

Background information and Guidelines for reviewers

John R. Evans Leaders Fund





The CFI's mission and mandate

Created by the Government of Canada in 1997, the Canada Foundation for Innovation (CFI) strives to build our nation's capacity to undertake world-class research and technology development to benefit Canadians. Thanks to CFI investment in state-of-the-art facilities and equipment, universities, colleges, research hospitals and non-profit research institutions are attracting and retaining the world's top talent, training the next generation of researchers, supporting private-sector innovation and creating high-quality jobs that strengthen Canada's position in today's knowledge economy.

Support from the CFI enables institutions to set their own research priorities in response to areas of importance to Canada. This allows researchers to compete with the best from around the world, and helps to position Canada in the global, knowledge-based economy. The research enabled by CFI support is also creating the necessary conditions for sustainable, long-term economic growth, including the creation of spin-off ventures and the commercialization of discoveries, and supporting improvements to society, quality of life, health, the environment, and public policy.

Additional information on the CFI is available on our website at <u>www.innovation.ca/en</u>.

Overview of the John R. Evans Leaders Fund (JELF)

The JELF is designed to help universities attract and retain the very best of today's and tomorrow's researchers at a time of intense international competition. To this end, the JELF offers universities the opportunity to:

- acquire infrastructure for their leading research faculty to undertake cutting-edge research; and
- create competitive packages of research support in the form of infrastructure and a portion of the operating and maintenance costs from the CFI, coupled with direct research costs from partner organizations.

The JELF is intended to serve the infrastructure needs of individual faculty, or small groups of up to three faculty members where there is a need to share infrastructure. The JELF is not intended to serve the infrastructure needs of larger groups, centres, departments or institutions. The CFI does not require that the requested infrastructure be for the exclusive use of the candidate(s) but that the infrastructure be required to conduct their groundbreaking research and that the candidate(s) maintain priority access to it.

The candidate(s) put forward by an institution must be recognized leaders in their field or who show promise of becoming research leaders. They must be engaged in, or embarking upon, an innovative research program for which the infrastructure is essential and which will provide an enriched research environment.

A university that has sufficient funds in its JELF allocation may put forward a proposal. The CFI will provide funding for up to 40 percent of the eligible costs of a funded proposal.

The CFI will also contribute to the operating and maintenance costs of approved proposals through its Infrastructure Operating Fund (IOF). The IOF allocation will be equivalent to 30 percent of the CFI funding awarded to an institution for proposals approved under the JELF.

Merit Review Process

The CFI evaluates proposals on the basis of the three broad criteria that reflect the CFI's mandate: research or technology development; benefits to Canadians; and capacity for innovation. To be considered for funding, a proposal must satisfy all three criteria to a degree commensurate with the size and complexity of the proposal.

- 1. Research or technology development
 - a. The research or technology development opportunity is timely and has the potential to lead to breakthroughs. The proposed activities are innovative and at the leading edge internationally.
 - b. The principal users of the infrastructure are experts in the relevant research or technology development domains. The team has the necessary expertise, ability and relevant collaborations and partnerships in place to successfully conduct the research or technology development programs.
- 2. Benefits to Canadians
 - a. The research or technology development programs lead to tangible benefits for society, health, the economy and/or the environment.
 - b. Appropriate measures are in place to transfer the research results and outputs of the technology development to end users in a timely manner.
- 3. Capacity for innovation
 - a. The infrastructure is necessary and appropriate to conduct the research or technology development programs. The use of the infrastructure will be maximized within and among institutions and sectors (private, public and non-profit).
 - b. The institution has made, and will continue to make, tangible and significant commitments in support of this area of strategic priority. The proposed infrastructure will be effectively managed, operated and maintained for its useful life.

The three criteria above are expressed by six individual review factors. Each factor contains a number of points that the applicants must address in the proposal. Failure to address all the points within each of the review factors will weaken the proposal. The review factors are:

- Research and technology development;
- Researchers;
- Need for the infrastructure;
- Training of HQP
- Benefits to Canadians; and
- Sustainability.

