

# **Brain Canada**

# Multi-Investigator Research Initiative (MIRI)

Request for Applications (RFA)

#### **About Brain Canada**

Brain Canada is a national non-profit organization that enables and supports excellent, innovative, paradigm-changing brain research in Canada. For more than one decade, Brain Canada has made the case for the brain as a single, complex system with commonalities across the range of neurological disorders, mental illnesses and addictions, brain and spinal cord injuries. Looking at the brain as one system has underscored the need for increased collaboration across disciplines and institutions, and a smarter way to invest in brain research that is focused on outcomes that will benefit patients and families.

The Canada Brain Research Fund is a public-private partnership designed to encourage Canadians to increase their support of brain research, and maximize the impact and efficiency of those investments. Brain Canada has committed to raising \$100 million from private and non-governmental sources, which will be matched by government on a 1:1 basis. The Fund was announced in federal budget 2011, which proposed to "allocate up to \$100 million to establish the Canada Brain Research Fund, which will support the very best Canadian neuroscience, fostering collaborative research and accelerating the pace of discovery, in order to improve the health and quality of life of Canadians who suffer from brain disorders."

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### Rationale

Supported by the Canada Brain Research Fund, the purpose of MIRI grants is to accelerate novel and transformative research that will fundamentally change our understanding of nervous system function and dysfunction and their impact on health. The ultimate goal is to reduce the social and

economic burden of neurological and mental health problems by prevention, early diagnosis, and treatment.

### **Grant Details**

Brain Canada's MIRI grants are for three years and usually provide up to \$500,000 a year for a total of \$1.5 M. The research focus may be related to any area of neural function and dysfunction, including special senses, neurological and mental health, and may involve biomedical, clinical, health services or population health approaches.

## **Funding Partners**

As a public-private partnership, Brain Canada's grants are derived 50% from the Canada Brain Research Fund (CBRF) and 50% from a funding partner.

Brain Canada has already secured a number of partner commitments to co-fund research projects that qualify and align with partners' strategic priorities (to support research with a theme, disease and/or geographic focus). The list of partners who have already committed to co-fund research projects and their strategic priorities is available on the <a href="Brain Canada Website">Brain Canada will</a> continue to update our website with any new commitments that we receive from funding partners, so that the research community is informed about opportunities for developing applications responsive to the priorities of partners.

To help secure more partner funds, Brain Canada may have to share the full contents of relevant LOIs and applications with actual or potential funding partners, under confidentiality agreements.

## Sponsored Opportunity

Through the Sponsored Opportunity, Brain Canada encourages all individuals, organizations, enterprises and institutions funding brain and mental health research to support research excellence in specific thematic and geographic areas by partnering on a specific research project. To take advantage of this opportunity, the Sponsor commits to providing matching funds, and the research team applies for funding.

We expect this opportunity to be of particular interest to:

<u>Institutional Benefactors and Donors to Charities</u>, who want to support a specific aspect of brain research, or a neuroscience or mental health research project at a specific institution, or conducted by a particular research team. Through a combination of tax credits from their donations to the institution or charity, and the matching funds provided by Brain Canada, their donations will be leveraged 2.5-3 fold, depending on the province.

<u>Health Charities and other Funders</u>, who can use this opportunity for exceptional leverage to attract additional donations and support more high-quality research relevant to their mission, than would otherwise be possible.

<u>Research Institutions</u>, which can also attract additional donations, and use this opportunity to build their capacity for brain research by supporting their investigators at a reduced cost.

<u>Industry partners</u>, who can use this funding opportunity as a low-cost approach to supporting innovative pre-competitive research in the neurosciences.

- Eligible *Sponsors* include individual donors, charitable organizations, provincial government agencies and ministries, for-profit enterprises, research institutions, hospitals and health-care organizations, and any other entities, including foreign entities or organizations, which do not receive more than 50% of their funding from the Government of Canada.
- A Sponsor may support any number of applications and multiple partners may support a single application, but no partner can commit less than 20% of the matched funding required.
- It is strongly advised that researchers and Sponsors begin to discuss possible sponsorship of a project as early as possible in the application planning process. Letters of Intent (LOI) may be submitted without a firm commitment from a Sponsor, but should at least be accompanied by letters expressing an interest in supporting the planned research.
- By submitting an application, Sponsors commit to contributing in aggregate 50% of the project budget, contingent on the application being considered deserving of funding by the Selection Committee. This amount must be provided in cash to Brain Canada, which will add the other 50% from the Canada Brain Research Fund, and administer the grant.
- By administering this Sponsored funding opportunity, including the review process and
  subsequent progress reporting, Brain Canada incurs operating and personnel costs. According to
  the federal Contribution Agreement governing the Canada Brain Research Fund, the only source
  of operating funds for Brain Canada is an administrative fee charged on funds flowing to grant
  recipients. Brain Canada's policy is to deduct a 5% administrative fee from the Sponsor's
  contribution, and 10% from the matching contribution from the Canada Brain Research Fund.
  This will result in a combined deduction of 7.5% from the total grant.
- Subsequent to the LOI review, invited full applications will not be accepted unless accompanied
  by a letter of commitment from one or more Sponsors, unless the application is being submitted
  for funding from a partnership that Brain Canada has already secured commitment for in advance. If a
  Sponsor is unable to honour its funding commitment at any time, Brain Canada will also have to
  withdraw its funding. It is recommended that potential Sponsors contact Brain Canada (see below
  for contact information) to ensure clarity on Brain Canada's matching policies.
- Partners' support of MIRIs will be acknowledged in all presentations and publications, and Brain Canada will advise Partners of any impending media opportunities related to the supported platform, and vice-versa.
- There is no pre-determined limit of the amount of Brain Canada funding available for this competition, however Brain Canada may, depending on the number of applications recommended for funding, impose a cap on the amount dedicated from the Canada Brain Research Fund to

support this competition, in which case Brain Canada's contribution will be allocated to applications in descending order of merit, as assessed by the Selection Committee(s), until the dedicated funds are exhausted.

