



APPLICATION INSTRUCTIONS

(revisions/updates are in red font)

The Canada First Research Excellence Fund (the Fund) application for Competition 2 consists of seven mandatory parts:

1. [Application Institutional Strategy \(Part A\) Form](#)
2. [Institutional Strategy Proposal \(Part A\) attachment](#)
3. [Institutional Strategy \(Part A\) budget justification attachment](#) – see update noted below and in Part 3
4. [Scientific Strategy \(Part B\) Form](#)
5. [Scientific Strategy Proposal \(Part B\) attachment](#)
6. [Scientific Strategy \(Part B\) budget justification attachment](#) – see update noted below and in Part 6
7. [Application Administrative Form](#)

The following three parts may also be included with the application:

8. [Biosketches \(attachments\)](#) for up to 10 key individuals for the scientific strategy
9. [Letters of support \(attachments\)](#)
10. [Additional Suggested Reviewers form](#) (for application; in **addition to those** provided in the Letter of Intent [LOI])

Update regarding the budget justification attachments: the page limit has been revised to a **total of up to 20 pages**. Applicants may divide this total page limit as they see fit between the budget justification attachment for the Institutional Strategy (Part A) and the budget justification attachment for the Scientific Strategy (Part B). The limit of 4 pages for each budget justification attachment no longer applies.

The following instructions provide details for completing, preparing and submitting the above documentation.

The following should be combined and submitted as one integrated, searchable PDF (not a scanned image):

- Institutional Strategy (Part A): parts 1, 2 and 3 listed above.
- Scientific Strategy (Part B): parts 4, 5, and 6 (as well as parts 8 and 9) listed above.

Part 7 (and Part 10, if applicable) listed above should each be submitted as a separate, searchable PDF (not a scanned image) attachment. The exception is the signed signature page included in the Application Administrative Form (Part 7), which can be a scanned copy.

Only institutions successful at the LOI stage can submit an application. A scientific strategy that differs significantly from the contents of the LOI (with respect to the area of research and its alignment with science, technology and innovation (ST&I) priority research areas) will not be considered in the application submission for Competition 2. All partners and their contributions should now be secured, unless they remain "potential" partners because, while they have been approached, their involvement is planned for the latter years of the initiative or is dependent on successfully completing earlier phases of the initiative. It is understood that there may be changes since the list of partners presented in the LOI—for instance, if a partner had not been confirmed in time for the LOI submission. The amount requested should not differ significantly between the LOI and application; the total amount provided by the institution, its partners and other sources should also not change significantly.

Each eligible institution can submit only one application—including ONE scientific strategy (Part B)—as the lead institution. There is no limit for the number of scientific strategy (Part B) proposals on which an institution can be listed as a partner. The applications will be adjudicated by peer review.

Completed applications must be uploaded into the Fund's application portal by **9 p.m. (eastern), March 29, 2016**.

Well in advance of the application deadline, **a Fund application portal account will be set up for each of the institutions that were successful at the LOI stage.**



If, after reviewing the Fund website and these instructions, you have questions about the application process, please email information@cfref-apogee.gc.ca.

Application Adjudication

Each application will be adjudicated based on the following selection criteria:

- **Criterion 1: Scientific merit and demonstrated capacity to lead on an international scale (future potential).** The application must describe the scientific strategy and how the grant would be used to achieve the stated objectives. This includes:
 - originality and positioning of the proposed research with respect to existing national and international capacity;
 - potential for the proposed research to provide breakthrough impact on a global scale; and
 - potential for the institution to demonstrate global research leadership in the proposed area(s).
- **Criterion 2: Strategic relevance to Canada:**
 - potential for the proposed research to create long-term economic advantages for Canada;
 - ability of the proposed initiative to leverage additional resources and promote knowledge mobilization through partnerships with:
 - the private sector;
 - international research institutions; and/or
 - public sector, academic and philanthropic organizations, both in Canada and abroad; and
 - potential for the research results to foster innovation (e.g., to create or build upon commercial endeavours, advance public policy, or otherwise mobilize research discoveries).
- **Criterion 3: Quality of implementation plan:**
 - quality of the institution's vision, and institution's willingness to commit internal resources towards supporting the proposed initiative;
 - demonstrated strength of the institution's research culture and standards;
 - quality of the implementation and risk management plans; and
 - suitability of the institution's performance measurement plan as a basis for monitoring progress and assessing results.

A scientific strategy must comprise a high-level research program or initiative in an institutional priority research area of focus.

The LOI application presented information with which to assess the institution's existing scientific capacity in the area proposed to advance its scientific strategy (part of Criterion 1), and to assess the alignment of the proposed research area(s) of focus with the federal ST&I research priority areas (part of Criterion 2). The LOI will be made available for the review of the application, in order to provide background information and context. Should applicants have pertinent updates since the LOI regarding the institution's current position and its existing strengths and capacity, they may indicate these briefly in their scientific strategy (Part B) proposal. Additional pages will not be provided to accommodate these updates.

The focus of selection will be whether applicants meet the threshold and standard for consideration under the Fund—i.e., does the application appropriately respond to the Fund's intended goals and ambition, based on the above elements of the selection criteria? Specifically, applications must meet a minimum rating of "Fully Satisfactory" on all criteria noted above, as rated by the review panel and selection board.

External expert reviews will be sought as part of the review process for applications. External expert reviewers will assess the scientific strategy proposal (Part B) only (criteria 1 and 2).

