CANADA FOUNDATION FOR INNOVATION

Presentation at SNOLAB User Meeting SNOLAB, June 27, 2024

Sarah Coogan, Senior Programs Officer Research Facilities



Canada Foundation for Innovation

Fondation canadienne pour l'innovation



About the CFI

With a bold, future-looking mandate, the Canada Foundation for Innovation *equips researchers to be global leaders in their field* and to respond to emerging challenges.

Our *investments in state-of-the-art tools, instruments and facilities* at universities, colleges, research hospitals and non-profit research institutions underpin *both curiosity- and mission-driven research* that cuts across disciplines and bridges all sectors.

The research infrastructure we fund mobilizes knowledge, spurs innovation and commercialization, and empowers the talented minds of a new generation.



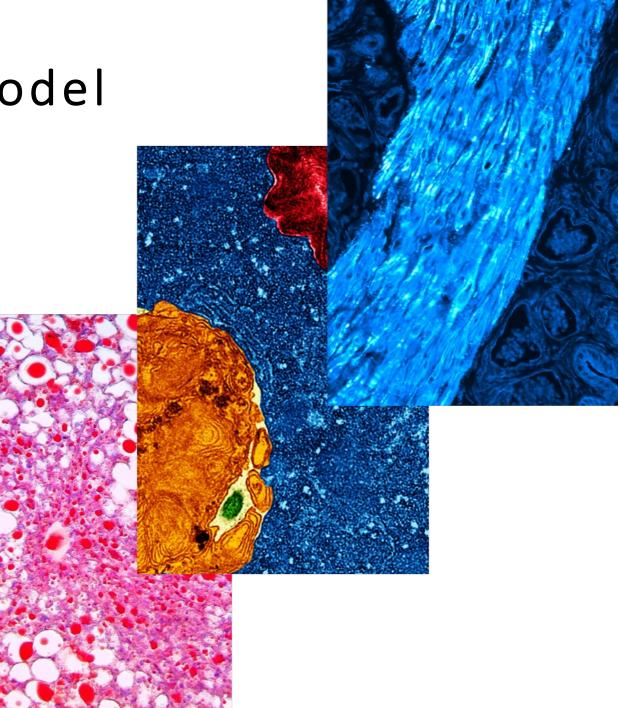
A unique funding model

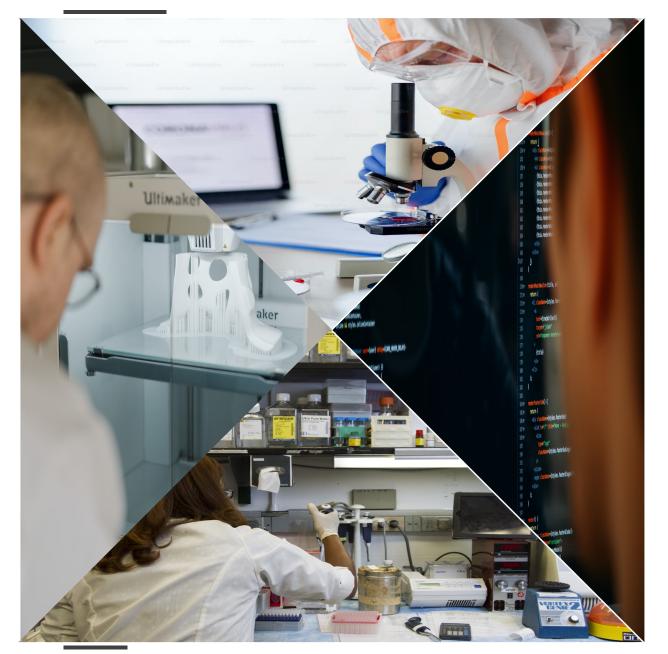
CFI provides 40% of infrastructure costs (remaining 60% provided by provinces, institutions and private sector)

Since its creation in 1997, the CFI has committed \$10.7 billion in support of 13,074 projects at 174 research institutions in 81 municipalities across Canada

Highly competitive funding requiring excellence and institutional commitment to maintaining the infrastructure over its useful life

CFI also provides funding for the operation and maintenance of research infrastructure through the MSIF and IOF



