

CANADA FOUNDATION FOR INNOVATION

Biosciences Research Infrastructure Fund

Competition for biocontainment
and large-animal facilities

Guidelines for the Strategic
Review Committee

August 2022

INNOVATION

Canada Foundation
for Innovation

Fondation canadienne
pour l'innovation

*Enhancing Canada's research capacity
for pandemic readiness*



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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 nonprofit 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



Who should use these guidelines?

These guidelines are for members of the Strategic Review Committee that will assess proposals for the Canada Foundation for Innovation's Biosciences Research Infrastructure Fund competition for biocontainment and large-animal facilities. We thank you for your time and invaluable contribution to the Biosciences Research Infrastructure Fund!



List of acronyms used

BRIF	Biosciences Research Infrastructure Fund
CAMS	CFI Awards Management System
CFI	Canada Foundation for Innovation
CL3	containment level 3
CL4	containment level 4
O&M	operation and maintenance
SRC	Strategic Review Committee

Part 1 – What you need to know about this competition

Purpose of the Biosciences Research Infrastructure Fund

To advance the Government of Canada’s biomanufacturing and life sciences priorities, Budget 2021 announced \$500 million for the Canada Foundation for Innovation (CFI) to support the infrastructure needs of postsecondary institutions and research hospitals in these areas. Canada’s leading postsecondary institutions and their affiliated research hospitals anchor much of the bio-innovation ecosystem. Important foundational components are centred in these institutions, including laboratories, research and talent.

Canada’s scientists need high-performance tools and innovative research spaces and laboratories to bring their ideas from discovery through development and commercialization. In many cases, their work requires specialized equipment in appropriate biocontainment facilities to ensure that infectious disease research is conducted safely. Supporting surveillance, diagnostics, and pre-clinical and clinical trials with flexible research infrastructure capacity is critical to Canada’s biomanufacturing and life sciences ecosystem.

The World Health Organization has recognized that animal models are key to advancing COVID-19 treatments. Canada’s federal COVID-19 Therapeutics Task Force further noted that access to animal models and laboratories with the appropriate expertise is a challenge faced by researchers and smaller Canadian firms in developing therapeutics. This challenge is equally valid for numerous infectious diseases beyond COVID-19.

This Biosciences Research Infrastructure Fund (BRIF) competition will respond to these critical needs by investing in containment level 3 (CL3) and containment level 4 (CL4) facilities (as defined in the [Canadian Biosafety Standard](#)) in research hospitals and postsecondary institutions and associated large-animal facilities capable of working with infectious materials. Research infrastructure funded through this competition will strengthen the capacity of academia to work with industry and government to advance promising discoveries and promote training and talent development.

The CFI will only fund proposals that:

- Meet a high standard of scientific excellence
- Best respond to government priorities to address pandemic readiness and emerging health threats
- Hold the greatest potential to develop commercially viable vaccines and therapies.

CFI investments will ensure that funded CL3 and CL4 facilities are collaborative, durable, flexible, multi-institutional and capable of serving researchers in all relevant disciplines in support of [Canada’s Biomanufacturing and Life Sciences Strategy](#).

Objectives of this competition

The objectives of this competition for biocontainment and large-animal facilities are to:

- Address immediate infrastructure needs in postsecondary institutions' and affiliated research hospitals' capacity to support pandemic preparedness and respond to emerging health threats, consistent with Canada's Biomanufacturing and Life Sciences Strategy
- Support the development of strong linkages among researchers working in a variety of settings, including government laboratories, and users of research results in all sectors
- Create an environment to attract and train highly qualified personnel linked to the needs of the biomanufacturing and life sciences sector.

Competition budget

The CFI will invest up to \$115 million in research infrastructure funding and will fund up to 60 percent of a project's eligible infrastructure costs. Institutions must obtain the remaining 40 percent from other funding partners, typically from provincial governments and other public, private and non-profit organizations. In addition, the CFI will provide up to \$34.5 million for associated operating costs through the Infrastructure Operating Fund.

Operation and maintenance costs

The CFI will contribute to the operation and maintenance (O&M) costs of funded projects through the Infrastructure Operating Fund. Institutions will automatically receive an allocation equivalent to 30 percent of the CFI contribution for funded projects.

Review process

Through our structured merit-review process, we ensure that proposals are reviewed in a fair, competitive, transparent and in-depth manner. This process relies on independent reviewers from across Canada and around the world to ensure the best projects receive funding. The reviewers' time and effort are invaluable to help the CFI's Board of Directors make funding decisions.

