

CANADA FOUNDATION FOR INNOVATION

College Fund

Guidelines for Expert Committees

February 2022

Building partnerships between colleges
and their communities

INNOVATION

Canada Foundation
for Innovation

Fondation canadienne
pour l'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.

A promising future, now
25 years of investing in ideas that change our world

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Who should use these guidelines?

These guidelines are for members of Expert Committees assessing proposals for the Canada Foundation for Innovation’s College Fund.



A word of thanks

The Canada Foundation for Innovation (CFI) would like to thank you for agreeing to participate in the review process for the College Fund. The review process relies on the dedicated people who generously lend their time and expertise to its success. The CFI and Canada’s research community greatly appreciate your efforts.

Part 1 – What you need to know about this fund

Purpose of the College Fund

The purpose of the College Fund is to support partnerships between colleges and a range of public, private or not-for-profit partners.

Through the College Fund, the CFI:

- Supports innovative projects that enhance the capacity of Canadian colleges to carry out applied research and technology development across all disciplines
- Provides colleges with research infrastructure to foster partnerships (in their strategic priority areas) with the public, private or not-for-profit sector.

The innovation generated through these research partnerships must address the social, business, health or environmental needs of a Canadian industry or community. It is expected to lead to the creation or adaptation of knowledge and technology to develop or improve a product, process or service.

The proposed activities and requested infrastructure supported through this fund should not:

- Duplicate existing services or facilities in the region
- Be used to compete with private-sector businesses.

Objectives of the College Fund

- Create and enhance partnerships with the public, private or not-for-profit sectors that lead to innovation. These innovations must address social, business, health or environmental needs of a Canadian industry or community
- Enhance and optimize the proven applied research capacity of the college that is related to the proposed applied research or technology development activities
- Generate social, economic, health or environmental benefits locally or nationally including the development of highly qualified personnel.

Review process

Through our structured merit-review process, we ensure that proposals are reviewed in a fair, competitive, transparent and in-depth manner. The following sections outline the review process for proposals to the College Fund, including the roles and responsibilities of each committee.

For the College Fund, we use a two-stage merit-review process: review of proposals by Expert Committees, followed by a Multidisciplinary Assessment Committee.



The CFI's commitment to equity, diversity and inclusion

The CFI is committed to the principles of equity, diversity and inclusion. In all our activities, we recognize that a breadth of perspectives, skills and experiences contributes to excellence in research.

Equity: We aim to ensure all CFI-eligible institutions have the opportunity to access and benefit from our programs and CFI-funded infrastructure through our well-established, fair and impartial practices.

Diversity: We value attributes that allow institutions and their researchers — from any background and from anywhere — to succeed. This includes individual attributes such as gender, language, culture and career stage; institutional attributes

such as size, type and location; and attributes that encompass the full spectrum of research, from basic to applied and across all disciplines.

Inclusion: We encourage a culture of collaboration, partnership, contributions and engagement among diverse groups of people, institutions and areas of research to maximize the potential of Canada's research ecosystem.

We believe that nurturing an equitable, diverse and inclusive culture is the responsibility of every member of the research ecosystem, including funders, institutions, researchers, experts and reviewers.

Figure 1: The College Fund merit-review process



Rating scale

We use a five-point rating scale with statements about the degree to which a proposal meets each criterion standard (Figure 2). Your rating must be supported by the proposal's strengths and weaknesses based on the criterion standard. We encourage you to use the full range of ratings to assess proposals, both in your preliminary assessment and when the Expert Committee reaches a consensus on the ratings.

Figure 2: Rating scale



A rating of “SA” indicates that the proposal clearly meets the criterion standard and addresses all the instructions for that criterion.

Where a proposal clearly meets the criterion standard, addresses all the instructions for that criterion and exhibits qualities or strengths that exceed what is required, you can assign a rating of “EX.”

See [“Part 3 – Criterion standards and instructions provided to applicants \(with instructions for reviewers\)”](#) for detailed instructions for assessing the criteria.

Stage 1: Expert Committee

Expert Committees review small groups of proposals from the same area of research to assess their strengths and weaknesses in relation to the assessment criteria.

