

**Fonds des leaders John-R.-Evans  
Fiche d'information**

**Ontario**

Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 28 772 247 \$ en vue d'appuyer 129 projets d'infrastructure dans la province.

Titre du projet	Contribution maximale de la FCI
-----------------	---------------------------------

**Algoma University**

Integrative Approaches to Disentangle Network Structure in Territorial Songbirds	32 040 \$
Infrastructure to support the Multi-stressor Conservation Physiology Laboratory	74 998 \$
<b>2 projets</b>	<b>107 038 \$</b>

**Carleton University**

Identification and Quantification of Organic Molecules from Microbial Ecosystems	75 001 \$
The Audience Experience Lab: Transforming Digital Media Production for Film and Games	76 500 \$
Urban Aeroconservation for Regionally Migrating Bats	75 001 \$
Accessible Automated Construction Site Studio (AACeSS Lab)	98 000 \$
Sulfate Through Time	110 000 \$
Advanced Vision Integration for Road Safety (AVIRS)	99 694 \$
<b>6 projets</b>	<b>534 196 \$</b>

**McMaster University**

The Indigenous Digital Dialogue Lab	75 000 \$
Characterizing Mechanisms of Thrombosis and Hemostasis using Multiphoton Intravital Microscopy	479 927 \$
Innovative Avian Mobile Laboratory to Study the Direct and Indirect Effects of Climate Change and Pollution on Birds	150 000 \$
Brain Mechanisms of Rhythm Perception: New Methods to Understand the Impact of the Motor System on Auditory Perception	220 000 \$
Advancing Energy Systems for use in Unsteady and Turbulent Environments	150 000 \$
Laboratory for the Development and Deployment of Magnetically Actuated Soft Robots for Medical Applications	250 000 \$
Space-time Mechanisms of Pattern Control during Vertebrate Embryo Segmentation	200 000 \$
Infrastructure to Enable High-dimensional Genomic and Epigenomic Analyses to	92 415 \$

Understand Placental Dysfunction	
Single photon counting confocal microscope for time-resolved fluorescence studies of gene transcription	345 860 \$
Laboratory for Advanced Nano-Optical Biosensing	773 924 \$
Development of the Bio-Resources Engineering Laboratory	146 263 \$
<b>11 projets</b>	<b>2 883 389 \$</b>

### Ontario College of Art and Design (OCAD University)

Completing Next Generation Holographic Technology and XR Research	50 636 \$
<b>1 projet</b>	<b>50 636 \$</b>

### Queen's University

Permafrost Hydrogeology in a Changing Climate	90 000 \$
The Fractured Rock and Cryo-hydrogeology Lab	100 000 \$
Nanobubble-aided Advanced Photocatalytic Treatment for Emerging Contaminant Removal	100 000 \$
Diverse, Perceptive and Intelligent Wireless Infrastructure for 6G and Beyond	220 000 \$
Magnetic Micromanipulation System for Mechanical Measurement and Stimulation of Brain Tumor	120 000 \$
** Impact of Radiation in Energy and Advanced Technologies	800 000 \$
*** Integrated Photonics for Massive Entanglement Generation	402 000 \$
** Imaging Immunity in Chronic Disease and Cancer	800 000 \$
Technologies for Neuromusculoskeletal Disorders	144 000 \$
Cardiac Macrophage Subset Maintenance and Expansion in the Healthy and Injured Heart	175 000 \$
Developing and Analytical Imaging Laboratory for Cultural Heritage Science	100 000 \$
<b>11 projets</b>	<b>3 051 000 \$</b>

\*\* Financement de l'infrastructure liée au soutien à la recherche du CERC

\*\*\* Financement de l'infrastructure liée au soutien à la recherche du NSERC

### Toronto Metropolitan University

Cardiovascular Biomechanics Measurement Facility for Blood Flow and Biomechanical Testing	78 000 \$
Studying Phenotypic Heterogeneity and Aging in Budding Yeast with Fluorescence-activated Cell Sorting	95 000 \$
<b>2 projets</b>	<b>173 000 \$</b>