For the Biosciences Research Infrastructure Fund, we use a two-stage merit-review process: review of proposals by Expert Committees followed by a subsequent review of proposals by a Strategic Review Committee (**Figure 1**). These guidelines are for reviewers taking part in the second stage of this process — the Strategic Review Committee. We provide separate guidelines to reviewers taking part in other stages of the process.

Figure 1: The Biosciences Research Infrastructure merit-review process



Expert Committees

In the first stage of review, Expert Committees, comprised of members selected for their expertise in the subject matter of the proposals, assessed groups of similar proposals. They assessed the strengths and weaknesses of each proposal in relation to the assessment criteria (for more about the assessment criteria for this competition, consult the [call for proposals](#)). Proposals that did not meet the competition's threshold of scientific and technical excellence were not recommended for funding and will not be reviewed by the Strategic Review Committee.

Strategic Review Committee

In the second stage of review, the Strategic Review Committee (SRC) reviews proposals that Expert Committees have identified as meeting or exceeding this competition's threshold of scientific and technical excellence.

The SRC's role is to recommend research infrastructure investments that are well aligned with and directly support the objectives and priorities of the Biomanufacturing and Life Sciences Strategy, relative to other competing requests.

Informed by the Expert Committee reports and a summary of each proposal, the SRC is responsible for:

- Recommending projects that are in strategic alignment with the Strategy objectives as well as with other related investments
- Assessing other benefits to Canada
- Recommending the amount that the CFI should award for each proposal.

The recommendations of the SRC will be provided to the CFI Board of Directors to inform its decision making. Authority for the final approval of all awards remains with the CFI Board.

Funding decisions

Informed by the recommendations of the SRC, the CFI Board of Directors will make funding decisions at its meeting on October 4, 2022. After this meeting, we will notify institutions of the decisions and send them the Expert Committee and SRC reports.

Part 2 – How to conduct your review

The SRC will use a three-step process to evaluate the proposals recommended by the Expert Committees.

Step 1 – Before the meeting

Attend briefing sessions

Two briefing sessions have been organized for SRC members:

- A briefing session about Canada's [Biomanufacturing and Life Sciences Strategy](#) was organized by the Tri-Agency Institutional Programs Secretariat (TIPS) to provide context and facilitate an efficient strategic review. If you were not able to attend, a recording of this session is available on SSHRC's extranet (see "[How to access review materials](#)").
- The CFI will schedule a second briefing session to present the requirements of the BRIF competition and discuss the review process. This session is expected to be held August 24th. The date and access to the session will be communicated via email, and the relevant materials and recording of the session will be made available on SSHRC's extranet shortly after the session is over (see "[How to access review materials](#)").

How to access review materials

You will have access to the following documents to conduct your review:

- Proposal summaries
- Expert Committee reports
- Preliminary assessment form
- Template agenda (final agenda to be provided in September after we receive the preliminary assessment forms)
- Reference materials including these guidelines, the call for proposals and briefing material for the [Biomanufacturing and Life Sciences Strategy](#) as well as the CFI merit-review process.

You can access the review materials through SSHRC's extranet once they are available. You will have received instructions via email on how to finalize your account and set up your password to access this platform. For technical assistance, please contact SSHRC through their helpdesk at 613 995-4273 or by e-mail at webgrants@sshrc-crsh.gc.ca.

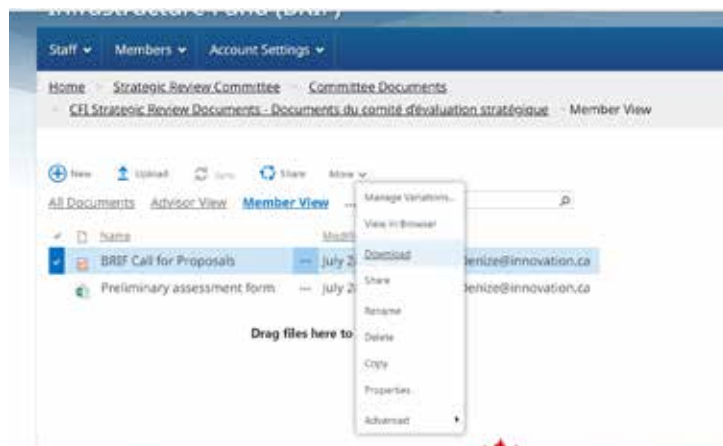
To access your material, once logged into SSHRC's extranet, hover your cursor over the "Members" tab (see **Figure 2**). Templates, guidelines and briefing materials will be accessible through "Committee Documents." Proposal information, such as the proposal summaries and Expert Committee reports, will be accessible through "Member Library." See **Figure 3** for instructions on how to download your review materials. Upload your completed preliminary assessment forms to "Member Library" (see "[Conduct your preliminary assessment](#)").

