



2020 INNOVATION FUND

GUIDELINES FOR EXPERT COMMITTEES

Working together toward global leadership
in research for a better Canada

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FOR INNOVATION

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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 [CFI's 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.

Objectives of the Innovation Fund

- 1 Enable global leadership by supporting world-class research or technology development.
- 2 Enhance and optimize the capacity of institutions and research communities to conduct the proposed research or technology development program(s).
- 3 Lead to social, health, environmental and/or economic benefits for Canadians.

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 first stage of this process – Expert Committees. Separate guidelines are provided to reviewers taking part in other stages of the process.

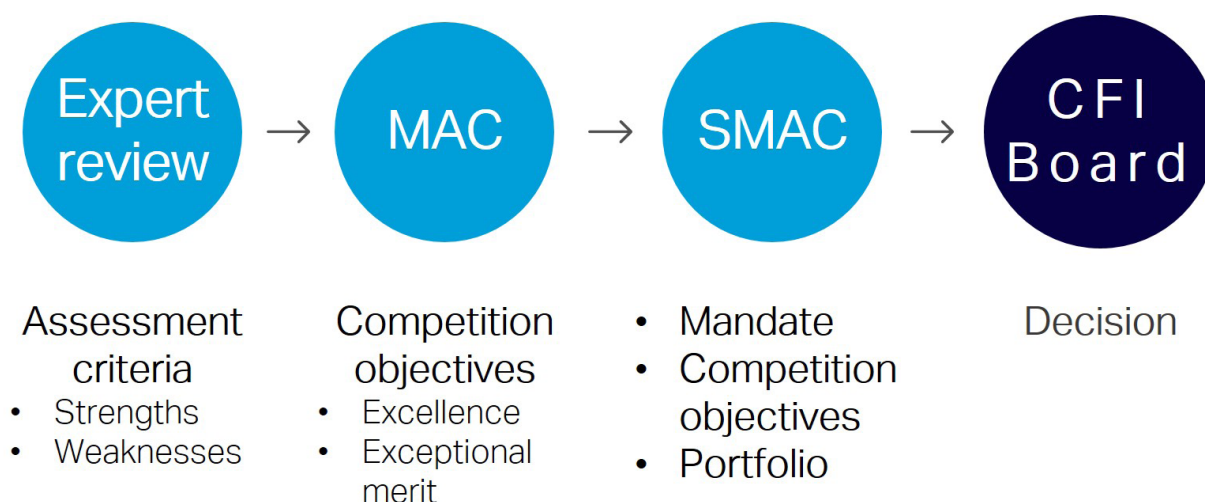
2. Multidisciplinary Assessment Committees (MAC) assess a subset of proposals — usually between 30 and 35 — grouped by the amount of funding requested. One or more MACs will review proposals from smaller institutions: those whose share of total research funding from the three federal research funding 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



Assessment criteria and standards

Expert Committees will evaluate proposals using six assessment criteria that expand on the competition objectives. Each criterion has a standard against which proposals are assessed (Table 1). In the [call for proposals](#), we told applicants to clearly present how their project meets each assessment criterion and to provide enough information for you to evaluate the project's merits.

Table 1: Assessment criteria and standards

Assessment criteria	Assessment criteria standards	Instructions to applicants
Research or technology development	The research or technology development program(s) are innovative, feasible and internationally competitive.	<p>Describe the proposed research or technology development program(s) that will be enabled by the requested infrastructure, including the proposed approach, feasibility and breakthrough potential.</p> <p>Demonstrate how the proposed program(s) are innovative and internationally competitive by positioning them within the national and international context. Where appropriate, include references.</p>
Team	The diverse team comprises the breadth of expertise needed to conduct the proposed program(s).	<p>Describe the team's relevant experience and expertise to undertake the proposed program(s). Highlight its scientific and technical contributions to the area of the proposed program(s).</p> <p>Describe the contributions from relevant partners, as applicable, to the proposed program(s).</p> <p><i>Note: Applicants are also asked to describe the process undertaken for equity, diversity and inclusion (EDI) consideration in composing the research team.</i></p> <p><i>The description of this process does not form part of the assessment of the "Team" criterion. Please see the Equity, diversity and inclusion process section of these guidelines for details on reviewing this information.</i></p>
Research capacity	The institutions and their partners have the necessary research capacity on which this proposal will build.	In the specific context of the current proposal, describe the existing research capacity of the institution(s) and their partners to support the proposed program(s), including past key investments in people (researchers and highly qualified personnel) and infrastructure.

