

INNOVATION

Canada Foundation
for Innovation

Fondation canadienne
pour l'innovation

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

Québec

Le conseil d'administration de la Fondation canadienne pour l'innovation (FCI) a approuvé des contributions totalisant 36 778 814 \$ en vue d'appuyer 118 projets d'infrastructure dans la province.

Titre du projet	Contribution maximale de la FCI
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Concordia University

Polymers for a hydrogen economy: Designing electrolytes and ionomers for the anion exchange membrane fuel cell	130 000 \$
Improving wound dressing technology through use of natural ingredients and sustainable light energy sources	184 976 \$
Accelerating the application of next-generation electric vehicles by developing new battery materials	168 833 \$
On scaling computing infrastructure for foundational modeling in computational pathology	238 054 \$
Sustainable zero-waste biomass for carbon-neutral processes and bio-circular economy via data-driven approaches	220 985 \$
CARBON: Cryo-NMR for Accelerated Research in Biology, Organic Chemistry and Nanoscience	791 581 \$
6 projets	1 734 429 \$

McGill University

Optimizing body composition analysis to investigate new treatments for tissue loss syndromes	120 000 \$
Discovery of patient-specific therapies for brain cancers	167 000 \$
A multi-component integrative platform for studying highly pathogenic respiratory RNA viruses	256 059 \$
Robotic fabrication for sustainable and autonomous construction	338 646 \$
Laboratory for synergistic design and development of shared automated electric mobility systems	80 000 \$
Revealing the hidden peripheral drivers of painful temporomandibular disorders: A multimodal and AI-driven approach	80 000 \$
Visualizing essential macromolecular complexes in their native environment	356 044 \$
Facility for quantum material growth, sample preparation and characterization	403 118 \$
A helium-free nuclear magnetic resonance facility for sustainable agricultural and environmental research	111 639 \$
Dual function faterials for selective capture of CO ₂ and conversion to fuels	327 381 \$

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A multiscale, open-science approach to digital cognitive phenotyping in transdiagnostic psychiatry	99 083 \$
Long-term health consequences of E-cigarette use	210 000 \$
Mapping tumour microenvironment interactions with spatial biology	239 559 \$
Multiscale structural biology of biomineralization	338 277 \$
Organic electronic materials for energy and quantum applications	283 097 \$
Advancing nanoscale research for improved infection control and therapeutic applications	391 904 \$
Inter-brain synchrony as a novel social biomarker of psychiatric illness and treatment response	174 904 \$
MiniHub for Engineering and Producing Viruses and Virus-like Particles (MHVEP)	255 257 \$
Complex fluid characterization and fragmentation in disease transmission	310 020 \$
Applied performance sciences studio lab	409 970 \$
Sustainable and resilient tall mass timber construction: Development of performance-based wind design approaches	316 328 \$
Environmental nucleic acids discovery hub	800 000 \$
New paradigms for the evaluation of human movement biomechanics	782 485 \$
EdTech for effective and equitable education	370 627 \$
Understanding the causes and impacts of water cycle biases in the Canadian earth system model for model improvement	100 332 \$
Understanding chronic inflammatory haematopoiesis and its role in cancer promotion	449 704 \$
RACE4NbCS: Rapid Assessment of Carbon Emissions for Nature-based Climate Solutions	133 261 \$
Advancing high-resolution translational brain research with cutting-edge single-cell methods	379 805 \$
Aquatic infrastructure for novel experimental studies in behaviour, ecology and evolution	212 288 \$
Genomic medicine in renal cell carcinoma	236 938 \$
Bioengineering and monitoring the development of transplantable human lung alveoli using microfluidic-based approaches	800 000 \$
2 Photon tools to map cerebellar circuits in health and disease	173 600 \$
32 projets	9 707 326 \$

Polytechnique Montréal

Exploration of ultra high temperature phase transitions in pyrometallurgy	160 403 \$
Over-the-air testing and validation for radar imaging systems and hardware	162 734 \$
Research infrastructure on the modernization of power systems using power electronics	299 564 \$
Infrastructure for autonomous robot-assisted in-situ subsurface prospecting of critical minerals	175 000 \$