### University of Guelph

# INNOVATION

Canada Foundation for Innovation    Fondation canadienne pour l'innovation

Investigating Glial-mediated Purinergic Dysfunction in Neurodevelopmental Disorders	79 429 \$
Gaining a Deeper Understanding of Emotional Processing Deficits in Two High-risk Samples of Youth	45 096 \$
Minimizing Environmental Emissions from Livestock Species in Canada	100 000 \$
Automated Microbioreactor Platform for Accelerated and Scalable Bioprocessing of Agri-food Residues	126 837 \$
Highly Sensitive High-throughput Biosensors for Early Cancer Diagnostics and Food Safety Applications	102 000 \$
The Effect of Grazing Intensity and Fertilization on Carbon Sequestration in Agricultural Grasslands	114 492 \$
Establishing the Growth Eating & Appetite Together (GrEAT) Laboratory to study infant and child growth and development	141 693 \$
Infrastructure for Building Environmental Monitoring	75 058 \$
Understanding the Interactions between Hypertension and Huntington's Disease	79 429 \$
Environmental Sentinel Surveillance and Forecasting of Climate-sensitive Waterborne and Vector-borne Zoonotic Diseases	150 000 \$
The role of Nitrogen and Carbon Quality in Greenhouse Gas Production following Permafrost Thaw in Northern Peatlands	112 000 \$
Infrastructure to Establish Lab in Plant Systematics and Evolution of Wild Crop Relatives	84 000 \$
The Effects of Temperature on Ecological and Evolutionary Dynamics	84 000 \$
Functional Characterization of Neural Circuits Underlying the Perception of Control During Stress	80 000 \$
Developing Novel Immunotherapies for Brain Cancers	82 000 \$
<b>15 projets</b>	<b>1 456 034 \$</b>

## Université d'Ottawa

Laboratory for Low-carbon Energy Infrastructure	540 275 \$
NMR Tools to Enable Innovative Molecule, Material, and Process Design	416 750 \$
Bioenergy & Value-added Products from Non-conventional Organic Wastes, Toward Circular Economy/Climate Change Adaptation	391 264 \$
In vivo Two-photon Imaging and Manipulation of Different Movement-related Ensembles in 3D in Awake Mice	585 000 \$
Behavioral and Experimental Macroeconomics	139 848 \$
Deciphering Targetable Molecular Communication Between Muscle Stem Cells and their Niche Environment to Improve Health	228 000 \$
Stable Isotopes to Study Changing Northern Environments	601 848 \$
** Attosecond X-ray Photonics	800 000 \$
Designing, creating, and testing hPSC-based endothelial cell therapeutics for liver disease	338 000 \$

# INNOVATION

Canada Foundation for Innovation    Fondation canadienne pour l'innovation

Ultrafast Multidimensional Infrared Spectrometer for Catalysis and Quantum Materials	340 000 \$
Analytical Tools for Lignin Biology and Engineering	110 000 \$
Shedding New Light on Photosynthesis with Multidimensional Coherent Spectroscopy	340 000 \$
<b>12 projets</b>	<b>4 830 985 \$</b>

\*\* Financement de l'infrastructure liée au soutien à la recherche du CERC

## University of Toronto

Impacts of Environmental Change on Organismal Movement	212 000 \$
21st Century Challenge for Dentistry: Breaking the Cycle of Irreversible Dental Tissue Loss	370 645 \$
Sex and Sex-specific Factors Influencing Brain Health Across the Lifespan	800 000 \$
Structural and Functional Assessments of Diabetic Skin Microvasculature using Photoacoustic Imaging	102 936 \$
Biointerfacing Materials for Drug Delivery Lab	150 000 \$
An Advanced Laboratory to Enable Novel Radio Telescopes for Cosmology and Time-domain Astrophysics	400 000 \$
Machine Learning for Nanoporous Materials Design	100 000 \$
Heterochromatin Regulation in Development and Inheritance	160 000 \$
Sarcopenia and Musculoskeletal Interactions (SaMI) Collaborative Hub	275 080 \$
Targeting Translation for Tissue Regeneration and Repair	515 757 \$
HFE Visual Design Studio	94 021 \$
Advancing Neuromodulation for Pediatric Rehabilitation	238 995 \$
Cardiovascular Exercise Physiology Laboratory – Individual Differences in Oxygen Delivery During Physical Activity	281 936 \$
Infrastructure to Identify New Targets and Therapies for Neovascular Eye Diseases	380 000 \$
Universal Filters for Storage Engines	112 800 \$
Dissecting Mechanisms of Cancer Development using Genetically Engineered Mouse Models	270 054 \$
Scalable Discrete Integration Engines	110 000 \$
A Collaboratorium to Improve Problem Framing in Engineering Design	93 092 \$
Molecular Regulation of Clonal Propagation and Dissemination in Human Breast Cancer	131 537 \$
Next-generation Vibrational Imaging Platform for Biomedical Research and Applications	630 000 \$
Development of a High-resolution Imaging Spectrograph.	280 000 \$
Mechanisms Regulating the Stem Cell Niche in Tissue Regeneration and Aging at Single Cell and Spatial Resolution	225 000 \$
Advanced Imaging and Manipulation of Hippocampal Activity Patterns Linking	733 941 \$