We select Expert Committee members from diverse sectors for their specific expertise in the area of the proposal. They are knowledgeable about the needs of the targeted industry or community and the college environment.

Only proposals that meet the fund’s threshold of excellence will move to the next stage. (See [“What is the threshold of excellence?”](#))



What is the threshold of excellence?

Proposals meet the threshold of excellence unless they receive one rating of **NS** or two or more ratings of **PS**.



What are the assessment criteria?

Expert Committees evaluate proposals based on five assessment criteria that reflect the three fund objectives:

Applied research or technology development —

The proposed applied research or technology development activities respond to clearly identified needs of an industry or community and have been developed in collaboration with partners to ensure the research achieves the intended outcomes.

Partnerships — The institution has demonstrated its ability to build and maintain productive partnerships with an industry or community. The institution has identified partners for the planned applied research activities. The institution has a plan to stimulate new partnerships with the industry or community.

Infrastructure — The requested infrastructure is necessary and appropriate to conduct the proposed applied research activities. It enhances

and integrates with the college’s existing applied research capacity. The infrastructure will be optimally used and maintained to ensure continued collaborations with, and relevance to, the industry or the community.

Team — The team comprises the breadth of expertise and experience needed to conduct the proposed applied research activities and operate the requested infrastructure.

Benefits — The proposed activities are likely to lead to social, economic, health or environmental benefits at the local or national level. The proposed activities will enable the development of highly qualified personnel.

See [“Part 3 – Criterion standards and instructions provided to applicants \(with instructions for reviewers\)”](#) for details of how applicants were instructed to address each criterion in their proposal.

Stage 2: Multidisciplinary Assessment Committee

The Multidisciplinary Assessment Committee (MAC) assesses proposals that meet the threshold of excellence at the Expert Committee stage. We select MAC members for their breadth of understanding of the applied research and technology development environment, the role of colleges in the innovation process and the needs of partners.

Following a careful analysis of proposals and Expert Committee reports, the MAC is then responsible for:

- Identifying proposals that best meet the three fund objectives relative to other competing requests
- Establishing the amount that the CFI should award for each proposal
- Making funding recommendations to the CFI Board of Directors.

Funding decisions

The CFI Board of Directors will make funding decisions at its November meeting each year. Following this meeting, we will notify your college that the decisions and review materials for your proposals are available in the CFI Awards Management System (CAMS).

Assessment criteria and standards

Expert Committees evaluate proposals based on the assessment criteria, which expand on the fund objectives. Each criterion is assessed against a standard. In the call for proposals, we instructed applicants to clearly present how their project meets each assessment criterion and to provide enough information for you to evaluate the project's merits. (See "[Part 3 – Criterion standards and instructions provided to applicants \(with instructions for reviewers\)](#)")

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 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 a conflict of interest, 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. 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 proposals with anyone. If you do not think you have the expertise to provide a useful review without discussing it with a colleague, you should decline the invitation.

Avoiding 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 or ideas about fundamental versus applied or translational research, areas of research, sub-disciplines or approaches (including emerging ones)
- The size or reputation of a participating institution
- The age, language, identity factors or gender of the applicant.

We strongly encourage you to complete the [Bias in Peer Review training module](#) developed by the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada and the Social Sciences and Humanities Research Council. This short, online module promotes understanding of bias, how it can affect merit review and ways to mitigate bias. (See "[The CFI's commitment to equity, diversity and inclusion.](#)")

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. We normally conduct committee meetings in English.

Part 2 – How to conduct your review

Tools to conduct your review

Use the [CFI Awards Management System \(CAMS\)](#) to access the documents and information you need to conduct your review. We will create a CAMS account for you once you have accepted to participate in the review process. If you already have a CAMS account, you can use it to access the review materials for this fund.

CAMS is divided into dashboards for different types of users. The “Reviewer” dashboard is where you will access the review materials and conduct your preliminary assessments. To access the review materials, click on the committee name. This will bring you to the “Review and documentation” page, where you will find:

- Reference materials (Criterion standards and instructions provided to applicants (with instructions for reviewers), these guidelines, etc.)
- Meeting information (date, time and agenda)
- Proposals
- Preliminary assessment form (under the “Your review” tab).

