2020 INNOVATION FUND

GUIDELINES FOR MULTIDISCIPLINARY ASSESSMENT COMMITTEES

Working together toward global leadership in research for a better Canada



ABOUT THE CANADA FOUNDATION FOR INNOVATION

The Canada Foundation for Innovation (CFI) makes financial contributions to Canada's universities, colleges, research hospitals and non-profit research organizations to increase their capability to carry out high-quality research.

The CFI invests in infrastructure that researchers need to think big, innovate and push the boundaries of knowledge. It helps institutions to attract and retain the world's top talent, to train the next generation of researchers and to support world-class research that strengthens the economy and improves the quality of life for all Canadians.



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AN OVERVIEW OF THE INNOVATION FUND

To succeed, Canada's research community must realize the full potential of both its people and its infrastructure. The Canada Foundation for Innovation's (CFI) Innovation Fund provides continued investments in infrastructure, across the full spectrum of research, from the most fundamental to applied through to technology development.

Innovation Fund-supported projects will help Canada remain at the forefront of exploring and generating knowledge. These projects generate social, health, environmental and economic benefits and address global challenges.

Expectations of applications to the Innovation Fund

We expect institutions to propose research infrastructure projects that are:

- Aligned with their strategic research plan.
- Guided by their policies or plans on equity, diversity and inclusion, as well as by the <u>CFI's</u>
 statement on equity, diversity and inclusion, when selecting projects and forming research teams.
 A breadth of diverse perspectives, skills and experiences drives innovation and contributes to research excellence.

We also expect that the research infrastructure projects proposed:

- Are of appropriate maturity and have the best potential for transformative impact.
- Allow teams and institutions to build on established capacity to accelerate current research and technology development or to enhance emerging strategic priority areas.
- Enable teams to fully exploit research infrastructure and drive world-class research.

Competition budget

In the 2020 Innovation Fund competition, the CFI will invest up to \$400 million in research infrastructure funding. We contribute up to 40 percent of a project's eligible infrastructure costs. Institutions must obtain the remaining 60 percent, typically from provincial governments and other public, private and non-profit organizations. That means the total costs of projects funded through this competition will be more than \$1 billion. The CFI will also invest up to \$120 million through our Infrastructure Operating Fund to help institutions with the operating and maintenance expenses of their awarded projects. This additional amount is equivalent to 30 percent of the CFI award for research infrastructure.

THE INNOVATION FUND MERIT-REVIEW PROCESS

We have a rigorous merit-review process that relies on independent reviewers from across Canada and around the world to ensure that only the very best projects receive funding. This process ensures that proposals are reviewed in a fair, competitive, transparent and in-depth way. The reviewers' time and effort is invaluable to help the CFI's Board of Directors make funding decisions.

For the Innovation Fund competition, we use a three-stage merit-review process (Figure 1).

1. Expert Committees evaluate how well a group of similar or related proposals meet the assessment criteria. Members comment on the proposals' strengths and weaknesses. Expert Committees usually have a Chair and two to six members, depending on the number and breadth of proposals that it will review.

These guidelines are for reviewers taking part in the second stage of this process – Multidisciplinary Assessment Committees.

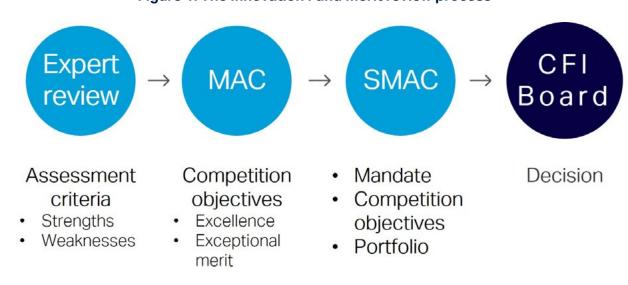
2. Multidisciplinary Assessment Committees (MAC) assess a subset of proposals — usually about 20 — grouped by the amount of funding requested. One or more MAC will review proposals from smaller institutions: those whose share of total research funding from the three federal research funding agencies is less than 1 percent. The MAC identify proposals that best meet the competition's three objectives and standards of excellence,

and make funding recommendations. Each MAC may also select up to two proposals that are of exceptional merit.

3. The Special Multidisciplinary Assessment Committee (SMAC) reviews all proposals recommend for funding by the MAC. This committee uses the proposal summary and the MAC assessment to recommend to the CFI Board of Directors those proposals that it feels best support the CFI's mandate, best meet the Innovation Fund competition objectives and form the most effective portfolio of investments for Canada.

