Ecology and Conservation Biology	\$63,299
Optogenetics- and Fluorescence-enhanced Slice Electrophysiology Workstation to Study Learning Dependent Synaptic Plasticity	\$66,484
3 projects / projets	\$290,617

Dalhousie University

*Establishing a Unique High Temperature Thermal Analysis Facility to Conduct Advanced Materials Processing Research	\$124,998
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... / Dalhousie University

Contribution of the lysosomal Ca ²⁺ /Fe ²⁺ channel TRPML1 in Acquired and Inherited Neurodegenerative Diseases	\$125,000
Dalhousie Transportation Collaboratory (DalTRAC)	\$72,800
Social Media Lab: Making Sense of a Networked World	\$60,081
4 projects / projets	\$382,879

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

École Polytechnique de Montréal

*NSERC Multisectorial Industrial Research Chair in Coatings and Surface Engineering	399 395 \$
1 projet / project	399 395 \$

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

McGill University

A Mechanochemical and Solid-State Green Chemistry Laboratory	190 000 \$
Autonomous Observing Laboratory for Ocean Circulation and Biogeochemistry	80 000 \$
Climate Observing System Simulator	80 000 \$
Molecular Basis of Mechanotransduction and Implications in Chronic Pain	140 000 \$
Muscle Aging Diagnostics Laboratory	72 471 \$
Production of Functional Organic Molecules from Renewable Biomass	160 000 \$
The Evolution, Ecology, and Mechanisms of Social Learning	350 000 \$
7 projets / projects	1 072 471 \$

McMaster University

*High-Performance Adaptable Electric and Hybrid Electric Vehicle Powertrain Dynamometer Facility	\$799,157
Centre for Integrated Bioarchaeological Research in Human Health, Diet, Disease and Migration	\$270,000
In Situ Characterization of Electrochemical Processes in Lithium Ion Batteries	\$380,650
Informing Musical Performance by Exploring the Production and Perception of Music for Percussion	\$154,213
Infrastructure for Population-Based Infectious Diseases Research	\$400,000
Innovative Nutritional and Activity-based Interventions to Improve, Maintain, or Regenerate Skeletal Muscle Health	\$361,701
Laboratory for the Study of Biomolecular Interactions Through Micropatterning and High Resolution Fluorescence Microscopy	\$225,001
Personalized Metabolomics for Assessment of Nutritional and Exercise Intervention in Human Health	\$166,410
Understanding Pathogenesis of and Immune Responses to HIV and Tuberculosis Co-infection	\$400,000

... / McMaster University

Utilizing New Media to Mobilize Knowledge on Race	\$94,635
10 projects / projets	\$3,251,767

**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)*

Mount Allison University

NMR Spectrometer for Green Boron Chemistry	\$195,776
1 project / projet	\$195,776

Nipissing University

Nipissing University Organic and Medicinal Chemistry Research Laboratory	\$121,522
1 project / projet	\$121,522

Queen's University

Laboratory for Multiphase Flow and Mass Transfer in Porous Media	\$116,586
1 project / projet	\$116,586

Simon Fraser University

Infrastructure for Characterization of Nano-engineered Surfaces in Printed Electronic Devices	\$120,000
Mobile Marine Research Laboratory	\$110,000
2 projects / projets	\$230,000

St. Francis Xavier University

Mitochondrial Physiology Laboratory	\$142,496
1 project / projet	\$142,496

Université Laval

*Etude des écosystèmes marins arctiques à l'aide de nouvelles technologies d'observation	722 004 \$
Infrastructure pour le développement de l'aérovirologie et l'étude des bioaérosols nanométriques	233 840 \$
Infrastructure pour étudier les régimes de perturbations et le fonctionnement des écosystèmes forestiers nordiques à l'échelle du paysage	58 972 \$
Laboratoire intégrant l'imagerie confocale, l'électrophysiologie et l'injection neuronale unitaire pour l'étude de la microcircuiterie striatale	124 963 \$
State-of-the-art Environmental Radiochemistry Laboratory	170 358 \$
5 projets / projects	1 310 137 \$