Note: An eligible institution can propose **only one scientific strategy proposal (Part B) as the lead institution**

Each application will be considered a holistic package, and will be adjudicated accordingly. Application proposals must demonstrate that the institution has the capacity for global leadership, is capable of being among the top one to five per



cent of centres of academic excellence globally, and can sustain world leadership in the proposed area(s). The Fund's objective is **not** to develop capacity where there is emerging potential.

Where possible, an institution may find synergies and merge, integrate or combine multiple research initiatives into one scientific strategy. However, the institution will need to demonstrate the integration and synergy within the strategy and the linkage/ connection between any subcomponents.

A scientific strategy will have one common theme, and can include multiple thrusts. The proposal must clearly demonstrate how these thrusts or subthemes are intricately linked, and how they can be brought together to provide a coherent strategic focus for the institution under a clearly integrated institutional leadership. The institution must make the case, in its proposal, for the choice of theme and subthemes, and must describe how advancing these would serve the institution's overall strategic focus for global excellence.

It is important to remember that submitting a scientific strategy with multiple subthemes that do not all meet the standards of excellence expected for the Fund might raise doubts about the institution's ability to self-assess its global position and to establish objectives aligned with its demonstrated strengths (as assessed under Criterion 1: Scientific merit and demonstrated capacity to lead on an international scale). It may also be perceived as demonstrating a weakness in the institution's ability to make the difficult choices that will undoubtedly be required to successfully implement an initiative of the scale and scope of a Fund initiative (an underlying element to Criterion 3: Quality of implementation plan)."

There is no limit to the number of proposals led by other institutions on which an institution can be identified as a partner.

Part 1: Application Institutional Strategy (Part A) Form

Complete each of the required fields (grey boxes) in the form.

Institutional Strategy Summary

Provide a summary (250-word maximum) describing the institution's overall strategy, relative to the Fund, for achieving global excellence and leadership in research, in areas of strategic relevance for Canada. This summary will be used in the application adjudication process, and for publicity and program communications purposes.

Funding Request

Applicants can request grant funding to support the implementation of the institutional strategy as a whole, separate from and complementary to funding requested for implementation of the scientific strategy. Examples of institutional strategy implementation activities include (but are not limited to): co-ordination of the scientific strategy; governance of the initiative; communications activities; and contributions towards an international initiative extending beyond the scope of the scientific strategy. It is not mandatory to request grant funding for the implementation of the institutional strategy.

Indicate the sources of funding, and how funds will be used, among the two categories of eligible expenses (direct and indirect costs) for the implementation of the institutional strategy. Funding requested for and allocated to the scientific strategy must be outlined in the Scientific Strategy Proposal (Part B) Form.

Please refer to [the Canada First Research Excellence Fund website](#) for details on eligible costs under each expense category.

Enter the approximate total amount of funding (rounded to the nearest thousand) that will be requested for the duration of the grant (if applicable) for implementation of the institutional strategy (implementation plan).



Include planned expenses to be incurred as of September 1, 2016. Include funding and contributions (one-time and ongoing) committed and available as of September 1, 2016 (not retroactively). Do not include funds from the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), the Canadian Institutes of Health Research (CIHR), any tri-agency program, or the Canada Foundation for Innovation (CFI).

You must attach a budget justification. See Part 3 below.

Note: All grants will be for a duration of seven years. If a grant is awarded, the total budget will be disbursed to the institution in quarterly installments over the duration of the grant.

The total funding requested to cover the indirect costs of research cannot exceed 25 per cent of the total grant amount. However, the funding requested to cover the indirect costs of research in any of Part A and Part B can exceed 25 per cent of the total requested for that Part.

There are no requirements for matching funding for a Fund grant. However, the institution's ability to leverage other resources is one of the subcriteria that will be used to evaluate the scientific strategy. Furthermore, the institution's willingness to commit internal resources is one of the subcriteria that will be used to evaluate the institutional strategy.

Alignment with the Mandates of the Federal Research Funding Agencies

Please refer to information on the agency [mandates](#) to help with this estimate. The proposed initiative must align with one or more of the three agencies' mandates, but does not have to align with the mandates of all three agencies.

Part 2: Institutional Strategy Proposal (Part A) Attachment

In Part A, institutions must present a formal overall institutional strategy, in relation to the Fund. This strategy should indicate how the institution plans to achieve the Fund's ambitious objectives, in areas of strategic relevance for Canada and in line with approved corporate strategic plans. Part A must describe in detail how the grant would be used to achieve the institutional strategy's stated objectives. It should also provide broad context and justification for the strategic choice of area(s) of focus and the overall institutional direction toward a position of global excellence and leadership in research.

Part A will be used in the adjudication process to assess the strategic and managerial aspects of the proposal. Specifically, it will be used to assess elements related to [selection Criterion 3](#): Quality of implementation plan:

- quality of the institution's vision, and the institution's willingness to commit internal resources towards supporting the proposed initiative;
- demonstrated strength of the institution's research culture and standards;
- quality of the implementation and risk management plans; and
- suitability of the institution's performance measurement plan as a basis for monitoring progress and assessing results.

The intended audience for Part A is generalists.