Each assessment factor will be evaluated against a standard. Reviewers will be asked to rate the degree to which the proposal meets each standard, based on the information provided in the proposal. Specifically, the information will be assessed on whether the requirements for that standard are:

- Not satisfied;
- Partially satisfied;
- Fully satisfied;
- Fully satisfied and significantly exceeded in one or more key aspects.

The standards for each factor can be found in Appendix 1.

Assessors are further expected to justify their choice by commenting on the <u>strengths and</u> <u>weaknesses</u> of the proposal with regards to each standard.

Given the goals of the JELF, the review focuses on the evaluation of the candidate(s), as opposed to the other users or collaborators in the research process. Proposals will therefore have to clearly describe the:

- qualifications and accomplishments of the candidate(s) in relation to the proposed research and research training;
- infrastructure that is being requested for use by the candidate(s) and why it is essential to carry out the candidates' proposed research;
- how the infrastructure facilitates the attraction or retention of the candidate(s);
- value added of an additional award in cases where the candidate(s) have previously
 received an award through other CFI programs. Specifically, the results and outcomes of
 the previous award must be highlighted.

Proposals submitted to the JELF are assessed by a minimum of two reviewers, each selected from either the JELF College of Reviewers, the list of suggested reviewers provided by the institution or one chosen by CFI staff.

Reviewers will be given access to their personal reviewer dashboard on the CFI's secure, online awards management system (CAMS). Through CAMS, all relevant documentation is provided, including the proposal to be reviewed, and the relevant Institutional *Strategic Research Plan Summaries* to refer to in assessing the proposal's fit within its institution's plans.

Funding decisions

Following the CFI Board of Directors meeting and the announcement of the Board's funding decisions, copies of the expert reports will be provided to the applicant institution.

Terms of reference for reviewers

Governing principles

Expert reviewers must adhere to the CFI's Statement on ethics, conflict of interest and confidentiality (see Appendix 3. The CFI expects the research community to not contact reviewers for information on committee deliberations. Reviewers are instructed not to discuss anything related to the review process or specific proposals with other members of the research community. They will only receive additional information or representations relating to proposals from the CFI directly, and must refer all inquiries for other material or information directed to them personally, to the CFI for response.

Appendix 1 - Assessment criteria

Research or technology development

Criterion standard: The proposed research or technology development is of high quality and originality, and meets international standards. It will create knowledge or develop technology leading to innovation.

- 1. Describe the proposed research or technology development program and its innovative aspect.
- 2. Explain why it is important to pursue the proposed research or technology program at this time.
- 3. Explain how the proposed research or technology development program complement or differ from comparable programs being conducted nationally and/or internationally.

Researchers

Criterion standard: Compared to researchers at the same stage in their career, the candidate(s) demonstrates excellence and leadership.

The candidate has the necessary expertise and relevant collaborations in place to successfully conduct the research or technology development program proposed.

- 1. Describe the expertise and ability of the candidate(s) to lead the proposed research or technology development program.
- 2. Describe the technical expertise of the candidate(s) to make the best use of the requested infrastructure.
- 3. Describe the existing collaborations and partnerships essential to the success of the research or technology development program.

Need for the infrastructure

Criterion standard: The infrastructure is necessary and appropriate to conduct the research or technology development program.

In cases where the infrastructure will not be fully used by the candidate(s), the institution has developed plans to maximize its utilization within and/or outside the institution.

- 1. Describe the requested infrastructure and how it will enable the proposed research or technology development program.
- 2. Explain how the infrastructure will be fully utilized by the candidate(s) and other users (if applicable).
- 3. Identify similar infrastructure available within the institution, the region and the country.
- 4. Describe the value added of an additional award in cases where a candidate has previously received a CFI award.

Training of highly qualified personnel (HQP)¹

Criterion standard: The infrastructure requested will create or enrich an environment promoting the attraction of high-quality trainees.