The CFI Board of Directors will make the final decision on funding for each proposal at its November 2020 meeting. After this meeting, applicants will receive the funding decisions and the expert committee and MAC reports, including the names of committee members.

Figure 1: The Innovation Fund merit review process



Competition objectives

Multidisciplinary Assessment Committees will evaluate proposals using the three competition objectives that are informed by six assessment criteria reviewed by the expert committee. Each objective has a standard against which proposals are assessed (Table 1). In the <u>call for proposals</u>, we told applicants to clearly present how their project meets each assessment criterion and competition objective and to provide enough information for you to evaluate the project's merits.

Table 1: Relationship between competition objectives and assessment criteria

Competition objectives (reviewed by the MAC)	Assessment criteria (reviewed by an expert committee)	Assessment criteria standards
Enable global leadership by supporting world-class research or technology development	Research or technology development	The research or technology development program(s) are innovative, feasible and internationally competitive.
	Team	The diverse team comprises the breadth of expertise needed to conduct the proposed program(s).
Enhance and optimize the capacity of institutions and research communities to conduct the proposed research or technology development program(s)	Research capacity	The institutions and their partners have the necessary research capacity on which this proposal will build.
	Infrastructure	The requested infrastructure is necessary and appropriate to conduct the proposed program(s).
	Sustainability	The infrastructure will be optimally used, operated and sustained over its useful life through tangible commitments.
Lead to social, health, environmental and/or economic benefits for Canadians	Benefits	The team and its partners have a well-defined plan to transfer the results of the research or technology development program(s). The results are likely to lead to social, health, environmental and/or economic benefits for Canadians.

Multi-institutional projects

For projects with three or more CFI-eligible collaborating institutions that will house part of the infrastructure or pool resources, applicants may request additional funds. Such multi-institutional projects may ask for up to an additional five percent of the CFI award to cover administrative costs for management and governance. Information about this addditional request can be found in the susainability sections of the proposal and Expert Committee report. Both the Expert Committees and the MAC will review these requests and determine if they are appropriate and justified.

Equity, diversity and inclusion process

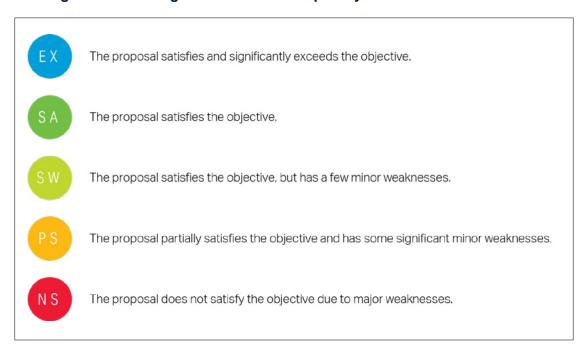
Under the "Team" criterion, applicants are asked to describe the equity, diversity and inclusion (EDI) principles they considered in composing the research team. We asked Expert Committees to comment on the EDI policies and whether these guided the applicants in choosing team members. For proposals that identify barriers or challenges, expert committees were also asked to provide advice for addressing these barriers.

Expert Committee feedback is intended to help us and applicant institutions identify good practices for creating more diverse research teams and for suggestions on how to overcome barriers in implementing EDI principles. Expert Committees were advised that the EDI considerations are for information purposes and should not be used for assessing the "Team" criterion standard. Consequently, expert committees' comments on EDI considerations are not included in the expert committee reports and will be shared with the applicant institutions separately from the reports. The MAC is not expected to make project-specific EDI comments. However, we welcome global comments about this aspect at the MAC meeting.

Rating scale

The CFI has a five-point rating scale with statements about the degree to which a proposal meets a competition objective (Figure 2). You are encouraged to use the full range of ratings, as appropriate, to assess proposals. Your ratings should be based on the proposal's strengths and weaknesses that you and the Expert Committee have identified.

Figure 2: CFI rating scale for Multidisciplinary Assessment Committees



Principles of merit-review

Our merit-review process is governed by the underlying principles of integrity and confidentiality. This is to ensure that we continue to have the trust and confidence of the research community, the government and the public. All Expert Committee members must follow our <u>Conflict of interest and confidentiality agreement</u>.

Integrity

We expect reviewers to maintain the highest standards of ethics and integrity. This means that any personal interests must never influence, or be seen to influence, the outcome. You are appointed as an individual, not as an advocate or representative of your discipline(s) or organization. If you have one of the conflicts of interest outlined in our <u>Conflict of interest and confidentiality agreement</u>, you should declare it to the CFI. We will determine if the conflict of interest is manageable or if we must withdraw your invitation to be a reviewer.

