

## John R. Evans Leaders Fund Backgrounder

### Alberta

The Canada Foundation for Innovation (CFI) Board of Directors approved a contribution of \$10,769,418 to support 39 infrastructure projects in the province.

Project Title	Maximum CFI Contribution
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#### **Athabasca University**

Investigating immersive leadership training as an intervention to combat workplace harassment	\$59,281
Healing land through soil: A mobile molecular microbiology approach for prairie restoration	\$29,929
Detection of industrial analytes of interest with luminescent bacterial biosensor technology	\$39,270
<b>3 projects</b>	<b>\$128,480</b>

#### **University of Alberta**

Synthesis of chiral and achiral nanographenes and graphene nanoribbons and study of their properties	\$240,000
Enhancing resilience and sustainability of infrastructure and buildings through hybrid testing systems	\$106,984
Exploring bacterial electron transport chains towards novel treatment of infection	\$212,748
The laboratory for molecular longevity and healthy aging	\$196,866
Research infrastructure for human-level robotic manipulation task mastering	\$164,699
Platform for the measurement of very persistent, very mobile, ultra-trace contaminants in the environment	\$294,355
Glow discharge optical emission spectroscopy: deep elemental depth profiling of all-kind solid materials	\$240,174
Analytical facility for hydrocarbons and atmospheric emissions	\$306,653
Temperature-control Structure-Property Characterization (TSPC) system for future energy system and material science	\$236,372
Expanding the capacity of the Canadian ice core lab	\$79,262
Water Research Centre (WRC) for circular economy and resilience	\$204,325
Beyond the microscope: Pioneering nanotechnology research with advanced atomic force microscopy	\$248,497
Long-lasting high-entropy electrodes for energy storage and conversion	\$105,000
Determining structure-property-relationships in functional polymer nanocomposites during processing	\$88,521
Metabolism and mechanobiology in musculoskeletal aging, injury and disease	\$145,288
Mitigating methane: A holistic approach to reducing GHG emissions in livestock	\$128,286

farming	
Quantitative exposomics and metabolomics for assessing human and animal health	\$446,164
<b>17 projects</b>	<b>\$3,444,194</b>

#### University of Calgary

ATOM: Anechoic Test and Observation Module for hyper-connected world research	\$170,000
Procoagulant membrane dynamics: Mechanistic insights, clinical translation, and innovation	\$250,000
Understanding the role of animals in the dissemination of antimicrobial resistance and antimicrobial-resistant organisms	\$110,000
Differentiable programming for optimizing nonequilibrium systems and biomaterials design	\$150,000
Advanced medium-voltage test facility for next-gen power electronics & drives: Accelerating clean tech adoption	\$155,199
VirRepo: Building & characterizing a human Virus Repository for Virotherapy	\$225,000
Research hub for binder discovery in cancer immunotherapy	\$400,000
Measuring and modeling wildfire fuels using laser scanning, artificial intelligence, and process modeling	\$175,000
Deciphering cell-cell interactions and signaling in neuroinflammation	\$527,000
Jungle genomics: Infrastructure for in situ study of genetic adaptation	\$75,050
Advancing quasi-passive prosthesis technology through experimental optimization	\$240,000
The Calgary Amyloid Lab (CALAB) - A novel approach to modelling neurodegenerative disorders	\$254,800
Energy storage systems for a renewable energy grid	\$205,000
Investigating the interplay of mechanical loading, bone growth, and metabolic dysfunction in childhood-onset diseases	\$290,000
Miniature multiphoton live imaging for discovering mechanisms and treatments of Alzheimer's disease	\$492,000
Integrating the mining cycle for the sustainable supply of critical mineral resources	\$100,000
Histological assessment of bone and joint tissue structure and function: A facility approach to increased research	\$322,445
Integrative metabolic physiology of overwintering insect pests	\$100,000
Harnessing isomer-resolved mass spectrometry lipidomics to map lipid modulators in antimicrobial resistance	\$470,000
<b>19 projects</b>	<b>\$4,711,494</b>

#### NOTE:

As part of this announcement, an additional \$2,485,250 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.