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

Université de Montréal

A Laboratory to Study the Genetic Basis of Susceptibility to Infectious Diseases	164 482 \$
Cellular and Molecular Mechanisms Involved in the Activation of Immune Cells: Design of Therapies for the Treatment of Cancers, Autoimmune Diseases and Transplant Rejection	220 000 \$
Conformational Changes of the HIV-1 Envelope Glycoproteins: A Structural Approach to Understanding Antibody Escape and Identifying New Therapeutic Targets to Block Viral Entry	200 000 \$
Imaging the Kinetics of Newly Forming CNS Inflammatory Lesions	371 853 \$
Infrastructure pour mesurer et promouvoir la plasticité cérébrale dans le vieillissement normal et la maladie d'Alzheimer : du virtuel au réel	233 096 \$
Laboratoire de pathogenèse des maladies infectieuses animales (LPMIA)	263 456 \$
Study the Processing, Storage and Integration of Synaptic Inputs that Occur in Dendritic Spines of Pyramidal Neurons with the Use of a Two-photon and Electrophysiology Microscope	188 635 \$
System for the Ultrafast Analysis of Emerging Contaminants, their Metabolites and By-products	204 876 \$
8 projets / projects	1 846 398 \$

Université de Sherbrooke

*Multidisciplinary Test Platform for 1000x Concentrated Photovoltaic (CPV) Performance and New Technology Assessment	120 000 \$
Biocarburants et molécules vertes à partir de sources résiduelles de carbone	125 000 \$
Infrastructure for Microbial and Single-cell Genomics	100 000 \$
Infrastructure intégrée pour la caractérisation de la réponse structurale des ouvrages de génie civil sous charges dynamiques rapides	179 278 \$
Mieux comprendre et traiter les douleurs gynécologiques	90 761 \$
5 projets / projects	615 039 \$

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

Université du Québec - Institut national de la recherche scientifique

Establishment of a Biophysical and Biochemical Infrastructure for Enzyme Engineering and Flexibility-function Analyses	204 625 \$
Networks and Cyber-Physical Systems Laboratory (NECPHY-Lab)	180 000 \$
2 projets / projects	384 625 \$

Université du Québec à Trois-Rivières

Développement et caractérisation de nanomatériaux	154 419 \$
1 projet / project	154 419 \$

University of Alberta

*Canada's Arctic Cratons, Kimberlites and Diamonds	\$800,000
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... / **University of Alberta**

*Development of Tools and Techniques for Physical and Chemical Characterization of Oil Sand Interfaces	\$800,000
Capacity Building in Vision Research to Prevent Blindness	\$186,847
Integrated Field and Laboratory Infrastructure for the Development and Characterization of Road Materials and Pavement Performance for Cold Regions	\$254,752
Laboratory for Studying Immunological and Environmental Factors that Determine Transmission of Schistosomiasis	\$385,349
Molecular Biology Laboratory for the Study of Metabolic Disorders	\$165,381
Research Facility for Nanocellulose Processing and Applications	\$100,000
7 projects / projets	\$2,692,329

**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 British Columbia (The)

Development of a Flow-Through Time-Resolved Analysis (FT-TRA) Approach for Paleoceanographic and Environmental Applications	\$39,090
Mathematical and Experimental Analysis of the Spatial Dynamics and Signalling of Membrane-Bound Proteins on Immune Cells	\$148,793
Plant Secondary Metabolism Analytical Research Team (PlantSMART)	\$309,437
3 projects / projets	\$497,320

University of Calgary

Two-photon Imaging of Cerebral Blood Flow: From Cells and Vessels to Behaving Animals	\$300,971
Viscoelastic Materials Characterization for Novel Highly Conductive Polymer Blends/Nanocomposites and Heavy Oils	\$222,920
2 Projects / Projets	\$523,891