Confidentiality

Our review process is confidential to protect the applicants' innovative research ideas. When you agree to review for the CFI, you are bound by our confidentiality agreement. This means that everything we send you is confidential and must be treated as such at all times. You must not discuss or share any proposal with anyone. If you do not think that you have the expertise to provide a useful review without discussing it with a colleague, you should decline the invitation.

Avoiding unconscious bias

Merit review is subjective by nature. Bias can be unconscious and show up in several ways. It could be based on a school of thought, fundamental versus applied or translational research, areas of research, sub-disciplines or approaches (including emerging ones), size or reputation of a participating institution, or the age, language, identity factors or gender of the applicant. We strongly encourage you to refer to an <u>online training module</u> for preventing unconscious bias in merit review. This short module was developed by the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. It promotes understanding of unconscious bias, how it can affect merit review and ways to mitigate bias.



MULTIDISCIPLINARY ASSESSMENT COMMITTEE ROLES AND RESPONSIBILITIES

Chairs

The Chair is responsible for leading the Multidisciplinary Assessment Committee (MAC) meeting and ensuring that:

- It runs effectively.
- All members' views are taken into account.
- · All proposals are reviewed fairly, consistently and according to the guidelines in this document.
- The committee achieves a consensus rating for each competition objective.
- The committee's discussion is sufficiently detailed and the ratings are sufficiently substantiated so CFI staff can prepare the one-page committee report.

Members

We choose MAC members for their capacity to assess proposals based on the competition objectives and for their broad understanding of the research environment, the niches of excellence in institutions and the breadth of impacts and outcomes from research across the entire landscape of research activity. Members will review a subset of the approximately 20 proposals for review by each MAC. Members will submit their preliminary ratings of these proposals to the CFI before the committee meeting.

CFI staff

At least two CFI staff members will attend the meeting to help the Chair, take notes and clarify CFI policies and processes. CFI staff will draft committee reports for each proposal. The committee Chair will review and approve these reports to ensure they accurately reflect the committee's discussion.

Observers

CFI's senior management and other staff will attend the MAC meetings as observers.

MEETING LOGISTICS

Timeline and location

Multidisciplinary Assessment Committee (MAC) meetings will take place by videoconference on two days between September 9 and 11, 2020. Table 3 summarizes the key activities and timelines for the 2020 Innovation Fund competition.

Table 3: Summary of key activities and timelines for Multidisciplinary Assessment Committees

Timeline	Activities	
MAC members will:		
Before the meeting	Activate their account and log in to the CFI Awards Management System (CAMS).	
	Inform the CFI of any potential conflicts of interest	
	Complete the recommended <u>unconscious bias training</u> .	
	Access the review materials on the "Reviewer" dashboard (available by early July 2020).	
	Participate in member briefing teleconference (mid-July 2020).	
	Evaluate the proposal(s) against the competition objectives.	
	Provide preliminary ratings to the CFI by September 4, 2020.	
At the meeting September 9 to 11, 2020	The Chair guides the committee in reviewing each proposal in turn, following the order of review in the meeting agenda.	
	The committee reaches consensus on a rating for each competition objective and provides a funding recommendation.	
After the meeting	CFI staff draft the MAC report for each proposal.	
	The Chair reviews and approves the reports.	

Official languages

The CFI offers its services in both of Canada's official languages — French and English. Committees must ensure that all proposals in either official language receive a full and detailed review. If you have been assigned a proposal in a language that you cannot understand, contact us immediately and we will reassign the proposal to another reviewer. We normally conduct committee meetings in English.

HOW TO CONDUCT YOUR REVIEW

Before the meeting

Accessing the review materials

LOG ON TO THE CFI AWARDS MANAGEMENT SYSTEM

If this is the first time you are reviewing for the CFI, you will receive an email in early July to activate your account on the CFI Awards Management System (<u>CAMS</u>). If you already have an account, you will receive an email to notify you when the review materials are available in CAMS. If you need additional information about how to access and navigate CAMS, see the <u>guide for reviewers</u> on our website.

Access the Reviewer dashboard

CAMS is divided into dashboards for different types of users. Access the "Reviewer" dashboard, where you will access the review materials and conduct your preliminary assessment.