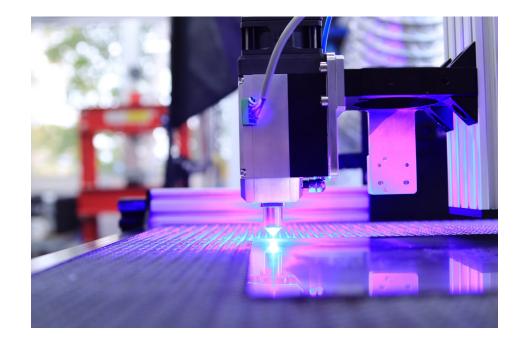


Eligible projects

The CFI funds infrastructure, across the full spectrum of research, from the most fundamental to applied through to technology development and supports a broad range of research programs including those in natural, social and health sciences, engineering, humanities and the arts, as well as interdisciplinary research.

Eligible infrastructure

- Acquisition or development of research infrastructure to increase research capacity and enable innovative research activities.
- Facilities, laboratories, equipment, collaboration space, computer hardware, software, and databases.
- Includes cutting-edge and workhorse
 equipment



CANADA FOUNDATION FOR INNOVATION

111 11 1

Funding programs

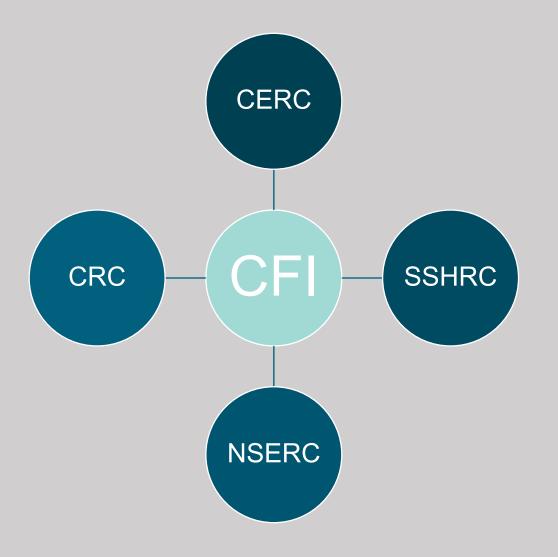
John R. Evans Leaders Fund

- Accepts proposals three times per year (February, June, October)
- Attracting and retaining researchers
- Typical minimum CFI request of \$75,000
- Maximum request \$400,000-800,000
- Not a competitive fund

Funding streams

Unaffiliated: This stream accepts proposals for research infrastructure that are standalone and not affiliated with an application submitted to any of our funding partner organizations.

Partnership: These streams accept proposals that are submitted alongside an application for research support from our funding partners.



Innovation Fund

- Competition every 2-3 years
- Total project costs (TPC) must exceed \$1M
- 2023 IF: TPC range \$1.1M-114.5M
- Collaborative projects encouraged (ex. Can-AMN)



2025 Innovation Fund competition timeline

Important dates in 2024



2025 Innovation Fund



Research infrastructure projects should:

- Align with the institution's strategic priorities
- Demonstrate **appropriate maturity** and offer the best potential for transformative impact
- Build on established capacity to accelerate current research and technology development or bolster emerging strategic priority areas
- Empower teams to maximize the use of research infrastructure and foster world-class research.

2025 Innovation Fund

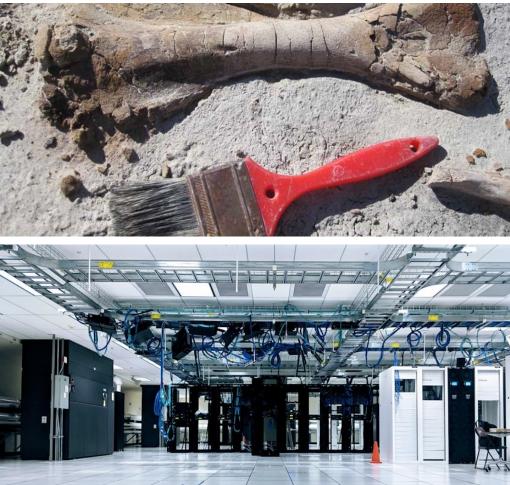
Streams

- 1. **Open:** all disciplines, same as usual
- 2. Social sciences, humanities and arts (SSHA): primary field of research must be in SSHA
- **3. Core facilities:** All infrastructure must be located in a core facility and some personnel are now eligible

Envelopes

- Every institution is allowed to submit one proposal outside their envelope allocation if the primary field of research is SSHA.
- If your institution submits or collaborates on just two proposals (one in SSHA and one in any stream), neither of those projects will be restricted by the institutional envelope.