Figure 2: SSHRC's extranet and folders



Figure 3: Downloading your review materials

To download review materials, first select the item(s) you would like to download. A checkmark should appear beside the selected item(s). Once selected, click the “More” option at the top right of the screen. From that menu, select the “Download” option. Note that only files can be downloaded (not folders). To view the documents in your browser without downloading them, simply click the name of the file.



Conduct your preliminary assessment

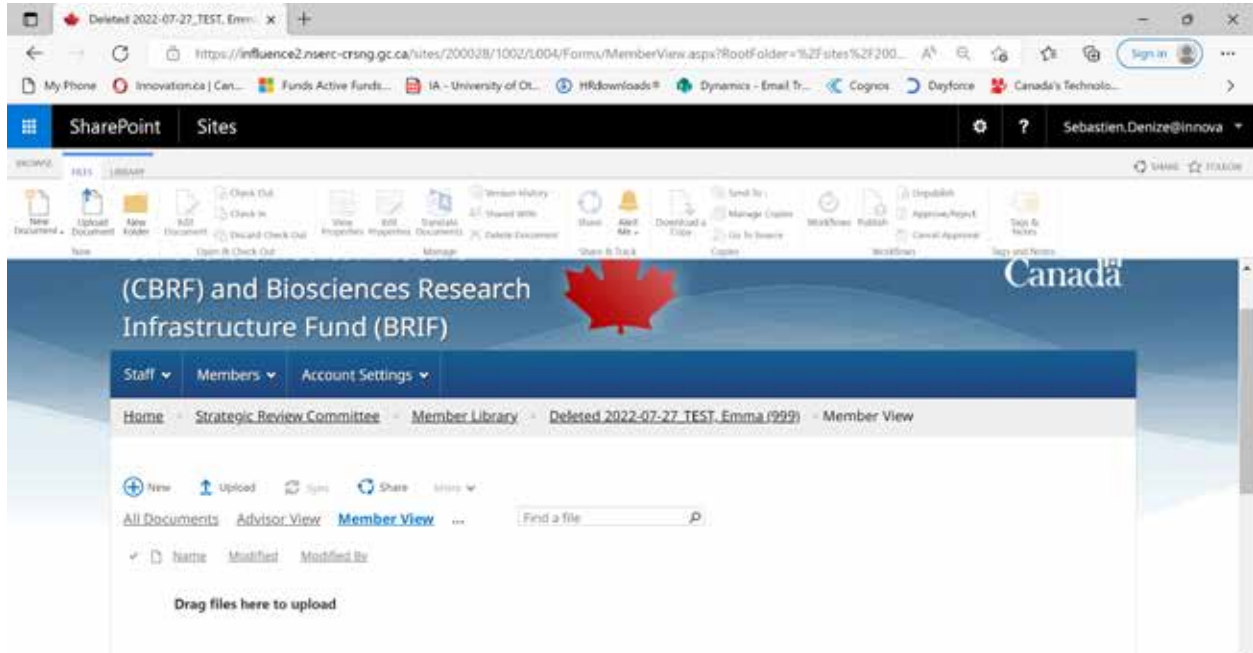
We ask that each member of the SRC individually review and rate each of the proposals before the committee meets. First, you will use the CFI’s five-point rating scale (see [“Rating scale”](#)) to rate each proposal on the degree to which it meets the three competition objectives (see [“Objectives of this competition”](#)). Record your ratings in the preliminary assessment form and support them with information provided in the review materials.

Second, identify a portfolio of projects (up to \$115 million) you would recommend for funding. Record this in the preliminary assessment form as a preliminary recommendation to fund or not fund a proposal and substantiate your selection with information provided in the review materials. In determining your preliminary portfolio recommendations, we encourage you to focus on what portfolio of projects, if funded, would best align with and support the objectives and priorities of the Biomanufacturing and Life Sciences Strategy, while also considering any associated benefits funding these projects could provide for Canada. Associated benefits may include, but are not limited to, knowledge transfer and dissemination, training of highly qualified personnel, etc. Your selection of a portfolio of projects does not need to be limited to those to which you gave the highest ratings in the first part of your preliminary assessment.

