Canadian Foundation for Innovation (CFI) Innovation Fund (IF) 2025 Internal Carleton Process

Overview of the CFI Innovation Fund & Carleton's Internal Process

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Agenda

- Introduction
- Presentation
- Panel Discussion:
 - Vivian Manasc, Principal Architect, Reimagine
 - Prosenjit (Jit) Bose, Associate Dean (Research & International), and Professor, Computer Science, Faculty of Science, Carleton University
 - Christopher Rowley, Associate Professor, Department of Chemistry, Faculty of Science, Carleton University
- Questions & Answers



IF Objectives

- Enable internationally competitive research or technology development through the equitable participation of expert team members.
- Enhance and optimize the capacity of institutions and research communities to conduct the proposed research or technology development program(s) over the useful life of the infrastructure.
- Lead to social, health, environmental and/or economic benefits for Canadians.

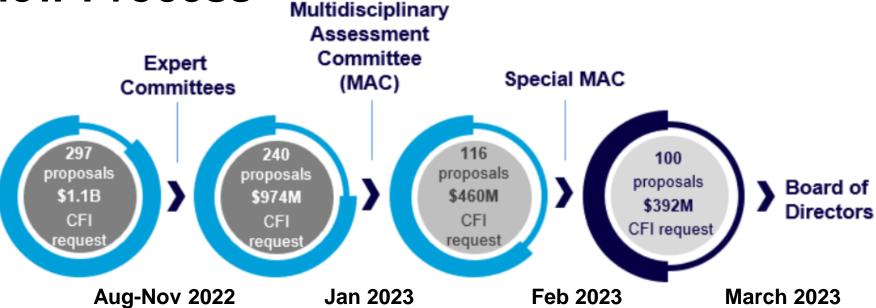


Competition Budget

- For the 2023 IF competition, total project costs had to be greater than \$1M
- CFI will support up to 40% of a project's total project costs
- In most provinces, including Ontario, the provincial government has a competition that will also support up to 40% of the total project costs
- Renovation and/or construction costs can be included in the project costs if they are required for the installation or operation of the requested equipment, and/or be essential to the research design
 - Typically, up to 20% total project cost
- Carleton's institutional envelope for the 2023 competition was \$12.7 million



IF Review Process



Proposals due to CFI Jun 15, 2022

Assess the strengths and weaknesses of proposals against the

assessment criteria

Assess proposals against the three

competition objectives

Feb 2023

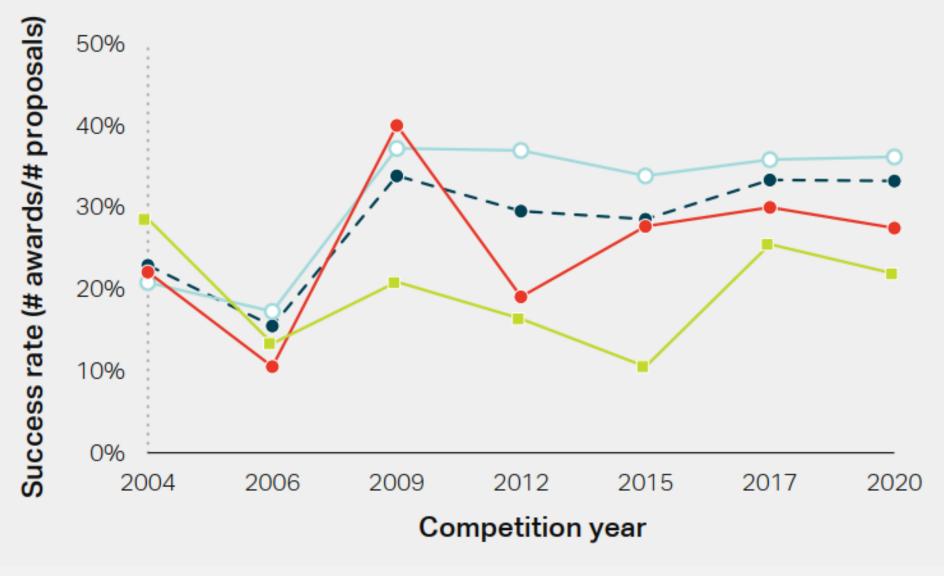
Recommends proposals that best meet the CFI's mandate and competition objectives and would be the most beneficial for Canada