Spending delays

In general, institutions have been taking longer to:

- Finalize awards.
- **Implement** projects often due to construction challenges, supply chain and transportation issues.
- **Disburse funds** allocated to them through the Infrastructure Operating Fund (IOF). As a result, the overall funding specified in our current contribution agreement with the Government of Canada will be reduced by \$101.3 million.

We encourage institutions to:

- Submit projects that demonstrate appropriate maturity.
- Consider all costs and create a **realistic budget**.
- Gather all documentation needed for finalization ahead of time.

2025 Innovation Fund

The CFI reserves the right to withdraw its support for projects not finalized within nine months of funding decisions, or for which the final financial report is not submitted within a reasonable time frame

Total project costs	Deadline to submit final financial report	
≤ \$2.5 million	November 2029	
> \$2.5 million and \leq \$10 million	November 2030	
> \$10 million	November 2032	

Biosciences Research Infrastructure Fund – Partnership with Stage 2 of the Canada Biomedical Research Fund

CBRF–BRIF is an investment under Canada's Biomanufacturing and Life Sciences Strategy.

Stage 2 invited partnered proposals for applied research, talent development and research infrastructure funding. Proposals aligned with one of the hubs' priorities, vision and program of research to support pandemic preparedness and respond to emerging health threats.



Of the 103 proposals submitted, 58 had a research infrastructure portion.



Research infrastructure cost

Those 58 projects have a total of \$1.16B in research infrastructure costs.



The CFI will fund up to 60 percent of a project's research infrastructure costs.



Competition budget

In addition to the \$277M in research infrastructure costs, the CFI will contribute \$83M in infrastructure operating funds.

Major Science Initiatives Fund

• Provides support for the ongoing operating and maintenance needs of research facilities of national importance.

Examples of eligible costs:

- Administrative, scientific, technical support personnel
- Replacement parts and minor upgrades
- Supplies and consumables
- Communication and outreach activities
- Training and professional development

Investments

Major Science Initiatives Fund

- $_{\odot}$ Created in 2010
- 2012 & 2014: Investment in 12 research facilities of national importance (\$210M)
- 2017: 17 research facilities (\$328.5M)
- 2019: Extension of funding period & budget uplift towards \$610M
- 2023: Investment in 19 research facilities (\$628M)