This environment will help impart new high-level skills to HQP and adequately prepare them for research and other careers.

- 1. Describe how the infrastructure will enhance the current training environment for HQP in this area.
- 2. Describe how the infrastructure will better prepare HQP for research and other careers.

Benefits to Canadians

Criterion standard: The research or technology development program has the potential to lead to tangible benefits for society, health, the economy and/or the environment. There are measures in place to transfer the research results and outputs of the technology development to potential end users in a timely manner.

- 1. Beyond the creation of new knowledge and the training of HQP, describe the expected benefits to Canadians and why they are significant.
- 2. Identify potential end users of the research or technology development results and describe the plans for knowledge mobilization and/or technology transfer.

Sustainability

In completing this section, applicants are asked to refer to the tables in the section entitled *Financial resources for operation and maintenance* which will be automatically appended to the end of the project module attachment for ease of reference for the sustainability criterion.

Criterion standard: The institution has made, and will continue to make tangible and significant commitments in support of this area of strategic priority leading to the attraction and/or retention of key personnel.

The proposed infrastructure will be effectively operated and maintained for its useful life.

- 1. Describe how the proposed project is of importance to the institution and the tangible contributions the institution has made or will make in support of this established area of strategic priority.
- 2. Describe the operating and maintenance needs of the infrastructure over its useful life.
- 3. Outline sources of support for operation and maintenance costs and explain the contingency plans should any of this support become unavailable.

¹ Highly qualified personnel (HQP) include technicians, research associates, undergraduate students, graduate students and post-doctoral fellows

Appendix 2 - Common CFI definitions

For all CFI funds, the following definitions apply:

Infrastructure

The CFI funds projects to develop or acquire research infrastructure. It does **not** fund the conduct of research or salaries of investigators.

Infrastructure is defined as equipment, scientific collections, computer software, databases, and communication linkages used or to be used primarily for carrying on research including the housing and installations essential for the use and servicing of this infrastructure.

Innovation

Innovation is a process that begins with the creation of knowledge in research, and continues through its applications, for the benefit of Canadian society.

Research

Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts or on new knowledge directed primarily towards a specific practical aim or objective.

Technology development

Systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or devices, to installing new processes, systems and services, or substantially improving those already produced or installed.

Research training

Training of highly qualified personnel (HQP) through research, including technicians, technologists, undergraduate students, graduate students, postdoctoral fellows and other trainees.

Applicant

For all CFI awards, institutions are the applicants, not individual researchers, thus only institutions may submit applications to the JELF.

Appendix 3 - Statement on Ethics, conflict of interest, and confidentiality

Conflict of interest and confidentiality agreement for review committee members, external reviewers and observers

The Canada Foundation for Innovation (CFI) must meet the highest ethical and integrity standards in all that it does in order to continue to merit the trust and confidence of the research community, the government and the public. CFI review committee members, external reviewers and observers must meet the highest standards of ethical behaviour to maintain and enhance public confidence in CFI's ability to act in the public's best interest and for the long-term public good. Where a conflict arises between private and public interests, review committee members, external reviewers and observers will be expected to take the necessary measures to ensure that the public interest is protected.

Conflict of interest

A conflict of interest is a conflict between a person's duties and responsibilities with regard to the review process, and that person's private, professional, business or public interests. There may be a real, perceived or potential conflict of interest when the review committee member, external reviewer or observer:

- would receive professional or personal benefit resulting from the funding opportunity or proposal being reviewed;
- has a professional or personal relationship with a candidate or the applicant institution;
- has a direct or indirect financial interest in a funding opportunity or proposal being reviewed.