ACCESS REVIEW MATERIALS

To access the review materials for this MAC, click on the 2020 Innovation Fund committee. This will bring you to the "Review and documentation" page, where you will find:

- · Reference materials: a quick reference guide to the competition objectives, expense form, etc.
- · Meeting information: the meeting location, date and time, and agenda
- Proposals and expert committee reports (under the "Project material" tab)
- Your review assignment and preliminary assessment tool (see Figure 3)

The proposal and its expert committee report must be the sole information sources upon which the committee bases its review. Applicants must demonstrate in the proposal how the project satisfies each of the competition objectives and justify the need for the requested infrastructure.

Pre-meeting briefing

We will maintain regular contact with committee members, by email or telephone, before the meeting to ensure you have the necessary information to conduct your review.

Once all members have activated and accessed their CAMS account, CFI staff will schedule briefing sessions with members to go over the review process. The briefing session will take place in mid-July 2020 and several sessions will be offered to accommodate a maximum of members.

Conducting your preliminary assessment

Each MAC will be responsible for the review of approximately 20 proposals. For each of the proposals, three committee members will be designated as lead reviewers and will be required to conduct a more in-depth review. You will each be assigned approximately 10 proposals in this capacity, some of which will be outside of your general area of expertise as this encourages diverse points of view.

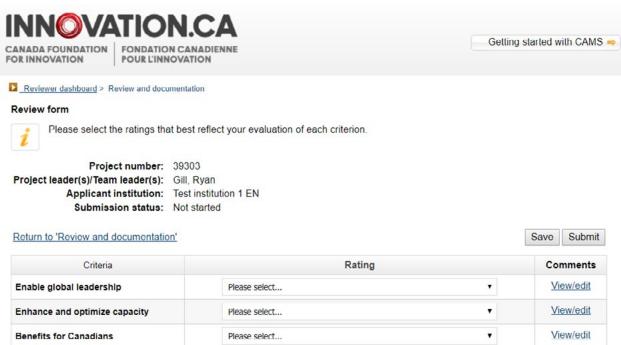
Proposals assigned to you as a lead reviewers are identified on the "Your review" tab on the "Review and documentation" page. You will be required to enter in CAMS your ratings only for those proposals assigned to you.

While we are aware that you will spend more time on your assigned proposals, each MAC member is expected to read all of the proposals, or at least the three-page project summary, and expert committee reports under your committee's purview to allow you to fully engage in all discussions.

The 2020 Innovation Fund competition objectives are aligned with one or more review criteria as illustrated in Table 1. Information provided for each criterion, in the proposals and expert committee reports, will enable you to evaluate the competition objectives.

Using the CFI rating scale (Figure 2), you will rate the degree to which each proposal meets the competition objectives. In CAMS, you will select your rating for each competition objective from a drop-down menu (see Figure 3). You are not required to provide written comment before the meeting. However, you should keep your notes for discussion at the meeting.

Figure 3: How to enter your preliminary assessment in CAMS



Please complete your preliminary assessments and submit your ratings in CAMS no later than **September 4, 2020**. Preliminary assessments will not be provided to applicants, and will only be used to help us identify areas for discussion at the meeting.

2 At the meeting

Discussing proposals

The committee will discuss each proposal in turn for approximately 25 minutes. The three MAC members assigned as lead reviewers to the proposal will share their preliminary assessments of the proposal first. For each proposal that has been assigned to you for review, be prepared to present a brief overview of its strengths and weaknesses based on the objectives.

Reaching consensus

A general discussion will follow, focusing on the objectives where there are significant discrepancies among the assigned members' assessments. Ultimately, the committee must reach a consensus on the objective ratings — the degree to which the proposal satisfies each of the three competition objectives – as well as formulate an overall opinion of the strengths and weaknesses of the project. Where there are discrepancies between the MAC's assessment and comments in the expert committee report, a substantive explanation will be required.

The Multidisciplinary Assessment Committees must also make funding recommendations. Each MAC will also be able to identify up to two proposals of exceptional merit.

3 After the meeting

Drafting committee reports

Multidisciplinary Assessment Committee (MAC) members are not required to draft committee reports. CFI staff will draft a consensus report (up to one page) for each proposal reviewed by the MAC. The report summarizes the committee's consensus ratings and comments. MAC reports do not list the committee membership. The Chair will review the reports and confirm that they accurately reflect the committee's discussions.

The reports for proposals recommended by the MAC will be forwarded to the Special Multidisciplinary Assessment Committee (SMAC) to assist it in its evaluation of the proposals.

Thank You

Your time and invaluable contribution to the 2020 Innovation Fund is sincerely appreciated!