Applicants must adhere to the following guidelines in completing the Institutional Strategy Proposal (Part A) attachment:

- Must not exceed **12 pages**.
- The proposal should address the selection criteria outlined above, as well as supply any other relevant information relating to the criteria. Information must be provided under the headings outlined below. The scale of reference for all evidence, indicators and data should demonstrate leadership in a global context.
- The attachment may include tables, charts, graphs, illustrations and references, which are encouraged to help summarize information, but **will** count as part of the page total.
- Any extra pages or materials provided in addition to those requested will be removed.
- Either single- or double-column presentation of text, graphs and illustrations is acceptable.



- The institution's name must appear at the top of each page. Number all pages. Use 12-point or larger Times New Roman font. Paper must be 8 ½" x 11" (21.5 cm x 28 cm). All page margins must be set at a minimum of ¾" (1.87 cm).

Proposal Headings

Vision and Commitment

Include:

- a description of the institution's vision, including the process by which this vision was arrived at and adopted by the institution; and
- a statement indicating the institution's willingness to commit dedicated internal resources towards achieving the Fund's objectives, as well as indicating its willingness to support the initiative(s).

Research Culture and Research Standards

Describe the institution's demonstrated strength in research culture and research standards, and how it demonstrates best practices and global leadership as a custodian of a research enterprise. This may include such areas as talent recruitment and management; resource management and strategic allocation of resources; intellectual property management; data management; provision of access to research publications and data; engagement with research users; research ethics, etc. Include an **equity plan** outlining how career and training benefits derived from the opportunities associated with the initiative will be made available to designated groups (women, visible minorities, Aboriginal people and persons with disabilities). The equity plan should include performance measures, including indicators; targets; and a monitoring and course-correction process.

Implementation Plan

Provide a plan that:

- outlines how the institution plans to use and allocate the grant funding and why;
- indicates the proposed governance, including accountabilities and the decision-making process regarding the allocation of the grant; and the respective roles to be played by governing bodies, senior management, management committees, partners, etc.; and
- includes a high-level outline of the scope of work and key activities, including a schedule with milestones and dependencies, a definition of roles and responsibilities, a plan for tracking progress, and expected outcomes and impacts.

Risks

Provide a risk assessment and management plan outlining the major risks that could impact progress or the achievement of the stated objectives of the initiative, as well as mitigation measures that will be put in place.

Performance

Provide a performance measurement plan, to be used as a basis for ongoing reporting, progress-monitoring and the evaluation of results during the midterm review. Performance plans should include baseline data for each indicator tied to an expected outcome or impact, as well as targets to be achieved at the various milestones of the strategy (at a minimum, targets should be identified for the midpoint and the end of the grant). For each indicator, the source of the data should be provided. Performance plans should also describe the processes used to monitor performance over the course of the grant, and to make course corrections as necessary. Performance measurement plans are expected to include performance indicators and metrics in relation to factors such as:

- evidence of global research excellence;
- ability to attract and retain the best and brightest talent;



- ability to mobilize knowledge for the benefit of society and the economy;
- contributions to national strategic priorities; and
- any other aspect that is relevant to the institutional strategy.

Note: The proposal must include baseline data for indicators tied to the key expected outcomes and impacts, to help reviewers assess the expected impact of the proposed initiative. For successful applicants, more detailed baseline data could be required at the outset of the award, to ensure the performance measurement plan is complete.

Part 3: Institutional Strategy (Part A) Budget Justification Attachment

Applicants must adhere to the following guidelines in completing the Institutional Strategy (Part A) budget justification attachment:

- **Must not exceed 4 pages.** The page limit has been revised to a **total of up to 20 pages between the budget justifications for both parts (A and B)**. Applicants may divide this total page limit as they see fit between the budget justification attachment for the Institutional Strategy (Part A) and the budget justification attachment for the Scientific Strategy (Part B). In some exceptional cases (e.g., if a large number of partners are involved), the Tri-agency Institutional Programs Secretariat (TIPS, formerly known as the Chairs Secretariat) may accept longer budget justifications. Please contact TIPS to verify appropriateness before submitting a longer justification section.
- Graphs and tables are encouraged.
- Any extra pages or materials provided in addition to those requested and approved will be removed.
- Information should be presented in the same order as in the budget table.
- The institution's name must appear at the top of each page. Number all pages. Use 12-point or larger Times New Roman font. Paper must be 8 ½" x 11" (21.5 cm x 28 cm). All page margins must be set at a minimum of ¾" (1.87 cm).

The budget justification should include (within the page limit):

- clarification concerning the timing of specific planned expenditures, e.g., if certain costs are expected to be defrayed at the beginning of the grant only (TIPS recommends including a table summarizing the planned expenditures on an annual basis);
- detailed descriptions of partners' contributions (cash or in-kind), including the timing and duration of such contributions (TIPS recommends including a table summarizing the annual planned contributions of partners and other sources);
- clarification concerning whether internal resources to be committed are incremental to the current state; and
- if the lead institution plans to transfer a portion of the grant to other Canadian postsecondary institutions eligible under the Fund, a clear outline of the timelines for such transfers and the amounts to be transferred.