# INNOVATION

Canada Foundation  
for Innovation

Fondation canadienne  
pour l'innovation

Memories Across Time	
The Open Virome - Infrastructure for Planetary-Scale Virus Surveillance	80 000 \$
Anticipating and Buffering Stress: From Synapse to Behaviour	785 715 \$
Innovative Strategies and Simulation Technologies for Sensory-cognitive Health of the Aging Population	251 241 \$
Advancing Fall Prevention Research	270 121 \$
Effects of Climate Change, Migratory Plasticity, and Habitat Modification on Monarch Butterfly Migration	200 000 \$
Enabling Precision Diagnostics/Image-Guided Therapy: Advanced Computational Infrastructure for Musculoskeletal Health	155 000 \$
Upgrade Glacios-2 200 keV Cryo-electron Microscope	800 000 \$
Mechanisms of Beta Cell Dysfunction in Diabetes	260 000 \$
Interrogating Cellular Pathways with Pathogenic Effectors	250 000 \$
Molecular Logic and Functions of Transcriptional Adaptation	475 000 \$
Large Memory Compute Nodes for Generation of Quantum Machine Learning Data	500 000 \$
<b>34 projets</b>	<b>10 694 871 \$</b>

## University of Waterloo

Scalable Biomanufacturing for a Net-zero Economy	84 721 \$
Developing Synthetic Symbiotic Bacterial Consortia for Mixed Plastic Upcycling	80 000 \$
Uncertainty-aware Structural Identification Testbed for Bridge Infrastructure	110 000 \$
Injectable Filamentous Hydrogels for Regenerative Medicine	92 689 \$
Developing Next Generation of Green Pavement Technologies	105 000 \$
Translational Approaches to Studying Chronic Pain	100 000 \$
Social Robots for Supporting Older Adults and Children	95 000 \$
Integrating Behavioural Science and Digital Health Approaches to Predict and Promote Physical Activity	100 000 \$
Creation and Validation of the Waterloo Dress Database to Support Impression Formation Research	22 000 \$
Developing a High-throughput Genome-wide Screening System to Study Stress Defense Mechanisms in <i>Clostridioides Difficile</i>	150 000 \$
CPU-GPU Accelerated Optimal Process Design and Control to Rigorously Model Space-time	80 000 \$
<b>11 projets</b>	<b>1 019 410 \$</b>

## University of Western Ontario (The)

Western X-ray Diffraction Unit	800 000 \$
Console for 15.2 T preclinical MRI	800 000 \$
Next-generation Operation and Management of Urban Mobility	200 000 \$

# INNOVATION

Canada Foundation for Innovation    Fondation canadienne pour l'innovation

The Plant Stress Biology Facility	209 461 \$
Robotic Joint Mechanics Simulator with Dynamic Imaging	184 830 \$
Portal to Humanistic Immersive Experiences	104 211 \$
<b>6 projets</b>	<b>2 298 502 \$</b>

## University of Windsor

Automation of Functional Genomics	75 001 \$
The Cell-type-specific Regulation of mRNA Translation in Health and Disease	75 001 \$
Understanding Reaction Mechanism and Properties of Low-carbon Cements/Concretes	75 001 \$
High-precision infrastructure for temperature and dynamic stability testing of micro sensors	165 045 \$
Integrative Cerebrovascular Function	75 159 \$
Facility for Research on Sustainable and Smart Pavement Materials	75 001 \$
Acoustic Monitoring for Long-term Biodiversity and Conservation Research	75 001 \$
STRIVE: Sustainable Transportation Research - Integrated Vehicular Electronics	75 001 \$
<b>8 projets</b>	<b>690 210 \$</b>

## Wilfrid Laurier University

Comparative Analysis of Chemosensing Mechanisms by Vertebrate Neuroepithelial Cells	77 215 \$
Mechanisms of Social Behavior in Snakes	84 909 \$
Deepen our Understanding on Plant-pathogen Interactions in Adapt to Climate Change	75 648 \$
<b>3 projets</b>	<b>237 772 \$</b>

## York University

Persistence of Recent Experiences in Memory via Spontaneous Thought	90 376 \$
Curating Reconciliation through XR Immersive Technologies	83 308 \$
Establishment of an AI-guided Personalized Medicine Discovery Facility	140 000 \$
Data Analytics in SErvices (DAISE)	76 520 \$
Methods to Create Mutations in Cells to Understand and Treat Disease	100 000 \$
Marginal MediaWorks	100 000 \$
An Advanced Platform for Biomolecular NMR Spectroscopy	155 000 \$
<b>7 projets</b>	<b>745 204 \$</b>

### NOTE:

As part of this announcement, an additional \$8,631,674 was awarded under the Infrastructure Operating

# INNOVATION

Canada Foundation  
for Innovation

Fondation canadienne  
pour l'innovation

---

Fund (IOF), a mechanism that assists institutions with the incremental operating and maintenance costs associated with the new infrastructure.