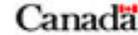




Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada



International Joint Venture Project 2005

Call for Project Outlines

To be successful in the global knowledge-based society and to address today's health, environmental, and socio-economic challenges, Canada needs to lead international research activities. Canadian institutions and their researchers need to capitalize on their capacity to perform research at the highest international standards of excellence by forging partnerships with the very best researchers and institutions in the world. This will facilitate our ability as a country to take full advantage of the knowledge and talent found in Canada and internationally.

In 2002, the CFI invested about \$165M in nine projects, including three Joint Venture projects, to help Canadian institutions lead and participate in major multi-national research projects. There is \$35M remaining to fund a fourth International Joint Venture project. As such, the CFI is initiating a competition for this funding and is collaborating with the CIHR, NSERC, SSHRC, and Genome Canada¹ to establish an outstanding international research project located in Canada. This collaboration is intended to ensure that the successful project has the infrastructure and research support required to achieve its objectives. The CFI will pay up to 100 percent of the infrastructure costs, and the required Canadian research support will be provided by one or more of the Agencies and Foundations and other sponsors, as appropriate.

The successful project will be a joint collaborative research venture between one or more leading Canadian institutions, and at least one leading institution located outside Canada. It will be a collaboration between the very best in Canada and the very best in the world. The project will ensure Canadian leadership in the research area and will promote a distinctive Canadian contribution. The successful project is likely already in development and will be able to provide clear evidence of substantive existing collaborative links with the proposed international partner(s).

In what kinds of projects do we want to invest?

The successful proposal will establish in Canada a major joint international research project in an area of significant potential benefit to Canada. The term 'project' is used in this Call for

¹ Hereafter the term "Agencies and Foundations" will be used to refer to the CFI, NSERC, CIHR, SSHRC and Genome Canada.

Project Outlines to refer to the set of activities required to carry out the proposed program of research. It includes:

- the direct costs of the research;
- the infrastructure (the facility and/or equipment, and their operational and maintenance costs);
- training activities; and
- other research related activities.

The Canadian institution(s) will actively collaborate with one or more internationally leading research intensive institution(s), whether in the public or private sector. In addition to the scientific merit of the proposed research, the nature and extent of this collaboration will be at the heart of the review of proposals. The project will require contributions from sources outside Canada. This Call will use the term 'contributions' throughout to mean the resources required by the project. This may be in the form of cash funding or in-kind contributions (e.g., personnel, donations, discounts etc.).

Eligible Canadian institutions are encouraged to join with international partners to develop challenging and transformative projects that will lead to significant benefits for Canada and the other countries involved. Projects should be in areas highlighted in the strategic research plans of the participating Canadian institutions.

We are interested in receiving proposals that focus on the development of enabling technologies and enabling knowledge, broadly defined. That is, the development of advanced technologies, knowledge, services, and support systems. These should aim to underpin the competitiveness of Canadian business and/or to improve the health, welfare, and well-being of Canadians and Canadian society. In addition, they should help to develop a world-class research capability in Canada.

In the 2001 CFI International Funds competitions, nine projects were funded spanning a number of areas (See Appendix 1). While excellent projects in these areas are not excluded, all other things being equal, proposals in other areas will be preferred.

We are interested in projects that:

- Capitalize on innovative research opportunities and extraordinary capability in Canada, and require international partnership to fully achieve the research objectives.
- Enable researchers to work on groundbreaking projects in the development of enabling technologies, and enabling knowledge that require research talent and facilities that are beyond the capability of Canadian institutions to tackle alone.
- Increase research excellence and strengthen Canada's capacity for innovation by having Canadian researchers participate in international collaborations, and having excellent researchers from other countries do research in Canada.
- Create a stimulating and innovative training environment with an international dimension in order to better prepare individuals for research and other careers.
- Make a substantive demonstrable contribution to the Canadian economy and/or to the improvement of society, the quality of life, health, or the environment.