Notes:

- Funds can only flow directly from the lead institution to other eligible Canadian partner institutions (i.e., partner universities, colleges and polytechnics that meet the eligibility criteria). For other academic and research institution partners involved in the initiative, the easiest transparent way to manage the funds would be to have these partners invoice the lead institution for services/activities completed as part of their participation in the research program, if applicable.
- Requests to use Canada First Research Excellence Fund funding for the purchase of larger equipment will be considered on a case-by-case basis. It would be a reasonable expectation on the part of the Fund program and peer reviewers that the top priority strategic areas of focus that the institution submits to the Fund would logically be the areas for which it would have reserved part or all of its CFI John R. Evans Leaders Fund (JELF) allocation (coherence with strategic plan). However, a limited JELF allocation would likely not be an acceptable justification to use the funding to acquire larger equipment. Timing of upcoming competitions (such as the CFI Innovation Fund) may be a justification, but only if it can be demonstrated that the equipment is required in a very timely fashion in order for the institution to seize a limited-time opportunity.
- Private sector partners cannot receive financial support through the Canada First Research Excellence Fund. They are expected to contribute in cash or in kind to the Fund-supported initiatives, and to self-fund their participation.
- Partner funds used to directly advance elements of the applicant institution's scientific or institutional strategy can be included as funding from other sources, whether they are spent in Canada or abroad.



- The total amount requested from the Fund will be paid quarterly in equal installments. The institution will be asked to manage its Fund award budget should its budget requirements not be spread uniformly over the award period. The budget justifications for parts A and B should reflect any expected fluctuations.
- For contributions from the institution, only incremental commitments subject to the grant being awarded should be included. Existing and ongoing commitments (e.g., existing faculty salary, existing lab space) should have been described in the presentation of the institution's current strengths and capacity, as these represent the current state rather than any incremental institutional commitment.

Part 4: Scientific Strategy (Part B) Form (institutions are only allowed as lead institution for ONE scientific strategy)

Complete each of the required fields (grey boxes) in the form.

Research Thematic Areas

There is no list of possibilities for the research themes. Feel free to use the vocabulary that best suits your proposal, including items from lists provided by the three federal research granting agencies and the CFI.

Research Disciplines

See the [list of research discipline codes](#).

Scientific Strategy Summary (300-word maximum)

Provide a summary describing the scientific strategy that will enable the institution to excel globally in this research area and create long-term economic advantages for Canada. Outline the main elements of the proposed research initiative and the nature of high-level activities to be funded. This summary will be used in the application adjudication process, for the recruitment of adjudicators, and for publicity and program communications purposes.

Alignment with Federal Science, Technology and Innovation Strategy Priority Research Areas and Focus Areas

Refer to the [Government of Canada's ST&I policy website](#) for further information on these priority and focus areas, particularly section [4.0 Focusing on Priorities](#).

These should match what was assessed in the LOI.

Partners

Please list all presently secured and potential partners. This information is required by the Tri-agency Institutional Programs Secretariat (TIPS) to ensure potential adjudicators/ reviewers are not in a conflict of interest with the lead institution or any key individuals involved with the research initiative.

A partner is an institution or organization, rather than an individual. Do not list every institution or organization with which a faculty member in the area of research may have a professional relationship or with whom they have co-published. **Partners are contributing partners with a defined and very concrete role to play in the implementation of the strategy.** These roles reflect strategic alliances and collaborations at the institution level. List as potential partners only those that have been approached and whose involvement is planned for the latter years of the initiative or is dependent on completing earlier phases of the initiative.

Participating Individuals

Key individuals



List **up to 10 individuals** who will hold a key leadership role in the implementation of either the Institutional Strategy (e.g., university administrator, head of centre or institute) or the Scientific Strategy (e.g., scientific director, lead researcher of any of the key research directions or areas that are the focus of the proposal). The final list of key individuals may vary slightly from that provided with the LOI submission; however, the overall maximum remains 10.

As per the instructions for biosketches in Part 8 below, **provide a biosketch** (maximum two pages each) **for these key individuals**. Relative to the LOI submission, individual biosketches may be resubmitted, updated or new. TIPS will not use biosketches submitted at the LOI stage.

The above information will assist adjudicators in assessing the future potential of the scientific strategy and its leadership in relation to the research objectives proposed.

Funding Request

Grant funding can be requested to support the implementation of the scientific strategy. Indicate the sources of funding, and how funds will be used, among the two categories of eligible expenses (direct and indirect costs) for the implementation of this scientific strategy. Funding requested for and allocated to the institutional strategy must be outlined in the accompanying Application Institutional Strategy (Part A) Form.

For contributions from the institution, only incremental commitments subject to the grant being awarded should be included. Existing and ongoing commitments (e.g., existing faculty salary, existing lab space) should have been described in the LOI presentation of the institution's current strengths and capacity, as these represent the current state rather than any incremental institutional commitment.

Please refer to [the Canada First Research Excellence Fund website](#) for details on eligible costs under each expense category.

Enter the approximate total amount of funding (rounded to the nearest thousand) that will be requested for the duration of the grant (if applicable) for the implementation of the scientific strategy.

Include planned expenses to be incurred as of September 1, 2016. Include contributions (one-time and ongoing) committed and available as of September 1, 2016 (not retroactively). Do not include funds from NSERC, SSHRC, CIHR, any tri-agency program, or the CFI.

Applicants must attach a budget justification. See Part 6 below.

Note: All grants will be for a duration of seven years. If a grant is awarded, the total budget will be disbursed to the institution in quarterly installments over the duration of the grant.

The total funding requested to cover the indirect costs of research cannot exceed 25 per cent of the total grant amount. However, the funding requested to cover the indirect costs of research in any of Part A and Part B can exceed 25 per cent of the total requested for that Part.