Consult [Getting started with CAMS: A guide for reviewers](#) for more information on using CAMS.

Expert Committee roles and responsibilities

Chairs

The Chair is responsible for leading the Expert Committee meeting, ensuring that it runs effectively and that the committee:

- Considers the views of all members
- Reviews all proposals fairly, consistently and according to the guidelines in this document
- Discusses each proposal in sufficient detail
- Achieves a consensus rating for each assessment criterion
- Sufficiently substantiates the ratings so CFI staff can prepare the draft committee report.

The Chair is also responsible for ensuring that the Expert Committee report for each proposal accurately reflects the discussion at the meeting.

Members

Expert Committee members have specific expertise in various aspects of the proposals their committee will review. Members review all the proposals or will be assigned a subset of them, depending on how many proposals the committee will assess.

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

CFI staff

At least one CFI staff member attends the Expert Committee meeting to assist the Chair, take notes and clarify CFI policies and processes. CFI staff draft an Expert Committee report for each proposal.

Observers

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

Meeting logistics

Table 1 summarizes the key activities for the College Fund review process.

Expert Committees will meet by videoconference. We will provide instructions for connecting to the videoconferencing platform in advance of the meetings.

Table 1: Summary of key activities for Expert Committees

Timing	Activities
Before the meeting	<p>Committee members:</p> <ul style="list-style-type: none">• Activate their account and log in to the CFI Awards Management System (CAMS)• Access the review materials on the “Reviewer” dashboard• Complete the recommended Bias in Peer Review training module (See “Avoiding bias”)• Evaluate the proposal(s) against the assessment criteria• Provide a preliminary assessment to the CFI at least three days before the meeting.
At the meeting	<p>The Chair guides the committee in reviewing each proposal in turn</p> <p>The committee discusses the strengths and weaknesses for each assessment criterion to reach consensus on a rating. This discussion informs the Expert Committee report.</p>
After the meeting	<p>CFI staff draft the Expert Committee report for each proposal. The Chair and/or committee members review and approve the report(s).</p>

Steps in the Expert Committee review

Step 1 – Before the meeting

We will prepare coaching opportunities and additional material for how to review a proposal that may include group briefing sessions and explainer videos. Access to these will be communicated to you by email.

Access the review materials

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. Consult [Getting started with CAMS: A guide for reviewers](#) for more information on using CAMS.

Conduct your preliminary assessment

The materials provided must be the sole information source upon which you base your review. Applicants had to demonstrate in the proposal how the project satisfies each assessment criterion and justify the need for the requested funding.

After reading the proposal, you will:

- Identify the proposal's relevant strengths and weaknesses based on the assessment criteria
- Use the five-point rating scale to assess the degree to which the proposal meets each assessment criterion standard based on the strengths and weaknesses identified
- In CAMS, select your rating for each assessment criterion from a drop-down menu and input the strengths and weaknesses in the relevant comments section
- Complete your preliminary assessments at least three days before the committee meeting.

See "[Part 3 – Criterion standards and instructions provided to applicants \(with instructions for reviewers\)](#)" for detailed instructions for assessing the criteria.

Preliminary assessments will not be provided to applicants. They will only be used to help us identify areas for discussion at the meeting and to inform Expert Committee reports.

Step 2 – At the meeting

The committee discusses each proposal in turn for approximately one hour. The discussion is moderated by the committee Chair, if applicable.

Each criterion is discussed in turn, focusing on those where there are significant discrepancies among the members' preliminary assessments. The discussion proceeds, as follows:

- The lead reviewer provides a brief overview of the proposal, their rating and a brief rationale that highlights the proposal's strengths and weaknesses based on the assessment criterion.
- The Chair invites other assigned reviewers to provide their rating and any additional information or differing viewpoints.
- The Chair opens the discussion to the rest of the committee members.
- The Chair asks the committee to reach a consensus for the rating for the criterion before moving to the next criterion.
 - The committee can assign one of five ratings for each criterion.
 - The rating assigned should accurately reflect the proposal's strengths and weaknesses identified during the discussion for each criterion.