- Are already relatively mature in their development of the research and collaborations, and in the planning of infrastructure needs.

Who is eligible to apply and receive funds?

Canadian universities, colleges, hospitals, and not-for-profit research institutions that have been recognized as eligible by the Agencies and Foundations can apply for, and receive, funds. They can apply provided they have filed the summary of their strategic research plan and signed the Institutional Agreement with those organisations, where normally required.

Eligible institutions will be responsible for the management of funded projects.

Given the terms of the competition, it is likely that the project will be located on a single site or facility; the location or construction of infrastructure outside Canada is not eligible. Some projects may involve several eligible institutions across the country. In such cases, institutions may choose to form a consortium to manage, operate, and use the infrastructure. Funds may not be transferred to non-eligible institutions to cover the cost of their participation.

What types of support are eligible?

For a general description of eligible costs, see the program guides for each Agency or Foundation. The electronic addresses of these are listed at the end of this document.

We envisage the costs falling into three broad groupings: infrastructure, research and training, operations and maintenance. In all cases, the proposal should be clear on what funding is being requested and from which funding body, and what has yet to be obtained (including the source and timing).

Infrastructure: The CFI will cover up to 100 percent of the eligible capital costs of the project, not to exceed \$35M. However, the CFI encourages institutions to seek additional capital funding from other partners where this will broaden the scope of the initiative and make for better outcomes.

Research: Funding for direct research costs may come from three sources: the Federal Granting Agencies and/or Genome Canada, other Canadian sources, international sources. The proposal should include the necessary research funding required from the Granting Agencies, and indicate where other funding has been obtained.

Operations and Maintenance: The proposal may also include funding to contribute to the incremental operating and maintenance costs associated with capital projects. Up to 25 percent of the available CFI funding may be attributed to O&M.

Whether the application is submitted by a single institution, or on behalf of a consortium, we expect the applicants to commit to operate, manage, and maintain the infrastructure in the longer term.

What contributions are expected from partners?

Although it is recognised that the Agencies and Foundations and other sponsors, as appropriate, are likely to be the major sources of funding in Canada, it is expected that there will be contributions provided for the project from sources outside Canada. Applicants are also encouraged to secure additional contributions from other Canadian sources.

Contributions may be made towards the capital costs, research costs or maintenance, and operations costs. Contributions must be necessary for the program of research to be undertaken.

The project outline must make a persuasive case that contributions from international partners will be assured by the time the Agencies and Foundations make their funding decisions.

It is expected that international partners will cover the costs of their own research and any infrastructure located outside Canada that is needed for the collaboration. Canadian partners (e.g., government agencies or companies) that are not eligible recipients may also contribute to activities related to the project, or in the project itself, in the context of collaborations with eligible institutions.

The project will likely build on work previously, or currently, supported by the Agencies or Foundations, or other sources. However, this project must propose new work and the requested funding cannot substitute for other current funding or contributions.

What is the application process?

Application notification

To ensure an appropriate review of the project outlines is appropriate, prospective applicants are asked to notify the CFI by June 30, 2005, of their intention to submit a project outline and provide a brief description of the project, including the following elements:

- project title and subject area(s);
- anticipated collaborating institutions (domestic and international); and
- estimate of funding to be requested from the Agencies and Foundations.

This notification will not be subject to evaluation. It is for planning purposes only.

Project Outlines

Institutions must submit a project outline by October 31, 2005. The outline—of no more than 12 pages, plus 2 one-page annexes—should describe:

- the proposed research and the research opportunity (stressing its transformative qualities);
- the infrastructure;
- the nature, status, and expected benefits of the proposed international collaboration, including the agreements with international partners;
- the institutions and researchers involved and their partners (no CVs required);
- the potential benefits to Canada;
- the plans for the longer-term management and operation of the infrastructure;
- the timeline and deliverables for both the implementation of the infrastructure, and the research program; and
- the estimated budget---including details of the research, capital, training, research-related activities and operations requirements, and the value and sources of the expected domestic and international funding and contributions.