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Advanced Lunar and Extreme Robotics Laboratory (ALERT)	125 000 \$
BEAM: A borehole exploration apparatus for multiparameter geophysics	125 000 \$
Novel ultrasound probes for imaging capillary function in vivo using dynamic Ultrasound Localization Microscopy	125 000 \$
7 projets	1 172 701 \$

Université de Montréal

Advanced mass spectrometry for xenobiotic and metabolite analysis to enhance precision research in veterinary medicine	309 168 \$
Spinning disc microscopy infrastructure for advanced imaging and structural biology applications	171 600 \$
Coherent terahertz spectroscopy facility for quantum materials discovery	373 909 \$
Physical-virtual 3D interfaces via machine learning	216 020 \$
High performance biomarker testing of the mechanistic association between insomnia and Alzheimer's disease	145 204 \$
Contaminants chimiques et biosurveillance de l'exposition humaine	694 024 \$
CONTAC - Carbon Observatory Network for the Terrestrial and Aquatic Connectivity	244 289 \$
VROOMM: The first photon-counting high-resolution optical spectrograph for faint exoplanet detection	300 000 \$
Orchestrating 3D-order in covalent organic frameworks: Synthesis, photophysics and sensing	342 586 \$
Infrastructure for computational methods development in cancer research	129 158 \$
Enhanced recovery after surgery for spinal cord injury with early brain-modulated activity-based therapy	688 813 \$
A rapid response flux tower infrastructure to quantify disturbance impacts on potential nature-based climate solutions	194 404 \$
Developmental neurolinguistics laboratory	477 518 \$
Multiplexed quantitative and single-cell functional genomics of mammalian transcriptional cis-regulation	205 656 \$
TARGETted interventions during pregnancy and their impact on maternal and childhood ASTHMA (The TARGET Asthma Project)	134 586 \$
Automated and fast-imaging platform for thick samples to study the brain and the retina	322 970 \$
Ancient Maya landscapes: Archaeological survey and excavations in a neotropical setting	41 781 \$
17 projets	4 991 686 \$

Université de Sherbrooke

Development of novel oncolytic virotherapies to reshape the tumor microenvironment	458 692 \$
Biodiversity dynamics of plant-insect food webs	124 239 \$

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Evaluation of contaminant transport through geosynthetics for improved sustainability in waste management	98 891 \$
Systèmes de chromatographie ionique pour la décontamination des sols pollués et le stockage du CO2	99 001 \$
Infrastructure for mechanistic studies of antimicrobial recalcitrance in polymicrobial communities	139 194 \$
VÉLOs LABoratoires sur la multiExposition en milieu URBAIN (VeloLabE-Urbain)	105 098 \$
Laboratoire SOCIALEX (Sciences sociales et méthodes expérimentales)	264 683 \$
System for gold standard hemodynamic monitoring	107 977 \$
Integrated approaches to study the microbiome and mechanisms of antibiotic resistance	381 315 \$
EPIC2: A versatile platform for advanced Characterization of Photonic Integrated devices and Circuits	163 985 \$
Advanced imaging to investigate subcellular mechanisms of neuronal function and targets for neurological disorders	269 526 \$
Integrated platform for advanced mouse multi-omics	392 336 \$
12 projets	2 604 937 \$

Université du Québec - École de technologie supérieure

Optimiser les performances tout en réduisant les risques de blessures : Application au patinage de vitesse courte piste	100 000 \$
In-ear sensing for multimodal health tracking and early disease detection	100 000 \$
2 projets	200 000 \$

Université du Québec – Institut national de la recherche scientifique

Aquatic Ecotoxicology and Ecophysiology Laboratory (AEEL)	223 000 \$
High-efficiency deep learning computing for edge wireless communication	149 645 \$
Studying laser-induced phase transformations of ceramic nanomaterials with a dynamic transmission electron microscope	151 243 \$
From gene to personalized therapy to contribute to the sustainable health of people with rare diseases	242 125 \$
4 projets	766 013 \$