Note that Expert Committees are not asked to make funding recommendations.

Only proposals that meet the fund's threshold of excellence will move to the next stage. (See "[What is the threshold of excellence?](#)")

Step 3 – After the meeting

Expert Committee reports

Expert Committee members are not required to draft Expert Committee reports. CFI staff draft a report for each proposal that summarizes the committee's consensus ratings and comments. The report will list the committee members' names and affiliation, but no comments will be attributed to a single member.

Part 3 – Criterion standards and instructions provided to applicants (with instructions for reviewers)

To assess proposals, use the rating scale shown in Figure 2 of this document and repeated here for quick reference.

Figure 2: Rating scale



Objective 1

Create and enhance partnerships with the public, private or not-for-profit sectors that lead to innovation. These innovations must address social, business, health or environmental needs of a Canadian industry or community

Assessment criteria under this objective are:

- Applied research or technology development
- Partnerships

Applied research or technology development

Criterion standard: The proposed applied research or technology development activities respond to clearly identified needs of an industry or community and have been developed in collaboration with partners to ensure the research achieves the intended outcomes.

Address each of the following aspects:

- What are the needs of your industry or community and how did you determine them (e.g. stakeholder consultations, environmental scan)?
- What applied research activities will you undertake with your partners? For each, include the following:
 - What are the objectives?
 - What is the methodology?
 - What are the intended outcomes?

Make sure your descriptions provide a sufficient level of detail for experts in the field who will judge the feasibility of the activities.

Describe collaborations with partners in the “Partnerships” section.

Partnerships

Criterion standard: The institution has demonstrated its ability to build and maintain productive partnerships with an industry or community. The institution has identified partners for the planned applied research activities. The institution has a plan to stimulate new partnerships with the industry or community.

Address each of the following aspects:

- What is your college's track record of establishing and maintaining research partnerships with the industry or community? Please include information about the:
 - Outcomes of previous partnerships
 - Longevity of previous partnerships
 - Partner contributions to research in the past (e.g., financial, personnel time, participation in the research activities). (Only address the last two aspects if you are requesting more than \$250,000.)
- Who are your partners for the proposed applied research activities?
- How did you select your partners? (Only address this aspect if you are requesting more than \$250,000.)
- How will you reach out to the industry or community to stimulate new partnerships?

Objective 2

Enhance and optimize the proven applied research capacity of the college that is related to the proposed applied research or technology development activities

Assessment criteria under this objective are:

- Infrastructure
- Team

Infrastructure

Criterion standard: The requested infrastructure is necessary and appropriate to conduct the proposed applied research activities. It enhances and integrates with the college's existing applied research capacity. The infrastructure will be optimally used and maintained to ensure continued collaborations with, and relevance to, the industry or the community.

Address each of the following aspects:

- Describe each requested item and justify why acquiring the infrastructure is the best way to meet the needs of the proposed research program. Indicate the item number, quantity, location, cost that you have entered in the "Cost of individual items" table. Provide a cost breakdown for any grouping of items. For construction or renovation, provide a description of the space including its location, size and nature (e.g., wet lab, greenhouse).
- How does the requested research infrastructure enhance and integrate with the existing research infrastructure at your college?
- How is the requested infrastructure relevant and essential for creating and enhancing collaborations with partners? (Only address this aspect if you are requesting more than \$250,000.)
- How is the requested infrastructure versatile and able to respond to immediate and longer-term applied research needs of the industry or the community? (Only address this aspect if you are requesting more than \$250,000.)
- How will the infrastructure be optimally used and maintained? Specify the operating and maintenance costs and revenue sources needed to sustain the requested infrastructure over its useful life (five years and beyond). Refer to the "Financial resources for operation and maintenance" table in the finance module.

When you describe each item, be sure to specify the item's main features so reviewers can judge its suitability for conducting the proposed activities using the methodology described.