A conflict of interest may be deemed to exist or perceived as such when review committee members, external reviewers or observers:

- are a relative or close friend, or have a personal relationship with the candidates;
- are in a position to gain or lose financially/materially from the funding of the proposal;
- have had long-standing scientific or personal differences with the candidates;
- are currently affiliated with the candidates' institutions, organizations or companies including research hospitals and research institutes;
- are closely professionally affiliated with the candidates, as a result of having in the last six years:
 - frequent and regular interactions with the candidates in the course of their duties at their department, institution, organization or company;
 - o been a supervisor or a trainee of the candidates;
 - collaborated, published or shared funding with the candidates, or have plans to do so in the immediate future;

- been employed by the applicant institution;
- feel for any reason unable to provide an impartial review of the proposal.

The CFI reserves the right to resolve areas of uncertainty and to determine if a conflict exists.

Disclosure and compliance measures

Any review committee member, external reviewer or observer who becomes aware of a conflict of interest must promptly disclose the conflict to CFI staff. The CFI will determine if it constitutes a conflict of interest and what measures—such as recusal—are required. No review committee member, external reviewer or observer may participate in the review process of a proposal with which he/she is in conflict of interest. The conflict of interest depends on the role and level of involvement of a review committee member, external reviewer or observer and the size of the research team. Such disclosures and compliance measures shall be documented and retained for the record.

Confidentiality

The CFI is subject to the *Privacy Act* and the *Access to Information Act*. These laws govern the collection, use and disclosure of information under the control of the federal government and certain federally funded organizations. Documentation submitted to the CFI by the applicant institution may be provided to the review committee members, external reviewers and observers. The documentation may contain personal information and confidential commercial information. By law, candidates have the right of access to the information provided by review committee members and external reviewers about their proposals. The names of external reviewers must be kept confidential to ensure they can provide an impartial review of a proposal. Review committee members' names can be released at the discretion of the CFI. Written materials used in the review process are generally made available to candidates when they are notified of the funding opportunity results.

Review committee members, external reviewers and observers must ensure that:

- all documentation and information that the CFI entrusts to review committee members, external reviewers and observers is maintained in strict confidence at all times. It must be used only for the purpose for which it was originally collected namely, to review proposals and make funding recommendations as applicable;
- review documentation is stored in a secure manner to prevent unauthorized access. It must be transmitted using secure techniques and when it is no longer required, it must be destroyed in a secure manner. Any loss or theft of the documentation must be reported to the CFI;
- all enquiries or representations received by review committee members, external reviewers or observers about a proposal or its review must be referred to the CFI. Review committee members, external reviewers or observers must not contact the candidates for additional information or disclose matters arising from the review process to the candidates.

Additional requirements for review committee members and observers:

- Review deliberations are confidential. Comments made by review committee members during the review of proposals and the conclusions of the committee's review must never be discussed or disclosed with individuals not involved in the review process unless required by legislation or the courts.
- The identity of successful candidates and the details of the awards must remain confidential until a decision is made by the CFI and officially announced to the candidates and the public. The identities of unsuccessful or ineligible candidates are not made public and must not be divulged unless required by legislation or the courts.
- During the meeting, observers must be as unobtrusive as possible to minimize disruption and must not remove from the meeting room written notes or documentation related to reviewer assignments, ratings or reviewer comments on proposals.

Confirmation

I have read and understood the Conflict of interest and confidentiality agreement. I agree to comply with the requirements of the Conflict of interest and confidentiality policy of the federal research funding organizations. (Additional information can be found in procedural guidelines for the specific review process.) I understand that any breach of this agreement will result in a review of the matter, with the CFI reserving the right to take appropriate action including, but not limited to, my removal from serving on or observing current or future CFI review committees or from serving as an external reviewer. The use of review documentation for any other purpose could result in a CFI investigation and/or report to the federal Privacy Commissioner's Office. Any action that the CFI may or may not take will not prevent a person whose privacy rights have been compromised from seeking legal action against the respondent. By signing this form, I also certify that I am not currently ineligible to apply for and/or hold funds from the CFI, the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada, the Social Sciences and Humanities Research Council of Canada or any other research or research funding organization worldwide for reasons of breach of policies on responsible conduct of research—such as ethics, integrity or financial management policies.

I agree to take personal responsibility for complying with these requirements.

Name

Signature

Date