There are no requirements for matching funding for a Fund grant. However, the institution's ability to leverage other resources is one of the subcriteria that will be used to evaluate the scientific strategy. Furthermore, the institution's willingness to commit internal resources is one of the subcriteria that will be used to evaluate the institutional strategy.

Part 5: Scientific Strategy Proposal (Part B) attachment

In Part B, institutions must present a scientific strategy that addresses those elements of the Fund's selection criteria 1 and 2 (see below) not assessed in the LOI. A scientific strategy must comprise a high-level research program or initiative in an institutional priority research area of focus. Part B must describe in detail how the grant would be used to achieve the scientific strategy's stated objectives. It should demonstrate evidence of the institution's international position and reputation in the priority area, as well as the potential and promise of the program of research over the



duration of the award, in terms of scientific impact at a global level, societal (including economic) impacts, as well as impact on the institution's position of global excellence and global leadership in the research area.

Part B will be used to assess the following elements related to selection criteria 1 and 2:

- **Criterion 1: Scientific merit and demonstrated capacity to lead on an international scale (future potential):**
 - originality and positioning of the proposed research with respect to existing national and international capacity;
 - potential for the proposed research to provide breakthrough impact on a global scale; and
 - potential for the institution to demonstrate global research leadership in the proposed area(s).
- **Criterion 2: Strategic relevance to Canada:**
 - potential for the proposed research to create long-term economic advantages for Canada;
 - ability of the proposed initiative to leverage additional resources and promote knowledge mobilization through partnerships with:
 - the private sector;
 - international research institutions; and/or
 - public sector, academic and philanthropic organizations, both in Canada and abroad; and
 - potential for the research results to foster innovation (e.g., to create or build upon commercial endeavours, advance public policy, or otherwise mobilize research discoveries).

The intended audience for Part B is experts in the research areas.

Applicants must adhere to the following guidelines in completing the Scientific Strategy Proposal (Part B) attachment:

- Must not exceed **15 pages**.
- The proposal should address the application selection criteria outlined above, as well as supply any other relevant information relating to the criteria. Information must be provided under the headings outlined below. The scale of reference for all evidence, indicators and data should demonstrate leadership in a global context.
- Should applicants have pertinent updates since the LOI regarding the institution's current position and its existing strengths and capacity, they may include these in their scientific strategy proposal (Part B). Additional pages will not be provided to accommodate these updates.
- Applicants may include tables, charts, graphs, illustrations and scientific references, which are encouraged to help summarize information; this content **will** count as part of the page total.
- Any extra pages or materials provided in addition to those requested will be removed.
- Either single- or double-column presentation of text, graphs and illustrations is acceptable.
- The institution's name must appear at the top of each page. Number all pages. Use 12-point or larger Times New Roman font. Paper must be 8 ½" x 11" (21.5 cm x 28 cm). All page margins must be set at a minimum of ¾" (1.87 cm).

Proposal Headings

Criterion 1: Scientific merit and demonstrated capacity to lead on an international scale (future potential)

Heading1: Proposed Science, Technology and Innovation Strategy (i.e., scientific strategy)

This section must describe the high-level research initiative for the proposed research area(s) over the duration of the grant, addressing the prospective elements below, and others as appropriate.

Originality and positioning of the proposed research.

Provide information and insights on what makes the proposed science original with respect to existing national and international capacity, including:

- originality of the research directions and the combined disciplines and expertise;
- how and why this research will set the institution apart;
- the institution's comparative strength in the research area, as evidenced by, for example:
 - listing those national and international institutions/centres that are comparable and/or key contenders as leaders on an international scale in the research area;



- indicating what comparative advantages and disadvantages your institution has and will have in this research area in relation to global competitors (provide evidence to support statements); and
- describing the institution's strategy and approach to research collaborations and to recruitment as, for example, a means to complement the institution's comparative advantages/disadvantages relative to global competitors.

Potential for the proposed research to provide breakthrough impact on a global scale

Provide insights and evidence of the expected contributions and impacts on the research area(s):

- outline the future directions in research and development that will be enabled by the initiative;
- describe the current state of the research area your institution is proposing, and how this initiative has the potential to lead to transformative or paradigm-shifting research activities and results;
- provide a description of the proposed research program's expected impacts on ST&I at a global level;
- identify, as much as possible, the measurable research outcomes and impacts expected during and after the seven years of the grant.

Potential for the institution to demonstrate global research leadership in the proposed area(s)

Describe how the institution plans to build on its current strengths, and provide evidence of the potential for this to enhance/consolidate its leadership position in the research area(s).

Provide a high-level description of how the institution will use funds to maintain and enhance its position in this priority research area of focus. **Do not duplicate** content from the Budget Justification. Provide the following:

- describe how future plans for commitment of internal resources will enable the institution to achieve its objectives and those of the Fund, explaining to what extent these plans are incremental relative to the current state described above regarding existing strengths;
- outline talent-management and succession plans over time for any key leadership in the area(s) of research;
- indicate the space, infrastructure, research facilities and other support the institution will secure/provide;
- outline the expectations for the initiative in training students and researchers, considering competencies and demand for highly qualified personnel in the research area(s) and related sectors.

Indicate how the institution will seek to position itself in an enhanced leadership position in the research area(s) over five to seven years, including:

- the role of the initiative within the institution, group and/or centre in relation to existing faculty within the institution;
- how the current and any new faculty recruited in this particular research area are critical at this time to the development of Canadian research in this area, in the context of international knowledge and activities;
- the role of this ST&I strategy nationally and internationally.