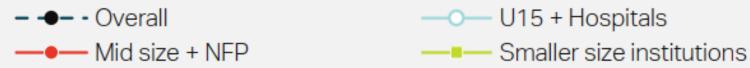
March 2023

Makes final funding decision

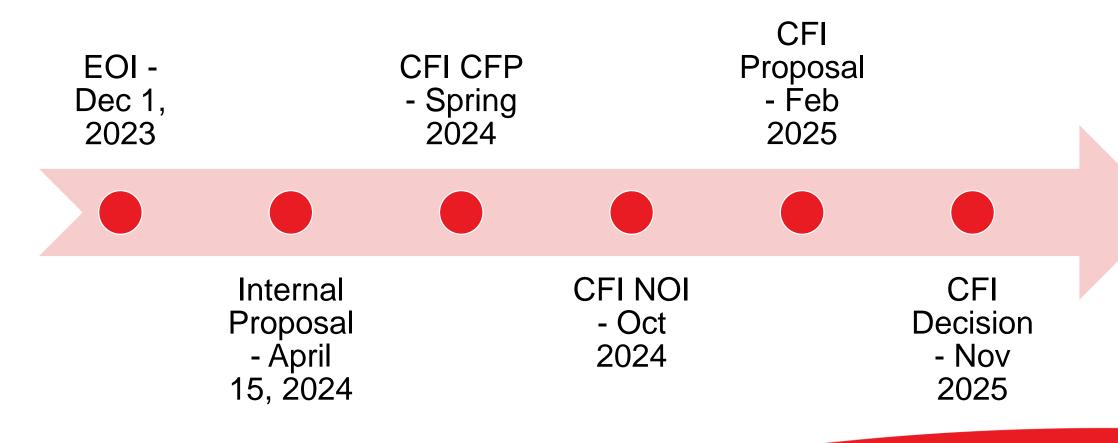


Success rate across IF competitions by size of administrative institution





Internal Process: IF 2025 Timeline





Internal Process: Adjudication Criteria

- Internationally-leading research or technology development;
- Composition and expertise of the team, including
 - integration of equity, diversity, and inclusion (EDI) considerations, and
 - track record of generating globally significant contributions to knowledge and/or generating impact beyond the academy
- Request for necessary and appropriate infrastructure, which leverages
 - previous investments by Carleton University, and
 - existing and/or planned funding to support direct costs of proposed research;
- Well-defined plan to transfer the results of the research or technology development program(s) that will lead to benefits for Canadians.



Internal Process: Step One

Internal Expression of Interest (EOI) can be submitted any time before December 1, 2023

- Carleton and non-Carleton-led projects requesting allocations from Carleton's envelope
- Components: 250-word summary; list of equipment; estimated total cost and CFI request ranges; proposed team members
- EOIs will be assigned a CORIS Research Facilitator to support the development of the internal proposal
- Strategic project development meetings will be organized for each internal proposal under development during Winter 2024.



Internal Process: Step Two

Mandatory internal proposal due by April 15, 2024

- Carleton-led: 8-page proposal; budget form; CVs; written confirmation of faculty endorsement including space allocation
- Non-Carleton-led: materials submitted to collaborating institution; 4page attachment; budget form; CVs; written confirmation of faculty endorsement including space allocation
- VPRI appointed expert panel review internal proposals
 - Final decision by VPRI in consultation with Deans
 - Feedback provided to all applicants (successful and unsuccessful)



Internal Process: Please Note!

- OVPRI is not able to provide space allocations for selected CFI IF projects. Potential applicants should contact their Faculty(s) to identify appropriate research space.
- Partner organizations may have different requirements, processes and timelines, including EOI or internal application deadlines earlier than the Carleton deadlines; please check specific institutional websites for details, or have your collaborators contact their institutional offices.
- Carleton Faculties may have earlier internal deadlines for application review and Faculty approval. Please check with your Faculty Research Facilitator and/or Associate Dean Research for more information.