University of Guelph

Assessment of Pulmonary Artery Calcification and Vascular Hemodynamic Parameters in Horses	\$125,484
Centre for Embryonic Health & Viability (CEHV)	\$126,486
Comparative Genetics of Innate Disease Resistance in Domestic Animals	\$122,619
High-Pressure Facility for Biomass Conversion, Hydrothermal Chemistry and Corrosion Research under Hydrogen and/or in Super-Critical Water	\$202,855
Infrastructure for the Establishment of the Laboratory for the Thermographic Investigation of Sexual Health (TISH)	\$125,402
Infrastructure to Support Integrated Cardio-Respiratory Research	\$125,488
Pediatric Pain, Health, and Communication Laboratory	\$124,975
Spine and Muscle Injury and Adaptation Laboratory	\$123,881
Systems-based Approach for Optimizing Field Crop Production using Novel Technologies	\$186,081
9 projects / projets	\$1,263,271

University of Lethbridge

Tools for Studying Neural Systems with Optogenetic and Electrophysiological Techniques	\$147,439
1 project / projet	\$147,439

University of Manitoba

*Arctic Geomicrobiology and Climate Change	\$799,366
A Facility for Cereal Functional Metabolomics	\$158,619
Establishment of a Prenatal Therapeutic Intervention Research Facility	\$159,987
Infrastructure to Determine Below-ground Plant-plant and Plant-microbe Interactions	\$131,269
Integrating Mass Spectrometry and Protein Functionality in Biology and Medicine	\$386,202
Molecular Determinants of Chromosome Instability in Cancer: Identification of Novel Therapeutic Targets	\$160,000
Molecular Oral Microbiology Laboratory for Cell-cell Interaction and Antimicrobial Research	\$242,479
Neuroendocrine Control of Inflammatory Bowel Disease	\$159,726
8 projects / projets	\$2,197,648

**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 New Brunswick

Expanded Canadian High Arctic Ionospheric Network (ECHAIN)	\$139,405
1 project / projet	\$139,405

University of Northern British Columbia

Towards Breaking the CRD-BP-RNA Interaction as a Novel Approach for the Treatment of Cancers	\$87,376
1 project / projet	\$87,376

University of Ontario Institute of Technology

Integrated Research Platform for Pattern Recognition of Machining Errors	\$66,238
Laboratory for Human-Centered Computer Science Research	\$21,152
Research Laboratory for Integrated High-Speed Broadband Wireless Communication Systems	\$98,001
Truck-Driver-Road Interaction Simulator	\$92,886
4 projects / projets	\$278,277

University of Ottawa / Université d'Ottawa

Integrated Microscopy and Imaging Infrastructure for the Physiology and Genetics of Zebrafish	\$698,138
A Transmission Electron Microscopy Facility for Biomaterials and Cell Biophysics Research	\$383,680
Bioorganic Chemistry Laboratory	\$267,897

... / **University of Ottawa / Université d'Ottawa**

Pre-clinical Development of Cardiovascular Stem Cells for Diagnosis and Treatment	\$116,000
Solid-State Bioreactor and Environmental Biocatalysis Facility	\$235,041
Specialized Physiological Laboratory for Testing of Therapies for Neuromuscular Disorders	\$110,000
Spinal Muscular Atrophy - Pathogenesis and Novel Therapeutics	\$140,000
7 projects / projets	\$1,950,756

University of Prince Edward Island

Essential Capacity Building Tools for the Preparation and Characterization of Macromolecules with Controlled and Tunable Properties	\$69,605
1 project / projet	\$69,605

University of Regina

Assessing the Impact of Environmental Stresses on Human Health	\$115,200
1 project / projet	\$115,200