Assessment criteria	Assessment criteria standards	Instructions to applicants
Infrastructure	The requested infrastructure is necessary and appropriate to conduct the proposed program(s).	<p>Describe each requested item and justify why it is needed to conduct the proposed program(s). (Reference the item number, quantity, cost and location entered in the "Cost of individual items" table. Provide a cost breakdown and description of included items in any grouping of items. For construction or renovation, provide a description of the space, including its location, size and nature).</p> <p>Taking into consideration the research infrastructure capacity at your institution and at your partners' institution(s), explain how the requested infrastructure is the optimal option to obtain the necessary resources to conduct the proposed program(s).</p> <p><i>Note: For construction or renovation, the detailed cost breakdown, timeline and floor plans must be provided in a separate document as part of the finance module.</i></p>
Sustainability	The infrastructure will be optimally used, operated and sustained over its useful life through tangible commitments.	<p>Present a management plan which describes how the infrastructure will be optimally used (e.g., user access and level of use), operated and maintained over its useful life.</p> <p>Outline the operating and maintenance costs and revenue sources over the useful life of the infrastructure. Refer to the "Financial resources for operation and maintenance" tables.</p> <p>For larger and more complex projects, describe the proposed governance of the requested infrastructure, including the composition of its decision-making bodies.</p> <p><i>Note: Justification for requested additional contribution to cover administrative costs associated with the management and governance of a multi-institutional project must be provided.</i></p>
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.	<p>Detail the plans to transfer the results of the research or technology development program(s).</p> <p>Describe the team's experience in knowledge mobilization and/or technology transfer.</p> <p>Describe the potential benefits to Canadians, including the skills highly qualified personnel will develop using the requested infrastructure.</p>

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. The Expert Committee will review these requests and determine if they are appropriate and justified.

Equity, diversity and inclusion process

Under the “Team” criterion, applicants are asked about the equity, diversity and inclusion (EDI) process used to form their teams, as follows:

Describe the equity, diversity and inclusion principles you considered in composing the research team (including team leaders, members and/or other users) to include people who have the necessary expertise, who are at different stages of their career, and who are from underrepresented groups, as appropriate for the proposed project.

We asked about the EDI process because we expect that when forming research teams, institutions are guided by their EDI plans and policies and the CFI’s EDI statement. Your comments will help us to identify good practices for creating more diverse and inclusive research teams and to develop assessment criteria for future competitions. We will also look for your advice on how researchers can overcome barriers to implementing EDI principles. **Do not use the EDI descriptions in assessing the Team criterion standard.**

The CFI recognizes that there are a broad range of aspects and identity factors that each team member brings which include but are not limited to the four designated underrepresented groups identified by the federal government (women, persons with disabilities, Indigenous peoples and members of visible minorities). In addition to these four groups, the CFI includes a researcher’s discipline and career stage, as well as the type, size and location of an institution as aspects to be considered when increasing diversity and inclusion in the research team as part of the EDI process.

We ask the Expert Committee to comment on the following aspects of the EDI process described in the proposal:

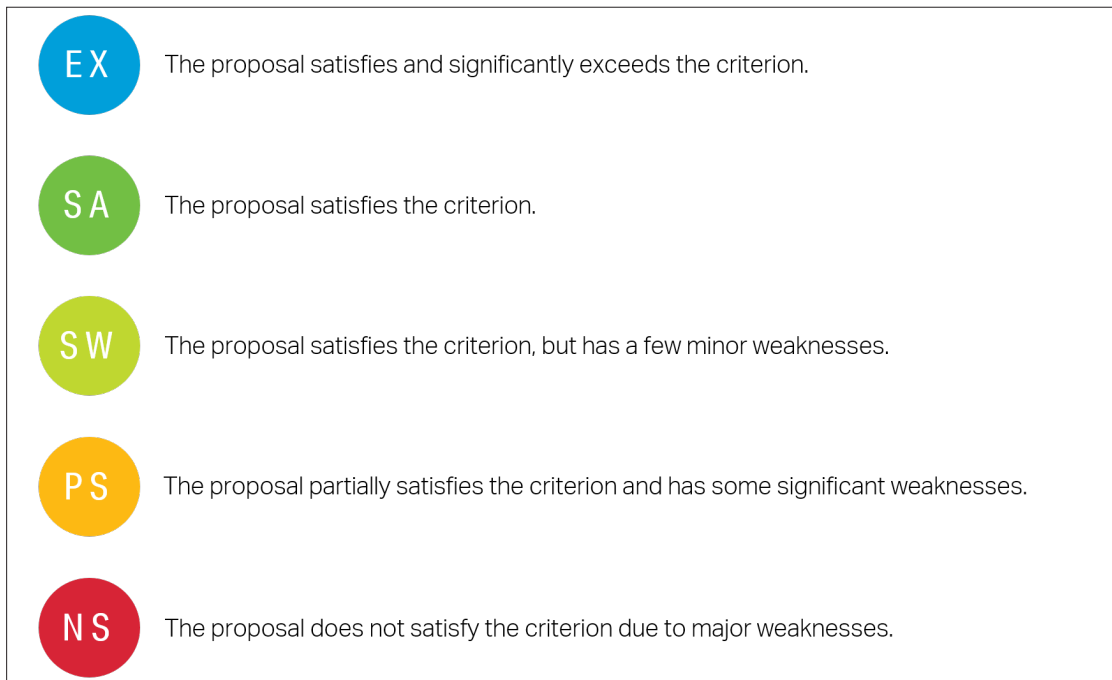
- Are there EDI policies or strategies (e.g., an institutional EDI plan, access to relevant EDI training or advisors) in place? If so, did the team demonstrate consideration of and meaningful effort to meet the objectives of the EDI policies or strategies in place? Please highlight policies or considerations that were particularly effective in guiding the team’s decision making.
- Did the applicants identify any barriers in composing a diverse team, as appropriate for the proposed project? If so, can the committee provide any advice for addressing such barriers?