CFI Two Stage Application Process

- 1. Step One: Notice of Intent (mandatory, not adjudicated)
 - Key sections: Project Summary, Collaborating Institutions, Team Members, Project Description, CV for Team Lead(s)
- 2. Step Two: Proposal
 - Project Module: Project Summary, Team, Users/Collaborators, Assessment Criteria (25-42 pages depending on budget and language), Plan for operation and maintenance of requested equipment, Collaborating Institutions, CVs
 - Finance Module: Cost of requested items, Construction or Renovation plans, Contributions from other partners (e.g., relevant provincial competitions), etc.

Note: Proposal requirements in 2023; no significant changes for 2025 are expected Carleton

Objectives & assessment criteria



Enable internationally competitive research or technology development through the equitable participation of expert team members

Research or technology development

Team expertise

Team composition

2

enhance and optimize the capacity of institutions and research communities to conduct the proposed research or technology development program(s) over the useful life of the infrastructure

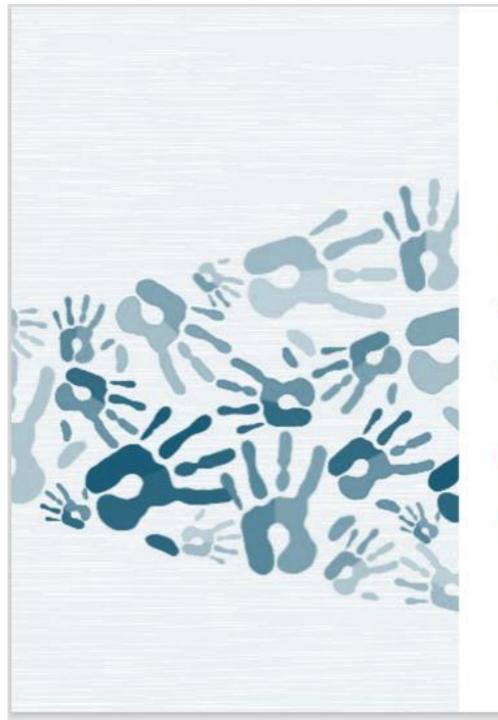
Infrastructure

Sustainability



Lead to social, health, environmental and/or economic benefits for Canadians

Benefits



SSH in the 2023 IF

REMINDERS

- SSH proposals are eligible and competitive
- Collaborative spaces are eligible for all CFI programs
- Computing and digital libraries are eligible
- Interdisciplinary research is eligible



Strengths & Weaknesses from Experience

- Meaningful engagement on EDI is critical
 - Suggestion: Explain under-representation as well as identify actions (taken and proposed) to address EDI, relevant goals the team will work toward, how progress will be evaluated, etc.
- Teams should: Be multi-institutional; Have demonstrable collaborations; Include a Team Lead(s) with experience leading large team projects; Reflect EDI in composition & project management
- If an obvious collaboration has not been pursued or existing similar equipment will not be included, explain
 - Suggestion: Do so in a way that emphasizes how or why your project is unique
- Propose exciting, ambitious science enabled by the requested infrastructure
- Writing has to strike a balance between reviewers with no expertise in the research area and expert reviewers who are looking for compelling science
 - Suggestion: A longer introduction (3/4-1 page) that is written for non-expert reviewers; Integrate explanatory details for non-expert reviewers
- Application must be complete



Section	Promising practices from 2023 feedback
Research and Technology Development	-world-leading, bold, break-through potential -robust justification of methodological choices (why those methods were the best possible methods to address the proposed research)
Team Expertise	-proposed research project and associated team's track record must be fully aligned -clearly link every member of the core team to the proposed project and the requested infrastructure in clear and concrete ways -preference for interdisciplinary or multidisciplinary contributions -demonstrated concrete connections and previous engagement with wide networks of other users and stakeholders to demonstrate team's capability to generate impact
	-go beyond the basics in addressing equity, diversity and inclusion (EDI) -indicating barriers members from underrepresented groups face in enabling their full participation on large-scale projects is only first step -teams should clearly demonstrate how EDI considerations were/are central to how core team was selected -indicate clear plan to expand team over life of project -integrate EDI considerations throughout proposal (beyond team composition and student training) i.e., EDI considerations should start now and drive application development