Criterion 2: Strategic relevance to Canada

Heading 2: Potential for the proposed research to create long-term economic advantages

Describe the potential benefits to Canada of the strategy proposed. Be as concrete and specific as possible:

- Indicate how the initiative will improve Canada's research capacity (e.g., the extent to which a critical mass would be built in the area, the competitive advantage that would be developed, how Canada's reputation as a magnet for talent and centre of research excellence would be strengthened).
- Explain how the proposed ST&I strategy will, as appropriate:
 - improve Canada's social, cultural and economic prosperity and resilience;
 - improve the health and quality of life of Canadians; and
 - result in economic advantages (e.g., the extent of: knowledge transfer to the marketplace, a culture of innovation being developed in business, wealth generation from commercialization, etc.).
- Describe how the strategy will improve Canada's position and influence in the world.
- Indicate any other economic advantages to Canada.
- Discuss the longer-term potential deriving from this strategy, such as: plans to sustain the momentum created by the grant and to capitalize on the advantages provided by the seven-year funding; and plans to extend the reach of the institutional activities in the research area(s), during and after the grant's tenure. Be as concrete as possible in describing your plans, including any targets for growth and long-term funding prospects. Where possible, provide firm financial commitments (salaries, infrastructure, etc.).

**Heading 3: Ability of the proposed initiative to leverage additional resources and promote knowledge mobilization through partnerships**

Provide evidence of the potential to leverage contributions from the private sector; international research institutions; and/or public sector, academic and/or philanthropic organizations, both in Canada and abroad. Outline the institutional plan for leveraging additional resources during and after the tenure of the grant: Include the following information:

- describe both secured and potential partners, and leveraged funding; and
- demonstrate that the initiative will have the appropriate resources to enable world-leading research capacity.

Support your plan with the following information:

- 1) Indicate past success (targets set and percentage met) in leveraging funds for the institution as a whole, and in the research area(s) in particular, including:
 - externally sponsored research (provide data on sponsored research revenue for the past five years);
 - funding acquired over the past five years from external partners for the capital costs of relevant CFI projects; and
 - endowed chairs and centres at your institution.
- 2) Indicate prospective leveraging in the research area, including:
 - key partners who have expressed an interest in collaborating;
 - federal (e.g., tri-agency and CFI) and non-federal funding sources and programs that will be accessed for operating funds to build and strengthen the initiative (any funding from NSERC, SSHRC, CIHR [including tri-agency programs] and the CFI can be discussed here, but must not be included in the Proposed Use of Funds table in this Form as contributions from other sources);
 - other funding sources; and
 - overall expectations regarding leveraged funding for this ST&I strategy.

Be as concrete as possible in your projections, indicating targets that the institution has set.

Heading 4: Potential for the research results to foster innovation

Provide information on the knowledge mobilization strategy—including plans for innovation and commercialization, expected contributions to public policy, etc.—to create or build on commercial endeavours, advance public policy or otherwise mobilize research discoveries. Outline how benefits will be realized, and provide information on the institution's track record. Provide the following information:

- Describe the plans to engage with knowledge users at all stages of the research, from formulation of research questions to design of research projects to transfer of results.
- Identify the key receptors (firms, not-for-profits and governments) of the innovations and insights resulting from the research, and describe existing institutional partnerships and linkages with these receptors.
- Identify current challenges and barriers to, as well as opportunities for, enhancing the impact and use of research findings in the area(s). Please comment on factors specific to the area(s), and specific to this institution and its major partners. Discuss the institution's plans to mitigate these challenges, overcome these barriers and seize these opportunities.
- Explain how the institution will facilitate linkages with users of the research outputs and outcomes.
- Provide information on your institution's track record in knowledge translation, knowledge mobilization and/or technology transfer in the research area(s). Describe the structures and policies that exist to facilitate knowledge translation, knowledge mobilization and/or technology transfer to external receptors. Outline the institution's intellectual property policy, and its application in this area.

Part 6: Scientific Strategy (Part B) budget justification attachment

Applicants must adhere to the following guidelines in completing the Scientific Strategy (Part B) budget justification attachment:

- **Must not exceed 4 pages.** The page limit has been revised to a **total of up to 20 pages between the budget justifications for both parts (A and B)**. Applicants may divide this total page limit as they see fit between the budget justification attachment for the Institutional Strategy (Part A) and the budget justification attachment for the Scientific Strategy (Part B). In some exceptional cases (e.g., if a large number of partners are involved),



TIPS may accept longer budget justifications. Please contact TIPS to verify appropriateness before submitting a longer justification section.

- Graphs and tables are encouraged.
- Any extra pages or materials provided in addition to those requested and approved will be removed.
- Information should be presented in the same order as in the budget table.
- The institution's name must appear at the top of each page. Number all pages. Use 12-point or larger Times New Roman font. Paper must be 8 ½" x 11" (21.5 cm x 28 cm). All page margins must be set at a minimum of ¾" (1.87 cm).