We will provide institutions with a short summary of the committee’s feedback about the EDI process used for each proposal.

Rating scale

The CFI has a five-point rating scale with statements about the degree to which a proposal meets an assessment criterion (Figure 2). You are encouraged to use the full range of ratings, as appropriate, to assess proposals. You must also support these ratings by identifying the proposal's strengths and weaknesses based on the assessment criteria.

Figure 2: CFI rating scale for Expert 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 [Conflict of interest and confidentiality agreement](#).

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 in our [Conflict of interest and confidentiality agreement](#), 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 [online training module](#) 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.



EXPERT COMMITTEE ROLES AND RESPONSIBILITIES

Chairs

The Chair is responsible for leading the Expert Committee 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 assessment criterion.
- The committee's discussion is sufficiently detailed and the ratings are sufficiently substantiated so CFI staff can prepare the draft committee report.
- Committee reports for each proposal accurately reflect the discussion at the meeting.

Members

We choose reviewers with specific expertise in the various aspects of the proposals their committee will review. Members will review either all of the proposals or a subset of them, depending on the number of proposals the committee will review. At times, we may ask a reviewer to consider a single aspect of a proposal, such as a particular methodological approach or research objective of a multi- or interdisciplinary proposal. Members will submit their preliminary assessments of these proposals to the CFI before the committee meeting.

Members must read all of the proposals to be able to fully participate in the meeting. After discussing each proposal, the members will work to reach a consensus rating for each assessment criterion.

CFI staff

At least one CFI staff member 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

Sometimes, additional CFI staff attend committee meetings. Also, to coordinate the review processes and avoid duplication of efforts, we may invite representatives of the relevant provincial or territorial authorities to observe Expert Committee meetings.

Meeting with applicants

For proposals that we deem particularly large and complex, we may invite applicants for a face-to-face meeting with the Expert Committee. We limit the number of individuals to five for each project. Typically, this group includes the team leader(s), team member(s) and senior representatives of the participating institutions. These projects typically involve a significant investment from the CFI; however, the financial aspect is not the sole factor in holding a meeting. We will tell the Expert Committee before the meeting if any applicants will be attending.

MEETING LOGISTICS

Timeline and location

Expert Committee meetings will take place between late February and June 2020. Table 2 summarizes the key activities and timelines for the 2020 Innovation Fund competition.

Expert Committees evaluating up to two proposals will typically meet by teleconference. If one or more of the proposals are complex or are requesting a large amount of funding, the committee will meet in person.

Expert Committees evaluating three or more proposals will meet in person for one to two days, depending on the number of proposals the committee will review. In-person meetings are usually held in Toronto, Ont., near the Toronto Pearson International Airport. We will notify the committee of meeting details soon after we confirm the meeting date.

Table 2: Summary of key activities and timelines for Expert Committees

Timeline	Activities
Before the meeting	Reviewers will
	<ul style="list-style-type: none">• Activate their account and log in to the CFI Awards Management System (CAMS).
	<ul style="list-style-type: none">• Access the review materials on the “Reviewer” dashboard.
	<ul style="list-style-type: none">• Complete the recommended unconscious bias training.
	<ul style="list-style-type: none">• Evaluate the proposal(s) against the assessment criteria.
At the meeting	<ul style="list-style-type: none">• Provide a preliminary assessment to the CFI at least three days before the meeting.
	<ul style="list-style-type: none">• The Chair guides the committee in reviewing each proposal in turn.
	<ul style="list-style-type: none">• The committee reaches consensus on a rating for each assessment criterion.
After the meeting	<ul style="list-style-type: none">• The committee discusses the strengths and weaknesses for each assessment criterion, which will inform the Expert Committee report.
	<ul style="list-style-type: none">• CFI staff draft the Expert Committee report for each proposal.
	<ul style="list-style-type: none">• 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

1 Before the meeting

Accessing the review materials

LOG ON TO THE CFI AWARDS MANAGEMENT SYSTEM

After you agree to be a reviewer, and soon after the proposal deadline, you will receive an email to activate your account on the [CFI Awards Management System \(CAMS\)](#). 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 [guide for reviewers](#) 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. If you have reviewed CFI proposals before, you will see a list of these past review committees or assignments.