The project outline must be a complete and self-contained document. Further documentation, such as CVs, letters of reference or support, etc., is not required. However, we reserve the right to request them at a later stage. Applicants may submit a one-page annex providing brief biographies of the key individuals in the project. The outline must also include a one-page annex pro-form spreadsheet for the proposed budget.

From these project outlines, we intend to invite between one and four applicants to submit a full proposal for funding. The format of that proposal and the timing of the submission will be determined at that time, depending on the nature of the invited proposal(s).

Details of where to send the notification and project outline can be found at the end of this document.

How will we assess proposals?

Only one project will be funded. The aim, therefore, is to select about four proposals from among the project outlines. The institutions that submitted those proposals will be invited to develop a full proposal.

Project Outlines

Administrative review

The first step of the process will be an administrative review of submissions to ensure that broad eligibility expectations appear to have been met.

The eligibility requirements are that the project will:

- establish a joint research project in Canada;
- include substantive participatory collaboration with at least one research institution, centre of excellence, or facility located outside Canada;
- include essential contributions from sources outside Canada; and
- have the necessary resources for the research, infrastructure, and operations

Outlines that meet the eligibility requirements will proceed to the next step to be judged against the review criteria.

Review of Project Outlines

The review of project outlines will be more exacting than usual. There is sufficient funding for one project. Therefore, to encourage or require the development of many full proposals would not be an effective use of resources. Although the project outline is longer than might be expected, it is still brief, so care will be needed to make the case and fulfill the requirements. In particular, we will be seeking assurance that the full costs of the project will be accounted for.

Project outlines will be reviewed by a multidisciplinary assessment committee (MAC) appointed by the Agencies and Foundations. Using the criteria described below, the MAC will assess the relative merits of the proposals and recommend about four proposals for further development.

The committee will review the project outlines against the following criteria:

1. Quality of the proposed research and the need for infrastructure.
 - Excellence and innovative potential of the research and the researchers at the very highest of international standards.
 - The contribution of the research to developing enabling technologies or enabling knowledge.
 - Demonstration that the proposed infrastructure and the international collaboration are essential to develop innovative research activities that could not be pursued otherwise.
 - Effectiveness of the proposed infrastructure in meeting the needs of the research activities planned.
 - Governance issues, including the management, operation, and maintenance of the project on an ongoing basis.
2. Contribution to strengthening the capacity for innovation.
 - Importance of the project to institutional capacity for innovation.
 - Potential for increased international visibility for Canadian research.

- Contribution to exchanges of highly qualified personnel (e.g. awareness of the international dimension of research), unique expertise from abroad.
 - Contribution to the training of highly qualified personnel.
 - Contribution to building sustainable linkages of high quality among institutions and researchers within Canada and outside Canada, among sectors and disciplines.
3. The potential benefits to Canada of the research and the international collaboration.
- Improvement of the environment, health, and quality of life; and/or
 - Contribution, through innovation, to job creation and economic growth (including commercialization of research results).
4. Resource planning
- The full resources required by the project, in terms of cash, personnel, and other contributions.
 - The value and appropriateness of all contributions, and the overall viability and sustainability of the project in the context of the stated objectives.

A proposal must meet all criteria, to a degree appropriate to the size and complexity of the project, in order to be eligible to be invited to submit a full proposal.

Full Proposals

About four projects will be invited to submit to a full proposal. The format of the application and the timing of the process will be determined by the nature of the proposals invited. Although the broad project requirements and review criteria will remain, as stated above, they may be drafted with a greater degree of specificity or definition. This will depend on the nature of the proposals selected and the funders' requirements.

The review process will include review by Expert Committee(s), followed by review and funding recommendations made by a MAC. Whenever possible, review and decision processes currently employed by the Agencies and Foundations would be used for these proposals. The specific details of the requirements and review arrangements will be discussed with each of the invited applicant institutions. As part of these discussions, applicants will be invited to suggest names of potential reviewers.