The budget justification should include (within the page limit):

- clarification concerning the timing of specific planned expenditures, e.g., if certain costs are expected to be defrayed at the beginning of the grant only (TIPS recommends including a table summarizing the planned expenditures on an annual basis);
- detailed descriptions of partners' contributions (cash or in-kind), including the timing and duration of such contributions (TIPS recommends including a table summarizing the annual planned contributions of partners and other sources);
- clarification concerning whether internal resources to be committed are incremental to the current state; and
- if the lead institution plans to transfer a portion of the grant to other Canadian postsecondary institutions eligible under the Fund, a clear outline of the timelines for such transfers and the amounts to be transferred.

Notes:

- Funds can only flow directly from the lead institution to other eligible Canadian partner institutions (i.e., partner universities, colleges and polytechnics that meet the eligibility criteria). For other academic and research institution partners involved in the initiative, the easiest transparent way to manage the funds would be to have these partners invoice the lead institution for services/activities completed as part of their participation in the research program, if applicable.
- Requests to use Canada First Research Excellence Fund funding for the purchase of larger equipment will be considered on a case-by-case basis. It would be a reasonable expectation on the part of the Fund program and peer reviewers that the top priority strategic areas of focus that the institution submits to the Fund would logically be the areas for which it would have reserved part or all of its CFI JELF allocation (coherence with strategic plan). However, a limited JELF allocation would likely not be an acceptable justification. Timing of upcoming competitions (such as the CFI Innovation Fund) may be a justification, but only if it can be demonstrated that the equipment is required in a very timely fashion in order for the institution to seize a limited-time opportunity.
- Private sector partners cannot receive financial support through the Canada First Research Excellence Fund. They are expected to contribute in cash or in kind to the Fund-supported initiatives, and to self-fund their participation.
- Partner funds used to directly advance elements of your institution's scientific or institutional strategy can be included as funding from other sources, whether they are spent in Canada or abroad.
- The total amount requested from the Fund will be paid quarterly in equal installments. The institution will be asked to manage its Fund award budget should its budget requirements not be spread uniformly over the award period. The budget justifications for parts A and B should reflect any expected fluctuations.
- For contributions from the institution, only incremental commitments subject to the grant being awarded should be included. Existing and ongoing commitments (e.g., existing faculty salary, existing lab space) should have been described in the presentation of the institution's current strengths and capacity, as these represent the current state rather than any incremental institutional commitment.

Part 7: Application Administrative Form

Only institutions successful at the LOI stage are invited to submit a proposal. A scientific strategy that differs significantly from the contents of the LOI (with respect to the area[s] of research and the alignment with ST&I priority research areas) will not be considered in the application submission for Competition 2.

Complete each of the required fields (grey boxes) in the form.

The Institution Contact Person should be a senior institutional representative.



Page 2 is the signature page. A scanned PDF copy of the completed and signed signature page **must** be included with the electronic application. The signed hardcopy should follow by mail.

If the lead institution proposes to transfer a portion of the grant amount to other Canadian postsecondary institutions eligible under the Fund, either for implementation of the institutional strategy (Part A) or the scientific strategy (Part B), the representative (president, rector or principal of the institution, or authorized representative) for each institution must sign a separate signature page. All pages must be included in the application package submitted by the lead institution.

Notes:

If an institution was successful in Competition 1:

Additional funding cannot be requested to support a proposal that was successful in Competition 1. The institution will have to demonstrate, in its proposal, that it has the capacity and the resources to successfully carry through a second ambitious institutional initiative of the scale and scope that is expected of a Fund initiative, to advance the institution's overall strategy for global excellence.

If an institution was not successful in Competition 1:

If the proposal is a resubmission of the same focus area(s) as in competition 1, given that the inaugural competitions will be held in close succession, to reduce the burden on the Fund's peer reviewers the program's management reserves the right to carry forward to Competition 2 any relevant peer review assessments from Competition 1. If, in consultation with the chairs of the review panels, management deems that a Competition 2 proposal is relatively unchanged from a proposal submitted by the same institution for Competition 1, it may decide not to solicit new external assessments for the proposal (or for the relevant parts thereof).

Part 8: Biosketch Attachments

Biosketches assist adjudicators in assessing the future potential of the scientific strategy and its leadership, by providing background information on the key individuals involved in the implementation.

For the proposed scientific strategy, provide **a biosketch for up to 10 key individuals** who will hold a key leadership role in either the implementation of the institutional strategy (e.g., university administrator, head of centre or institute) or the scientific strategy (e.g., scientific director, lead researcher of any of the key research directions or areas that are the focus of the proposal).

The final list of key individuals may vary slightly from that provided with the LOI submission; however, the overall maximum remains 10. Relative to the LOI submission, individual biosketches may be resubmitted, updated or new. TIPS will not use biosketches submitted at the LOI stage.

Each biosketch must be a maximum of two pages. Biosketches do not count towards the proposal page limit. Use the Biosketch template and complete each of the required fields in the form. The Biosketch template is "unlocked," to allow applicants to more easily add content specific to the key individual.

The biosketch should include the following information and headings, **as relevant to the proposal**:

- Key individual's name and affiliation.
- Education/training: Include only current and/or completed degree programs.
- Employment/affiliations: List the individual's current, primary position/ appointment; their place of employment (if at an academic institution, indicate whether tenured or tenure-track, full-time or part-time); and other academic and professional work experience, including administrative appointments.
- Research funding: List sources of support currently held or applied for in the past four years (this heading may not apply to, and can therefore be removed for, administrators).
- Most significant contributions (up to five): List the individual's most significant contributions to research and/or practical applications over the last six years. Contributions made more than six years ago, but the impact of which is currently being felt, may also be included. For each contribution, briefly describe the significance in terms of influence on the target community, and use by other researchers or end users. For collaborative



contributions, briefly describe the individual's role. For administrators, this heading can be modified to read "Most significant achievements," and administrators can here list experience/accomplishments in leading large research initiatives.