Facility eligibility requirements

Highly specialized capabilities

User community

Appropriate governance model

Appropriate management structure and practices

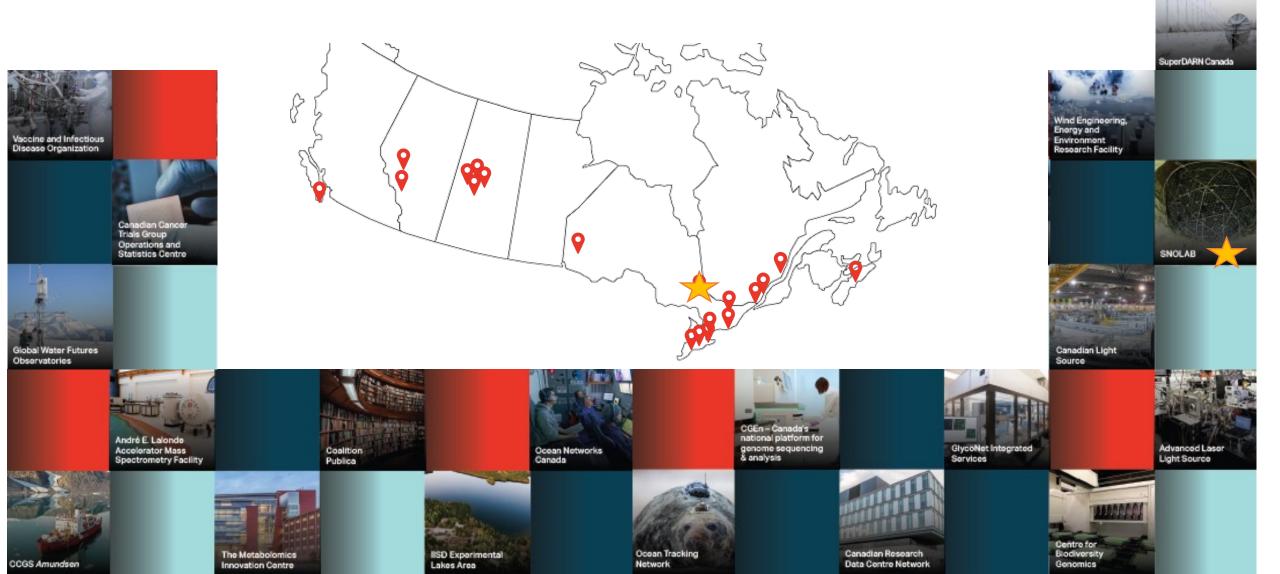
Established access policy

Substantial annual O&M costs (>\$1M)

Fully operational

Owned by one or more CFI-eligible institutions

Canadian research facilities of national importance



The CFI's approach

Currently, our approach to research security is meant to mitigate two types of risks:

- Risks related to partnerships with the private sector (in line with the Government of Canada's National Security Guidelines for Research Partnerships (NSGRP))
- Risks related to affiliations of concern for projects aiming to advance a sensitive technology research area (as per the Government of Canada's Policy on Sensitive Technology Research and Affiliations of Concern (STRAC policy))



NSGRP requirements

Currently applies to:	Not yet in scope:
Innovation Fund (2023 & beyond) Northern Fund CBRF – BRIF Stage 2 Exceptional Opportunities Fund Unaffiliated JELF (as of June 25, 2024)	College Fund Affiliated JELF Major Science Initiatives Fund

The CFI requires a **Risk Assessment Form (RAF)** and a **Private-sector partner identification form (PSPID)** if the project involves a **private-sector partner** (or partners) that:

- Has an active role in the research activities described in the proposal (e.g., sharing of intellectual property, providing expertise, actively participating in research activities, contributing financially to the research activities); or
- Houses part or all of the research infrastructure; or
- Contributes more than \$500,000 to the infrastructure through a cash or in-kind contribution to any single item.

STRAC requirements

Currently applies to:	Not yet in scope:	Not applicable:
Innovation Fund (2025 & beyond) Northern Fund & Exceptional Opportunities Fund (as of May 1, 2024) Unaffiliated JELF (as of June 25, 2024)	College Fund Affiliated JELF Major Science Initiatives Fund	Innovation Fund 2023 CBRF – BRIF Stage 2

Project/team leaders and team members will be required to complete an attestation form if the proposal is in support of research that **aims to advance** any of the **areas listed** in the Government of Canada's list of Sensitive Technology Research Areas.

Proposals that support research that aims to advance a sensitive technology research area **will not be funded** if any of the project/team leaders or team members are currently affiliated with, or in receipt of funding or in-kind support from, any of the Government of Canada's Named Research Organizations.

STRAC requirements

The CFI context:

Funding of **large infrastructure projects** complexifies the interpretation of the STRAC policy:

- Are all users of the research infrastructure covered by the policy?
- What about infrastructure located in core facilities with hundreds/thousands of users?
- Which research projects are "in scope"?

Given these questions, our current implementation plan is based on:

- Meeting the imperative of the policy
- Recognizing the resources available.

Our interpretation and next steps:

Currently, in the context of CFI-funded research infrastructure projects:

- Only project/team leaders and team members are subject to requirements under the STRAC policy
- While we encourage institutions to take adequate security measures, no other users of the research infrastructure are subject to requirements under the STRAC policy.

We will be initiating a discussion in the coming months with institutions and national security agencies to refine the scope of this implementation.

Thank you!