Complete your preliminary assessment form and upload it to the “Member Library” (see **Figure 2**) on SSHRC’s extranet no later than **August 29, 2022**. Instructions on how to upload your completed preliminary assessment form can be found in **Figure 4**. Preliminary assessments will not be shared with applicants. They will only be used to help us steer the meeting discussions and organize the meeting agenda.

Figure 4: Uploading your preliminary assessment form

Preliminary assessment forms are uploaded in the “Member Library.” Once in your “Member Library,” you can upload your completed form in one of three ways: by dragging and dropping the relevant files or by selecting one of the two upload buttons.



Rating scale

The CFI uses a five-point rating scale with statements about the degree to which a proposal meets a competition objective (**Figure 5**). We encourage the committee to use the full range of ratings, as appropriate, to assess proposals. It is important to substantiate your rating with justifications on how the proposal does (or does not) meet the competition objectives.

Figure 5: Rating scale

EX	SA	SW	PS	NS
The proposal satisfies and significantly exceeds the competition objective	The proposal satisfies the competition objective	The proposal satisfies the competition objective, but has a few minor weaknesses	The proposal partially satisfies the competition objective and has some significant weaknesses	The proposal does not satisfy the competition objective due to major weaknesses

Step 2 – At the meeting

The Strategic Review Committee will meet by videoconference on September 6, 2022 from 1 to 4 p.m. (EDT). We will provide instructions for connecting to the videoconferencing platform in advance of the meetings.

Discuss the proposals

During the meeting, the committee will discuss each proposal in turn for approximately 10 minutes. The Chair will call upon a member to provide a very brief overview of the proposal and discuss its fit to the Biomanufacturing and Life Sciences Strategy. The Chair will then open the discussion to the rest of the committee for comments regarding the proposal's strengths, weaknesses and fit to the Biomanufacturing and Life Sciences Strategy. The discussions will be focused on areas of significant discrepancies, as identified by the preliminary assessment of the competition objectives and funding recommendations (see "[Conduct your preliminary assessment](#)").

Reach consensus

Following the general discussion of the proposals, the committee must ultimately reach a consensus on a portfolio of proposal that most efficiently support and advance the objectives and priorities of the Biomanufacturing and Life Sciences Strategy to recommend to the CFI Board of Directors. The total amount recommended must not exceed the competition budget of \$115 million. The recommendations must be substantiated by the meeting discussions and supported by information provided in the review materials.

The preferred CFI approach is to provide applicants with the full funding requested, when justified, rather than implement individual or across the board cuts to the budgets. However, there may be cases where partial funding is deemed appropriate, such as cases where the Expert Committee did not recommend full funding (e.g., ineligible items). Any recommended cuts to the budget should be strongly supported through the discussions and information provided in the review materials.

Step 3 – After the meeting

Review committee reports

Final recommendations will be captured in Strategic Review Committee reports drafted by the CFI. The committee Chair will review the reports and confirm that they accurately reflect the committee's consensus discussions. The reports will not contain the names or affiliations of the SRC members, nor will any comment be attributed to a single member.

Timeline and key activities

This table summarizes the key activities for SRC members and important dates for the competition.

Table 1: Timeline and key activities for

Dates	Who	Activity	Tasks
August 2022	SRC members	Attend briefing sessions	<ul style="list-style-type: none"> Attend or view the recording of the briefing sessions
August 2022 to September 2022	SRC members	Assess proposals	<ul style="list-style-type: none"> Review competition guidelines Access the review material Notify the TIPS of any potential conflicts of interest at src-ces@sshrc-crsh.gc.ca Review and rate each proposal against the competition objectives and fit to the Biomanufacturing and Life Sciences Strategy using the Preliminary Assessment form
August 29	SRC members	Submit preliminary ratings and recommendations	<ul style="list-style-type: none"> Submit your Preliminary Assessment form using the SSHRC's extranet (see "Conduct your preliminary assessment")
September 6, 2022	SRC members	Attend SRC meeting	<ul style="list-style-type: none"> Participate in the SRC meeting Collectively determine an investment portfolio that most efficiently advances the objectives and priorities of the Biomanufacturing and Life Sciences Strategy
September 2022 to October 2022	SRC Chair	Approve reports	<ul style="list-style-type: none"> Review and provide feedback on the Strategic Review Committee reports drafted by the CFI
October 4, 2022	CFI Board of Directors	Review SRC recommendations	<ul style="list-style-type: none"> No tasks required of SRC members
October 2022	CFI staff	Notify institutions of funding decisions	<ul style="list-style-type: none"> No tasks required of SRC members