Université du Québec à Chicoutimi

SENSe platform: A state-of-the-art research infrastructure for studying mechanisms of sensorimotor control	100 000 \$
Pour une histoire sociale de la filiation génétique : l'intégration de la parenté spirituelle au projet BALSAC	100 000 \$
2 projets	200 000 \$

Université du Québec à Montréal

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Nanospetroscopie Raman in situ pour les matériaux avancés appliqués en énergie et en santé	472 978 \$
μTRACE. Tracage dendroisotopique et dendrogéochimique des changements environnementaux au sein de l'écosystème boréal.	425 315 \$
Plateforme de la Boussole durable : une infrastructure pour l'analyse du cycle de vie de la consommation au Canada	267 329 \$
Plateforme pour l'étude du protéome sombre dans les neuropathies	474 115 \$
4 projets	1 639 737 \$

Université du Québec à Rimouski

A laboratory for compound-specific ¹⁴ C to study the impact of climate change on the oceanic & atmospheric carbon cycle	239 753 \$
Impact des activités humaines sur la stabilité du génome et ses conséquences sur la biodiversité	139 143 \$
Programme pancanadien de détection et de surveillance d'instabilités en parois rocheuses	169 277 \$
3 projets	548 173 \$

Université du Québec à Trois-Rivières

La biomécanique appliquée au service de la santé neuromusculosquelettique	163 049 \$
Platform for the study of bioenergetic reprogramming in health and disease	172 580 \$
2 projets	335 629 \$

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 projets	103 623 \$

Université du Québec en Outaouais

Antennes et surfaces électromagnétiques avancées pour les systèmes sans fil émergents	185 000 \$
Renforcer la résilience de la vigne en climat froid par les outils OMICs	199 462 \$
2 projets	384 462 \$

Université Laval

Hybrid stereo-electroencephalography in drug-resistant focal epilepsy: Epileptic biomarkers and cognitive neuroscience	199 986 \$
Information technology infrastructure for mathematical modeling and health economics of infectious diseases	120 000 \$
Référentiel Tracéologique Expérimental Collaboratif (RTEC)	26 186 \$

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Organ-on-chip: The next generation disease modeling and drug screening platform	120 000 \$
Optogenetics in nonhuman primates	120 000 \$
Development of green methods for the recovery of critical and strategic metals from e-waste	108 376 \$
Exploring galaxy clusters environments with SpICE, a new imaging Fourier transform spectrometer at Mont-Mégantic	120 000 \$
Chaire de recherche du Canada en efficacité énergétique	114 189 \$
Deep immunophenotyping of the impact of early life stress on sex-specific determinants of lung immune responses	119 238 \$
Field robotics	120 000 \$
Étudier les sols pour assurer la durabilité et la résilience des agroécosystèmes	82 922 \$
Analyse dynamique de la mitochondrie par imagerie confocale à haut débit et haute résolution	310 000 \$
VIVADATA: protéger la vie privée pour encourager la valorisation des données de santé	93 500 \$
Multiscale and multimodal quantitative imaging of brain tumor	229 244 \$
Laboratoire de suivi de la qualité de l'eau dans les communautés nordiques du Nunavik	116 207 \$
Cutting-edge real-time genomics and informatics to transform the diagnostic and surveillance of infectious diseases	175 533 \$
Integrated platform for advanced housing and body composition analysis in rodents	151 739 \$
RECLAIM - Recycling of E-waste using Carbon dioxide, LIBS, and elemental Analysis for valuable Metals recovery	399 977 \$
Robotic non-invasive brain stimulation guided by neurodynamics	115 233 \$
State-of-the-art platform to the early and rapid detection of herbicide resistance in weeds	128 307 \$
Single-cell high-throughput proteomics to pioneer tailored immunotherapy strategies in pediatric oncology	175 533 \$
Biology and control of zoonotic and pandemic respiratory viruses	627 936 \$
Quantum dots towards enabling reproducible quantum technologies	128 573 \$
23 projets	3 902 679 \$

À NOTER : Cette annonce comprend l'attribution d'une somme additionnelle de 8 487 419 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.