The name of the applicant institution and of the key individual should appear at the top of each page. Number all pages. Use 12-point or larger Times New Roman font. Paper must be 8 1/2" x 11" (21.5 cm x 28 cm). All page margins must be set at a minimum of 3/4" (1.87 cm).

Part 9: Letters of Support

Where applicable, applicants may attach letters of support from any partner (including other eligible Canadian postsecondary institutions) who will play a **concrete role** in the implementation of the scientific strategy. A partner is an institution or organization, rather than an individual. **Partners are contributing partners with a defined and very concrete role to play in the implementation of the strategy.** These roles reflect strategic alliances and collaborations at the institution level.

Do **not** attach general letters of support. General letters of support or advocacy will be removed from the application and will not be included in the materials used in the review process.

Letters should be one-to-two pages in length, and should provide an overview of:

- who the partner is;
- why they are interested in participating, and what they expect to gain through the collaboration; and
- what they are contributing to the collaboration (cash and/or in-kind contributions).

Letters of support must be attached to the scientific strategy (Part B). The letters do **not** count towards the page limit for the scientific strategy proposal (Part B) attachments. If a partner is involved in both the institutional strategy and scientific strategy, they must provide only one letter of support.

Please **include a cover page/index for the letters of support** that briefly lists, for each attached letter, the name of the partner, and their role (as detailed in the letter of support).

Notes:

- A federal government department can be a partner, and can provide a letter of support.
- For institutions resubmitting a proposal from Competition 1, new letters of support are required.

Part 10: Additional Suggested Reviewers (optional)

(for full proposal; in addition to those provided with the LOI)

In the LOI, the institution suggested a **minimum of five** potential adjudicators / expert reviewers **for the proposed scientific strategy**. In the application, the applicant may propose **additional** suggestions for reviewers, using the Additional Suggested Reviewers form. The form provides room for five suggested reviewers; to suggest more (i.e., up to 10) additional potential reviewers, copy and attach the second copy of the form as additional pages, preferably integrating all pages into a single PDF.

The entire file should be uploaded as a separate, searchable PDF entitled "Additional Suggested Reviewers-Institution Name-Title or Research Area."

To request that TIPS not invite an individual/individuals to review the application, send an email to information@cfref-apogee.gc.ca with a clear subject line referencing the applicant institution.

Suggested reviewers should be able to evaluate the application in the language in which it is written. The program's administration reserves the right to make the final selection of adjudicators/ reviewers for any scientific strategy, and may opt to not use any of the reviewers suggested.



Reviewers cannot:

- be a faculty member at a Canadian institution (excluding adjunct professors);
- be affiliated with the applicant institution(s) (including hospitals and research institutes) or with an organization receiving financial support from that institution;
- have held a position in the last six years at the institution(s) applying to the program;
- be involved in the proposed program of research;
- be a potential recruit for this scientific strategy; or
- be in a position to directly benefit from the outcome.

The following criteria will be used to identify conflicts of interest:

At the institution(s) level:

- has been employed by the applicant institution(s) in the last six years;
- has a professional relationship with the applicant institution(s);
- is currently affiliated with the applicant institution(s) or the key partner organizations or companies,* including research hospitals and research institutes;
- is in a position to gain or lose financially/materially from the funding of the application; or
- has had long-standing scientific or personal differences with the applicant institution(s).

* Key partner organizations or companies are those identified in the application as secured contributing partners with a defined and very concrete role to play in the implementation of the proposal. For those identified as potential partners, a situation of conflict may or may not be material and will be managed on a case-by-case basis.

At the individuals level:**

- will receive professional or personal benefit resulting from the application under review;
- is in a position to gain or lose financially/materially from the funding of the application;
- has a professional relationship with an applicant involving sustained contact in the last six years;
- is a relative or close friend, or has a personal relationship with an applicant;
- has had long-standing scientific or personal differences with an applicant; or
- is closely professionally affiliated with an applicant, as a result of having, in the last six years:
 - had frequent and regular interactions with the applicant in the course of their duties at their department, institution, organization or company;
 - been a supervisor or a trainee of the applicant; or
 - collaborated in research or training, published or shared funding with the applicant, or planned to do so in the immediate future.

** Individuals are those who hold a key leadership role in the implementation of either an institutional strategy (e.g., university administrator, head of centre or institute) or scientific strategy (e.g., scientific director, lead researcher of any of the key research directions or areas that are the focus of the proposal).

Submitting the Application

All parts of the application (forms and attachments) must be uploaded into the Canada First Research Excellence Fund application portal by **9 p.m. (eastern), March 29, 2016**.

To upload your application documents, please follow these steps:

1. From the drop-down Applicants menu, select "Applicant Library."
2. Find the folder with your account name in the Applicant Library. This is the folder from which you will upload documents. Click the folder to open it.
3. In the folder, locate the toolbar menu. Select "Upload." The Application Upload window will appear.
4. In the Application Upload window, click "Browse" to select the files you want to upload.
5. Click "OK" to upload the files.

You may upload documents to your library until the March 29 deadline.

If you have questions about the application process, please email information@cfref-apogee.gc.ca.