ACCESS REVIEW MATERIALS

To access the review materials for this expert committee, 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 assessment criteria and standards, expense form, etc.
- Meeting information: the meeting location, date and time, and agenda
- Proposals (under the “Project material” tab)
- Your review assignment and preliminary assessment tool (see Figure 3)

The proposal must be the sole information source upon which the committee bases its review. Applicants must demonstrate in the proposal how the project satisfies each assessment criterion and to justify the need for the requested infrastructure.

Conducting your preliminary assessment

You must read all of the proposals that your committee will review. For committees reviewing a large number of proposals, you may be assigned a subset of proposals to review. These are identified on the “Your review” tab on the “Review and documentation” page. You will be required to enter in CAMS your preliminary assessments only for those proposals assigned to you.

You will rate the degree to which each proposal meets the assessment criteria based on the [Assessment criteria and standards](#) and using the CFI [rating scale](#) for Expert Committees. You must also support these ratings by identifying the strengths and weaknesses of each proposal based on the assessment criteria. In CAMS, you will do this by selecting your rating for each assessment criterion from a drop-down menu and inputting the strengths and weaknesses in the relevant comments section (Figure 3). If you have identified any weaknesses in the proposal, you must take these into account in your rating.

Your preliminary assessment under the “infrastructure” section of the report should consider the appropriateness of the budget and cost estimates. This budget evaluation should identify any items that you feel are not adequately justified for the planned research activities.

Figure 3: How to enter your preliminary assessment in CAMS

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Help | Français

Getting started with CAMS

Researcher dashboard
Reviewer dashboard
Review and documentation
Institutional dashboard

Reviewer dashboard > Review and documentation

Review form

Please select the ratings that best reflect your evaluation of each criterion.

Project number: 12345
Project leader(s)/Team leader(s): Doe, John
Applicant institution: University of Ottawa
Submission status: Not started

[Return to 'Review and documentation'](#) Save Submit

Criteria	Rating	Comments
Research or technology development	Please select...	View/edit
Team	Please select...	View/edit
Research capacity	Please select...	View/edit
Infrastructure	Please select...	View/edit
Benefits	Please select...	View/edit

Please complete your preliminary assessments at least three days before the committee meeting. Preliminary assessments will not be provided to applicants, and will only be used to help us identify areas for discussion at the meeting and inform Expert Committee reports.

2 At the meeting

Discussing proposals

The committee will discuss each proposal in turn for approximately 45 minutes. Where reviewers have been assigned, they will share their preliminary assessments of the proposals first. The Chair will ask members to provide their assessments. For each proposal that has been assigned to you for review, be prepared to present a very brief overview and its strengths and weaknesses based on the assessment criteria.

Reaching consensus

A general discussion will follow, focusing on the criteria where there are significant discrepancies among the assigned members' assessments. Ultimately, the committee must reach a consensus on the criteria ratings — the degree to which the proposal satisfies each criterion standard — as well as the strengths and weaknesses for each assessment criterion. The comments must substantiate the consensus assessment ratings.

Expert Committees are not asked to make funding recommendations.

Meeting with applicants

Before any face-to-face meeting with applicants, Expert Committee members will discuss their preliminary assessment of that proposal, identify key issues that may need further clarity and prepare questions to ask the applicants. After meeting with the applicants, the committee will resume *in camera* to reach consensus on ratings, strengths and weaknesses relative to the assessment criteria.

3 After the meeting

Drafting committee reports

Expert Committee members are not required to draft Expert Committee reports. CFI staff will draft a three- to five-page report for each proposal reviewed by the Expert Committee. The report summarizes the committee's consensus ratings and comments.

The report will list the committee member names but no comments will be attributed to a single member. The Chair will review the reports and confirm that they accurately reflect the committee's discussions.

Filing expense claims

For committees that meet in person, an expense claim form is available on your "Reviewer" dashboard in CAMS. You must enter your email address on this form. Send the completed and scanned form and receipts to claim.reclamation@innovation.ca within one month after the meeting. Once CFI finance staff receive the approved expense report, we will email you to complete the electronic payment form. This two-step process helps ensure that banking information is safeguarded. Expenses will be reimbursed in the currency of your residence.

Thank You

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

