

John R. Evans Leaders Fund Backgrounder

Quebec

The Canada Foundation for Innovation (CFI) Board of Directors approved a contribution of \$21,616,359 to support 85 infrastructure projects in the province.

Project Title	Maximum CFI Contribution
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Bishop's University

Lab for Secure Multimodal Identity & Human States	\$64,527
The Discovery and Characterization of One Hundred Thousand Transiting Exoplanets	\$29,076
Enhancing the Genetic Potential for Leaf Expansion as a Strategy to Improve Plant Productivity Under High CO2	\$245,311
3 projects	\$338,914

Concordia University

* (Re)Thinking Sustainability: Research Network for Global Environmental Humanites	\$209,559
1 project	\$209,559

** Funding for Research Infrastructure Associated with SSHRC Research Support*

McGill University

Ultra-high Resolution Mapping of the Medial Temporal Lobe Memory System in Health and Disease	\$124,420
Characterizing Naturalistic Memory and its Neural Correlates in Temporal Lobe Epilepsy and the Healthy Brain	\$113,730
High-throughput Platform to Develop Novel Biological Control Agents for Sustainable Crop Protection	\$148,336
Sustainable Food Analysis Platform for Enabling Novel Food Innovations	\$402,116
Charting the Extremes of the Universe using Coherent Radio Transients	\$800,000
Elucidating the Molecular Fingerprints of Biological Oxidation	\$284,298
Chromatin Regulation of Mammalian Cell fate and Carcinogenesis	\$257,704
The Microbiology Integrated Citizen science Research laboratory for One Health (MICRO-ONE)	\$800,000
Uncovering the Logic of Synaptic Wiring	\$102,073
Infrastructure for Streamlining Extracellular Vesicle Isolation and Profiling in Host-Parasite Interaction Studies	\$425,481

Precision Hybrid Manufacturing Through Robotics and Termanl Management	\$84,138
Smart Biopolymeric Metamaterials: Facility for 3D Printing, Electromagnetic Characterization, and Untethered Actuation	\$350,000
Low-cost Imaging Biomarkers for Point-of-care Assessment of Neurodegeneration	\$190,986
High Speed Diagnostics for Developing Advanced Alternative Fuel Energy Systems	\$401,084
Investigating the Role of Gene Regulatory Networks on Tissue Self-organization	\$316,000
Machine Learning of High Resolution Images for Improved Energy and Environmental Outcomes	\$94,434
Extended Reality Semi-Immersive Technologies Accelerating the Transition to a Circular Economy in the Housing Sector	\$184,364
Innovative Imaging of Brain Activity Patterns in Memory Networks: Implications for Aging and Dementia	\$402,401
Discovery of Mechanisms of Cancer Immune Evasion and Next-generation Immunotherapies	\$560,825
High-dimensional Spectral Flow Sorting of Rare Immune Cells Driving CNS-Compartmentalized Inflammation in MS	\$297,980
Amplifying the Voices of the Displaced	\$380,086
An Integrated MS Platform for Multi-modal Metabolomics	\$337,166
Whole-brain-hemisphere Cryosectioning for Spatially Resolved Transcriptomics and Proteomics in Human Neuropathology	\$220,933
Shedding a New Light on Neuromodulation within the Behaving Brain	\$221,402
Biomarker Discovery through Automatized Rare Urinary Microbe Culture	\$172,375
25 projects	\$7,672,332

Polytechnique Montréal

Molecular Vibrational Spectroscopy Imaging Platform for Rapid Peroperative Histopathology in Surgical Oncology Guidance	\$411,400
Cybersecurity for Critical Infrastructure with Trustworthy AI and Quantum-resistant Cryptography in Secure Testbeds	\$299,998
Plasma-Induced Nanoscale Signalling Response in Live Cells (Plasma-INS)	\$455,540
Harnessing Combustion for Safe and Clean Aerospace Propulsion	\$210,000
Infrastructure for Mechanical Characterization of Weak Geological Structures and Anisotropic Rocks	\$140,000
Semiconductor Characterization and Reliability Testing Platform for Harsh-environment Microelectronics	\$150,000
6 projects	\$1,666,938

Université de Montréal

Nouvelles technologies et gestion de risque : des outils innovants pour le soutien à domicile des aîné.e.s	\$197,945
Interspecies Gametogenesis and Embryogenesis Multi-omics (IGEM) Lab	\$252,976
Mass Spectrometry Imaging Suite for Biological and Material Sciences	\$534,656
ReproVision, a High-throughput Live Cell Imaging Platform for Reproductive Organoids	\$303,815
Advancing AI-driven Research in Veterinary Sciences using Animal Health and Production Data in Canada	\$158,406
High-resolution Spatiotemporal Live Imaging to Decode Mechanisms of Collective Cell Migration in Vivo and Cancer Cells	\$400,000
High-throughput Functional Genomics or Rare Diseases using Zebrafish	\$533,085
Viral Uncoating and Morphogenesis by Super-resolution Cryo-correlative Microscopy	\$330,000
Interplay Between Insulin Secretion and Cytokine Signaling in Nutrient Allocation	\$199,876
An Integrated Human Cardiac Disease Modeling Approach Bridging Clinical Arrhythmia Phenotypes and Electrophysiology	\$198,805
Closed-loop Ligand Discovery Infrastructure for Small-molecule Antibiotics and Cancer Modulators	\$339,841
Établissement du Laboratoire de chronobiologie moléculaire, pour l'étude de la régulation circadienne de la physiologie	\$200,000
Empowering the Next Generation of Mastitis and Milk Quality Discoveries	\$260,122
13 projects	\$3,909,527