Section	Promising practices from 2023 feedback
Infrastructure	-clarify connections with and potential to leverage previous infrastructure investments (by the administering and/or collaborating institutions) -clear case for the innovativeness of the requested infrastructure (more than standard request)
Sustainability	-detailed and costed sustainability plan should extend beyond the initial five years of the CFI project and this extension -Operating and Maintenance budget should not be static unless there is a clear justification for this choice - project management and governance as a key element of sustainability and should include a clearly detailed and well justified governance model -key governance bodies should be at least partially identified at the time of application -clarify how various governance components would interact and support the overall operation and maintenance of the facility -for community-engaged and/or Indigenous projects: how communities and peoples were involved in the overall project design prior to application and their participation would be integrated into the project governance going-forward
Benefits	-clear plans for both training of highly qualified personnel (HQP) and for knowledge mobilization, including integration of EDI considerations -detailed and tangible examples of the kinds of knowledge mobilization or technology transfer activities that would occur during the project

Critical Strengths	Key Questions
Prominent leads	Is it a world class team? Who are the leading experts globally in the area? How will the infrastructure advance the team's research? What is innovative about the proposed research and/or equipment development?
Institutional support	How is the project aligned with the strategic priorities of the host and any collaborating institutions? How are the host institution and any collaborating institutions investing in the project? How are institutions supporting the sustainability of the infrastructure?
Appropriate collaborations	Is the collaboration genuine? Are any critical expertise or perspectives missing? Who are potential end users and how will they benefit from the research? How will collaborating institutions manage access and data sharing? How will the team be engaged throughout the planning process? How will equitable participation be ensured?
Existing infrastructure	What existing infrastructure exists locally? Why is it insufficient? Have potential collaborators who would benefit from the infrastructure been considered? If not, why?

Strengths and Weaknesses Analysis (Expert Committee)

Major weaknesses - 2020 IF

- 1. Lack of details on methodology
- 2. Feasibility of the approach
- 3. Not innovative
- 4. Research plan lacks focus
- Missing expertise
- Missing evidence for track record of investment
- 7. Infrastructure not well justified
- Issues regarding governance or management plan
- Weak plan for technology transfer/clinical transfer/knowledge mobilization

Major Strengths - 2020 IF

- Outstanding research track record
- 2. Innovative research program
- Impressive breadth and depth of expertise
- 4. Team leads the field internationally
- 5. Investments in people
- 6. Rare, world-class infrastructure
- 7. Strong governance/oversight plans
- Strong O&M plan

Strengths and Weaknesses Analysis (MAC)

Major weaknesses - 2020 IF

- Lack of detail for RTD
- 2. Feasibility of the approach
- 3. Missing expertise
- 4. Not innovative
- 5. Weak justification for infrastructure
- Weak plan for technology transfer/clinical transfer/knowledge mobilization
- 7. Sustainability planning
- 8. Management/governance/access plan
- 9. Overstated/weak benefits

Major Strengths - 2020 IF

- Leading-edge and innovative research in area of global leadership
- 2. Leading researchers
- Unique infrastructure
- Integrated into sustainable existing facility
- Strong plan for technology transfer/clinical transfer/knowledge mobilization
- 6. Unique HQP opportunities

Reminder CFI Info Session Series

<u>Budget Session</u> – Fri Oct 27 10AM-NOON <u>Equity, Diversity & Inclusion (EDI) Session</u> – Wed Nov 15 10AM-NOON

Registration information for both can be found here.



Resources and More Information

- CFI IF 2025 Internal Carleton Process (CORIS)
- CFI-IF-2020-By-the-numbers.pdf (innovation.ca)
- Innovation Fund 2023: Call for proposals (innovation.ca)
- CFI Update (June 2023) (innovation.ca)