Consider explaining how much the infrastructure will be used in your regular operations for the proposed applied research activities (e.g., number of samples processed per day, hours of operation, number of users).

- If you are requesting funding for construction or renovations essential to house and use the CFI-funded infrastructure or to conduct the research activities described in the proposal, provide the following information in a separate document as part of the finance module:
 - A timeline identifying key dates for the various stages of the proposed construction or renovation. (We expect colleges to finalize contracts and start the construction or renovation component of a funded project within 18 months of the funding decision. This applies to every site when a project involves multiple sites. While we recognize that some projects involve large

and complex construction or renovation components, we expect your college to have completed planning and development work for such a project before applying.)

- Floor plans of the proposed new area(s), showing the location of the requested infrastructure and the scale of the plans
- A detailed breakdown of the overall cost of the construction or renovation project, categorized by cost component (i.e. direct costs, soft costs and contingency costs), when these costs are expected to be more than \$500,000.

Instructions for reviewers

Your assessment should consider the appropriateness of the budget and cost estimates. This budget evaluation should identify any expenses that you feel are not adequately justified for the planned activities.

Team

Criterion standard: The team comprises the breadth of expertise and experience needed to conduct the proposed applied research activities and operate the requested infrastructure.

Address each of the following aspects:

- What is the experience, expertise and contribution of the research and technical staff (from your college and from your partners) to conducting the applied research and operating the requested infrastructure?
- How will staff from your college (e.g., administrative, business development) support the research and ensure the sustainability of the infrastructure? (Only address this aspect if you are requesting more than \$250,000.)
- What are the specific challenges or systemic barriers (see "[How are systemic barriers defined?](#)") that exist in the context of your research program that could prevent individuals from underrepresented groups from participating equitably within the research team?
- Describe at least one concrete practice that you put in place to overcome the challenges or systemic barriers previously described and which demonstrates that equity and diversity were intentionally considered when composing the research team and recruiting team members.
- Describe at least one concrete practice that you will adopt to facilitate the ongoing inclusion of underrepresented groups in the research team, and how you will implement that best practice given the challenges or systemic barriers previously described.

For examples of best practices, consult the [Government of Canada's Best Practices in Equity, Diversity and Inclusion in Research](#).



How are systemic barriers defined?

Systemic barriers are defined as policies or practices that result in some individuals from underrepresented groups receiving unequal access to or being excluded from participation in employment, services or programs. Underrepresented groups can include, but are not limited to, women, Indigenous Peoples, persons with disabilities, members of visible minorities/racialized groups, members of LGBTQ2+ communities and early-career researchers.

Objective 3

Generate social, economic, health or environmental benefits locally or nationally including the development of highly qualified personnel

Assessment criterion under this objective is:

- Benefits

Benefits

Criterion standard: The proposed activities are likely to lead to social, economic, health or environmental benefits at the local or national level. The proposed activities will enable the development of highly qualified personnel.

Address each of the following aspects:

- What are the anticipated benefits of the applied research activities for the industry or community beyond the outcomes described in the “Applied research” section? This can include knowledge mobilization and technology transfer activities.
- What is your plan for training highly qualified personnel through applied research activities (e.g., co-op projects, capstone projects, paid internships) using the requested infrastructure? How many people will be trained and which skills will they acquire?
- Describe at least one action that you will take to promote equitable access to applied research opportunities for highly qualified personnel using the requested infrastructure. What efforts will be taken to ensure an inviting and inclusive training environment? (While we encourage you to consider this aspect in your applied research activities, you are not required to provide information, nor will we assess this aspect until 2024.)

If applicable, quantify the anticipated benefits of the applied research activities for the industry or community (e.g., number of jobs created, amount of increased revenue, number of people helped).

Instructions for reviewers

Your assessment should consider a broad range of potential benefits. In addition to more common benefits, some other examples include:

- Increased participation of underrepresented groups (including those who may face systemic barriers (see [“How are systemic barriers defined?”](#)))
- Increased scientific literacy among the public
- Public engagement
- Partnerships outside of academia
- Published datasets.