Université de Sherbrooke

Habitat intelligent adaptatif pour l'assistance cognitive multimodale	\$272,379
Electroactive Membranes for Water Decontamination and Nutrient Recovery from Digested Manure Effluent	\$165,300
Plateforme intégrée pour la caractérisation opérando des matériaux avancés pour l'énergie et l'environnement	\$530,000
Microwave-Assisted Thermal Energy and CO2 Storage in Porous Media	\$107,207
Next-generation RNA Vector Platforms for Precision Immunotherapy	\$481,820
5 projets projects	\$1,556,706

Université du Québec - École de technologie supérieure

Traumatologie de la colonne vertébrale vieillissante	\$100,000
Deep Learning Hydrology for Flood Forecasting in the Context of Climate Change: From River Catchments to Urban Areas	\$100,000
2 projets projects	\$200,000

Université du Québec - École nationale d'administration publique

Laboratoire d'analyse longitudinale sur la santé globale des jeunes	\$371,400
1 projet project	\$371,400

Université du Québec – Institut national de la recherche scientifique

JASMIN - Laboratoire Jumelé sur les Approches Sensibles et Matérielles des Infrastructures Numériques	\$149,786
Circular Battery Economy Platform	\$142,751
M-LAB: Laboratoire multifonctionnel pour les technologies mm-ondes avancées	\$307,249
Infrastructure for Studying Eco-evolutionary Dynamics between Plants and their Microbiomes	\$100,000
Infrastructure de recherche pour l'analyse de données longitudinales des iniquités sociales, environnementales en santé	\$110,724
Green Shields of the Sea: Marine Macrophytes in Coastal Defense	\$154,450
6 projects	\$964,960

Université du Québec à Chicoutimi

Microscopie confocal RAMAN pour identifier la nature et la structure des composés métallurgiques et géologique	\$100,000
En route vers la carboneutralité des secteurs forestiers et agricoles	\$100,000
2 projects	200 000 \$

Université du Québec à Trois-Rivières

Equipment for Biomass Conversion for Energy Applications	\$122,931
1 project	\$122,931

Université du Québec en Abitibi-Témiscamingue

Outils de caractérisation des matériaux miniers en vue de leur gestion responsable	64 446 \$
Appareil de mesure des gaz à effet de serre en temps réel	39 177 \$
2 projects	103 623 \$

Université du Québec - Télé-université

LUCID : Laboratoire d'Utilisabilité et de Cocréation Inclusive pour le Développement de technologies numériques durables	\$226,591
1 project	\$226,591

Université Laval

Exploring the Molecular Roles of m6A in Neuronal Function and Neurodegeneration	\$180,000
Establishment of a Developmental Biology Laboratory to Study the Functional Impacts of Repetitive DNA	\$125,293
Plateforme en communication quantiques à l'Université Laval	\$332,500
Advanced Characterization of Functional Surfaces for Interfacial Challenges in Materials	\$728,000
Base de données sur les traités environnementaux	\$105,922
Optimisation de l'analyse des déformations des matériaux sous l'effet du transport lourd moderne au Canada	\$131,002
Vers un contrôle écoresponsable des bactéries d'altération des produits carnés	\$89,587
LIGHTBEAM : Larval fish InvestiGation via High Throughput imagery in BorEal and Arctic Marine ecosystems	\$249,500
Laboratoire expérimental de simulation en neurochirurgie	\$160,000
Preclinical Molecular Imaging Core Facility	\$526,222
OPM-MEG and Epilepsy: Refining Diagnosis, Epileptogenic Network Mapping and Opening a New Window to Study Consciousness	\$789,345
Next-generation Dynamic Virtual Power Plant Modeling, Control, and Validation Platform	\$124,853
LARCAN - Laboratoire de recherche et de création en art audio et numérique	\$175,907
Design and Validation of a Vibrotactile Aid to Overcome Challenges Related to Hearing Loss	\$159,414
Laboratoire de recherche en santé mentale jeunesse axée sur les arts et les approches existentielles	\$18,135
Integrative Infrastructure for Monitoring Antimicrobial Resistance from Soils to Bioaerosols	\$116,051
Canada Research Chair on School-family-community Relationships	\$52,426
17 projects	\$4,064,157

NOTE: As part of this announcement, an additional \$6,484,908 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.