University of Saskatchewan

Advanced Live Cell Imaging and Protein Purification Systems for Studying Protein Trafficking and Signaling in Breast Cancer Cells	\$253,817
Body Composition Imaging Suite to Design More Effective Exercise and Nutritional Interventions and Improve Rehabilitation for Older Individuals	\$51,255
Confocal Microscope in Support of Level 2 Biofilm Research and Experimental Pipeline for Synchrotron Studies	\$75,854
Database, Hardware and Services Infrastructure for the Creation of Textual Communities, as a Base for Research into Large Textual Traditions	\$77,240
Field and Laboratory Facilities for Research in Agroforestry	\$52,220
Identifying and Improving Fertility in Bulls	\$45,506
6 projects / projets	\$555,892

University of Toronto

Imaging for Cardiovascular Therapeutics	\$85,928
Infrastructure for the Study of Host-Pathogen Interactions	\$395,933
Integrative Computational Biology for Cancer Genomics	\$292,775
Laboratory for Social Neuroplasticity	\$41,577
Novel Ultrasound Instrumentation for Therapy and Imaging	\$124,439
Studying the Relationship between Social Interaction and Mathematics Learning: The Learning Interaction Lab (LILa)	\$169,173
6 projects / projets	\$1,109,825

University of Waterloo

Acquisition of a Time-Resolved Stereoscopic Particle Image Velocimetry System for Fluid-Structure Interaction Investigations	\$50,000
Computational Infrastructure for Three-dimensional Simulations of Environmental and Geophysical Fluid Dynamics	\$183,243
Integrative Cell Mechanics Studies using Liquid Cell Atomic Force Microscopy	\$49,454
Laser Induced Incandescence Instrument for Characterizing the Size and Concentration of Aerosolized Nanoparticles	\$55,000
Platform for the Analysis of Nanostructured Materials	\$134,965
5 projects / projets	\$472,662

University of Western Ontario (The)

Facility for Applications of Advanced Nanomaterials in Energy Storage for Electric Vehicles	\$335,606
High-capacity Dynamic Testing System for Energy Pipelines	\$194,936
Hybrid biomedical Optical Platform for Improved Detection and Management of Brain Injury	\$265,241
Laboratory for Research to Study Community Integration of People with Mental Illness	\$151,525
Laboratory for Neuroscience and Musical Rhythm Investigation	\$112,035
Simulation and Imaging Laboratory for the Study of Ischemia Reperfusion Injury and Inflammation in Transplantation	\$230,056
6 projects / projets	\$1,289,399

University of Windsor

Parallel Sequencing Facility for Environmental, Ecological and Evolutionary Research	\$77,545
1 project / projet	\$77,545

York University

Bridging the Gap Between Childhood Health and Mental Health	\$175,259
Global Employment Standards Database (GESD)	\$159,470
In Vivo Imaging of Cardiovascular Function	\$140,288
Muscle and Adipose Stem Cell Analysis	\$135,889
Neural Correlates of Attention, Response Suppression, and Multisensory Processing	\$141,764
Precise Measurements of the Proton Charge Radius and of the Fine-structure Constant	\$199,861
6 projects / projets	\$952,531

The Canada Foundation for Innovation's Board of Directors approved a total investment of \$33,600,263 following a rigorous and independent merit-review process. This amount included \$25,846,356 awarded under the Leaders Opportunity Fund, and another \$7,753,907 awarded under the Infrastructure Operating

Fund, a complementary program designed to contribute to the incremental operating and maintenance costs of infrastructure projects funded by the Foundation.

Par suite d'un processus rigoureux et indépendant d'évaluation fondé sur le mérite, le conseil d'administration de la FCI a approuvé des investissements totalisant 33 600 263 \$. Ce montant comprend une somme de 25 846 356 \$ attribuée au titre du FL et une autre de 7 753 907 de financer une partie des coûts d'exploitation et de maintenance liés aux projets d'infrastructure que finance la FCI.