Contact information

Sarah Coogan, Senior Programs Officer, Research Facilities, sarah.coogan@innovation.ca

NSGRP requirements

Institutional responsibility:

Institutions applying for or receiving CFI funding have research security obligations throughout the life of the project. They are required to do the following:

- At application: Perform open-source due diligence before submitting an RAF or PSPID (if required).
- When finalizing: Implement the risk mitigation plan described in the RAF.
- Until the final financial report is submitted: Immediately inform the CFI of changes that could affect the risk to national security (e.g., new partnership with the private sector, change of location of research infrastructure to a private-sector partner).

The CFI's responsibility:

The CFI and our stakeholders have the responsibility to ensure that Canada's research ecosystem is safe and secure. We will:

- Assess and validate RAF
- Refer forms to the Government of Canada if:
 - The nature of the proposed research is deemed sensitive; and,
 - Partners are associated with or originating from organizations or countries that are subject to sanctions or associated with criminal and ethical concerns.

STRAC requirements

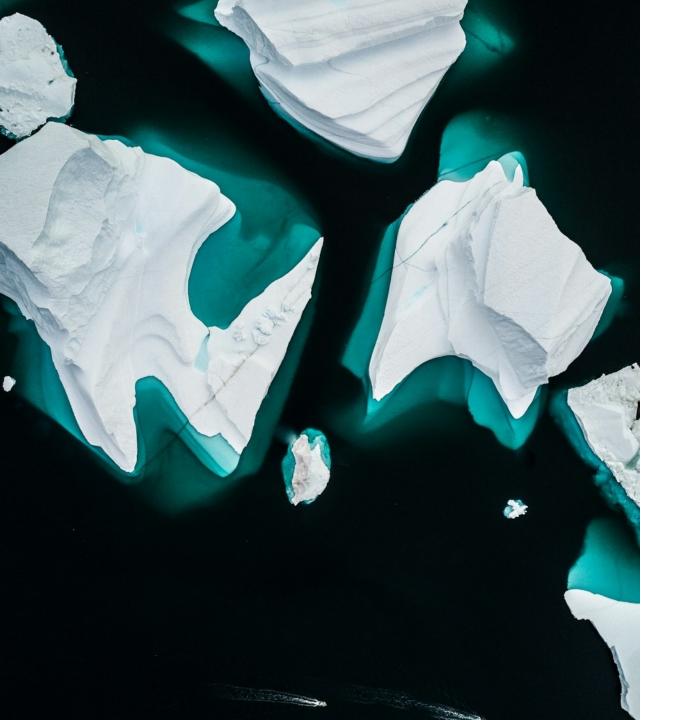
Institutional responsibility:

Institutions applying for or receiving CFI funding have research security obligations throughout the life of the project.

- When developing a proposal: Determine if the research it supports aims to advance any of the sensitive technology research areas.
- At application: If it does, all team/project leaders and team members (those providing CVs/biosketches) will need to provide an attestation for the institution to be able to submit the proposal.

Note: Institutions are not expected to validate the accuracy of attestation forms submitted to the CFI.

 Until the final financial report is submitted: Inform the CFI of any changes in project/team leaders (as per usual) and provide a new attestation if required. Inform the CFI immediately of any changes in the nature of the research activities that would result in the project now being aimed at advancing a sensitive technology research area.



Highlights of the Northern Fund

- Launched January 31, 2024
- The CFI will invest up to **\$25 million** in research infrastructure funding and associated operating costs.
- Open for proposals in all research disciplines that clearly demonstrate how the research directly engages and serves the needs of Northern communities, including First Nations, Métis and Inuit communities
- The North comprises Yukon, the Northwest Territories, Nunavut, Nunavik and Nunatsiavut.

Northern Fund

- Eligible institutions can submit proposals anytime between February 2024 and February 2028 requesting:
 - Funding to help defray the costs of holding meetings, consultations and other expenses related to the development of proposals for the Northern Fund
 - Between **\$250,000** and **\$2.5 million** to cover research infrastructure costs.
- The CFI will fund up to **50 percent** of the eligible costs of a research infrastructure project.
- Institutions can request up to 100 percent of the CFI contribution to the cost of the research infrastructure for operation and maintenance costs.

For more information, email us at northern.fund@innovation.ca.



Research project participants (left to right), Aina Igiyok, Carole-Anne Gillis, Silasie Ajaku and Jaiku Airo, study Arctic char in Lake Tasirjuarusik, Nunavik Source: Véronique Dubos/ArcticNet