The full proposal will also need to address governance and accountability issues. The precise requirements may vary depending on the funding partners for the project, but projects would be expected to have a management committee and a scientific advisory committee, both of which should be independent. These would provide support and advice for the project and would have an important role in advising on research plans and in assuring the quality of the project outcomes and deliverables.

Other review possibilities

There may be other possible review requirements, for example, if an additional funding partner wishes to participate in the review. At present, these cannot be predicted. However, if an opportunity arises at the full proposal stage, the review implications will be discussed with the applicants.

Funding decisions

This Call is a joint activity of the CFI, CIHR, NSERC, SSHRC and Genome Canada. Projects will require funding from the CFI and, probably, one or more of the Agencies and Foundations. The decision to proceed with the invitation to submit full proposals will be agreed to by all organisations, although the review process and the final funding decision will rest with the Agencies and Foundations from whom the selected proposals are requesting funding. We expect to invite full proposals early in 2006.

The lead applicant institutions will receive a summary of comments made as a result of the review process.

The successful institution(s) will be responsible for ensuring that the necessary inter-institutional and international agreements for a project are in place. We reserve the right to review these.

Expected Timelines

- | | |
|---|---------------------|
| ▪ Call for project outlines issued | April 2005 |
| ▪ Closing date for submission of project outlines | October 31, 2005 |
| ▪ MAC review of project outlines | Dec. 2005/Jan. 2006 |
| ▪ Invitation to proceed to full application | Feb./Mar. 2006 |

Where to Submit the Project Notification and Project Outlines

Project notification

The President or VP Research of the lead institution should submit an email to kevin.hamilton@innovation.ca or fax to 613 943 0923, no later than **June 30, 2005**.

Project Outlines

One copy of the project outline should be submitted no later than **October 31, 2005**, to:

Elaine Salmon
Canada Foundation for Innovation
230 Queen Street, Suite 450
Ottawa ON K1P 5E4
(613) 947 6124

The outline should be accompanied by a letter from the President of the applicant institution, or their designate, in order to establish the validity of the application.

The document should use regular 8.5" x 11" paper, and text of no less than 12 point. The outline may include pictures and diagrams within the 12 pages permitted.

Contact

Any queries on the process or requirements should be addressed to Kevin Hamilton at the CFI: kevin.hamilton@innovation.ca or tel: 613 947 6124.

Agency and Foundation program and finance policy guides

CFI: <http://www.innovation.ca/programs/index.cfm?websiteid=84>

Genome Canada:

<http://www.genomecanada.ca/GCprogrammesRecherche/CONCOURS/concoursIII/INDEX.ASP?l=e>

Granting Agencies: http://www.nserc.gc.ca/professors_e.asp?nav=profnave&lbi=toefin
and http://www.nserc.gc.ca/professors_e.asp?nav=profnave&lbi=f3

CFI Awards: International Funds 2001²

The **International Joint Ventures Fund** aimed to support the establishment of a small number (no more than four) of high-profile research infrastructure projects in Canada, to take advantage of extraordinary research opportunities with leading facilities in other countries that will bring significant benefits to Canada. Funding of \$100M was available and the following three projects were funded:

An International Facility for Underground Science: \$39.9M

Lead by David Sinclair of Carleton University

Advanced Laser Light Source (ALLS): \$20.9M

Lead by Jean-Claude Kieffer of the INRS

A Canadian Icebreaker to Study the Changing Arctic Ocean: \$27.5M

Lead by Louis Fortier of the Université Laval

The **International Access Fund** aimed to provide Canadian institutions and their best researchers with access to facilities in other countries and major international collaborative programs. They were expected to perform innovative research through unique collaborative research opportunities that would lead to significant benefits for Canada. Funding of \$100M was available and the following six projects were funded:

Canadian Participation at the Spallation Neutron Source: \$15M

Lead by Bruce Gaulin of McMaster University

Canadian Participation in the North American Program in Radio Astronomy: \$7.9M

Lead by Andrew Taylor of the University of Calgary

Canada-Kenya International Collaboration on Infectious Diseases Research: Building on Strengths and Enhancing Capacity for Innovation: \$3.8M

Lead by Francis Plummer of the University of Manitoba

NEPTUNE Canada: \$31.9M

Lead by Christopher Barnes of the University of Victoria

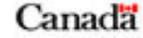
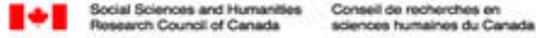
SCUBA-2: A Submillimetre Camera for Astronomy: \$12.3M

Lead by Michel Fich of the University of Waterloo

KOPIO: A new Investigation into the Heart of Matter: [not finalised]

Lead by Douglas Bryman of the University of British Columbia

² Note: these lists include only the project leader and their institution, although in all cases, the projects were awarded to consortia of Canadian institutions



International Joint Venture Project Project Outline

Applicant Institution(s)	
International partner institution(s)	
Canadian Lead Researcher Address Telephone Email	
Project title (20 words max)	
Funding requested (from CFI, CIHR, NSERC, SSHRC, Genome Canada)	
Total cost of project (funding from all sources)	
Project keywords (up to 10)	
Brief description of Project (100 words)	
Signature of President of Applicant Institution Name and Date:	

Project Outline

This section may be no more than 12 pages in length. It should address the criteria set out in the Call in a form appropriate for the proposed project, but following the order set out on page 5.

**International Joint Venture Project
Project Outline: Budget information**

	Construction	Equipment	Research*	Training	O&M*	Others	TOTAL
Canadian Funding							
CFI							
CIHR							
NSERC							
SSHRC							
Genome Canada							
Totals							
Other Canadian							
(funder)							
(funder)							
International funding in Canada							
(funder)							
(funder)							
International funding not in Canada							
Est. spending profile	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Canadian Funding							
All Funding							

* Assume broad categories: 'research' includes direct research costs; 'O&M' (operations and maintenance) includes infrastructure operations and maintenance costs. All costs must be described in the proposal.

**International Joint Venture Project
Project Outline: Personnel information**

International Joint Venture Project

Notes for completing the Application Form

The **Application Form** is a free text document but with a pre-set order for presenting the material. The length of each section is to be determined by the applicant, as appropriate for the nature of the project. However, the proposal must be self-contained. The free text section may not exceed 12 pages in length, but may include images etc.

The proposal must have a cover page for basic project information. This is not included in the 12 pages. This page must be signed by the President (or designate) of the Canadian lead applicant institution.

The application must also include two one-page Annexes, in addition to the 12 pages of text.

The **Budget Annex 1** should be completed according to the best information available. We are looking for information on the full project costs, recognising these are unlikely to be definitive until a full proposal is prepared. The 'Canadian funding' section must be completed in full, using the lines for those organisations from whom funding will be requested. It may not be possible to disaggregate the funding from other sources (i.e., International and other Canadian) into the sub-headings, but total available/expected funding should be included.

Particular points to note include:

- The 'research' heading should include the usual direct research costs that would be requested from a Granting Agency.
- The 'O&M' column refers to the operations and maintenance costs of the facility. **Note:** Up to 25 percent of the CFI funding may be allocated to these costs.
- The 'spending profile' lines should include the contributory costs for the first six years of the project. It is likely that, in the initial years, these will involve only construction and equipment. The 'Canadian' line should include only the costs requested from the Agencies and Foundations.

The funding requested should be described in more detail in the proposal.

The **Personnel Information** allows one page to describe briefly the leading researchers involved with the project. CVs are not required for the project outline.

Letters of Support are not required for this proposal. Any letters submitted will be kept on file but will not be used in the review.