## Use of Funds

MIRI grants may be used to support any aspect of the operating costs of the research project, including: supplies and materials; provision of special services and user fees; maintenance of essential equipment; travel of team members and trainees for collaboration and presentation of results; publication costs; salaries for technical personnel; stipends of trainees; and equipment that is currently unavailable but essential for the project. MIRI grants may not be used for salary payments to any team members who are eligible to apply for operating grants from the federal granting agencies. Brain Canada does not provide institutional overhead. MIRI grants are non-renewable.

### Eligibility

This opportunity is open to teams of two or more investigators in any scientific discipline who are eligible to apply for research grants from the Canadian federal granting agencies (CIHR, NSERC, and SSHRC).

- One of the team members will be designated Team Leader, and will be the individual responsible for communication with Brain Canada and accountable for the team's research activities and use of funds.
- Teams must be multidisciplinary, and their members may be based in one or several research institutions. The team must include the range of expertise and experience required to carry out the proposed research.
- To build capacity and generate novel perspectives, Brain Canada encourages the formation of teams that include researchers at all stages of their careers, as well as researchers from outside the neurosciences who now wish to extend their expertise to problems of the brain and nervous system.
- Collaborators from government, the private sector, and other nations are also welcomed in order
  to strengthen teams and facilitate the uptake of their research results, but Brain Canada funds will
  only support the portion of the work conducted in Canadian institutions eligible to receive funding
  from the federal granting agencies.

## Criteria for Assessment

To be recommended for funding, proposals will demonstrate:

• Innovation and originality. Proposals which, while solidly-based in scientific fact and technically feasible, offer new concepts and approaches with the potential to change the paradigms of the field, open the field to new experimental, preventive or treatment directions, or address a critical barrier to progress in understanding or application. Since a track record of innovative research, appropriate for career stage, is a predictor of future performance, quality of the team and novelty of the proposal will both be critical components of the assessment.

- Multidisciplinarity and teamwork. Members from different disciplines contribute a specific value to the team, the team contains the necessary expertise, and the team as a whole achieves synergy of effort in order to accelerate progress.
- Potential for Impact. The proposed research has the potential to reduce the social and/or
  economic burden of neurological and mental health problems through improved prevention,
  diagnosis, and treatment. This includes research that fundamentally changes our understanding of
  brain and nervous system function or dysfunction, and which will have long-term practical
  impacts, as well as research with shorter-term impacts, including changes to professional practice,
  services, products, and public policy.

#### Review Process

Sponsors are free to conduct their own pre-selection process to determine those Letters of Intent and full applications that they wish to support through this funding opportunity.

### **Letter of Intent**

In anticipation of a large number of applications, and not wishing to waste the time of those involved in uncompetitive proposals, there will be a short LOI stage to identify those applications that are most likely to be competitive.

LOIs will be reviewed by two members of a LOI Selection Committee composed of Canadian and International members, who are not applicants. The Committee will be recruited by Brain Canada, which welcomes suggestions from Sponsors about its membership. At the discretion of the Chair of the Committee, certain LOIs may also be sent to other expert reviewers to obtain an additional opinion. Depending on the type and number of applications received, Brain Canada may recruit subcommittees of the LOI Selection Committee with specialized expertise in particular areas or approaches to research, so that LOIs are appropriately reviewed against the prevailing and relevant standards of excellence in their field.

The LOI Selection Committee will recommend which applicants should be invited to submit their LOI proposals as full applications. It may also recommend that applicants consider collaborating and consolidating their proposals.

All LOI applicants will receive anonymized reviewers' comments, but if considered uncompetitive by all reviewers, certain LOIs will not be discussed in detail at the meeting of the LOI Selection Committee and will not receive notes of the Committee discussion. Brain Canada will not entertain appeals against the assessment of the LOI Selection Committee.

### **Full Application**

Only those invited by Brain Canada following the LOI review will be able to submit full applications. These will be reviewed by at least two expert reviewers, and by two members of a full application Selection Committee composed of Canadian and International members with broad experience and expertise in the brain sciences, who are not applicants, to ensure that all funded proposals are assessed against similar standards of excellence.

Brain Canada will invite Sponsors and applicants to provide suggestions for the membership of the

Selection Committee, and for the selection of the expert reviewers who will provide the Selection Committee with expert advice on specific applications. Sponsors may observe the meetings of the Selection Committee to ensure that their expected standards of review are being met.

The Selection Committee will provide a merit score for each full application, and recommend to Brain Canada those applications that have received a sufficiently high merit score to deserve funding.

Applicants will receive anonymized written comments from the expert reviewers and the Selection Committee, but if considered uncompetitive by all reviewers, certain applications will not be discussed in detail at the meeting of the Selection Committee and will not receive notes of the Committee discussion. Brain Canada will not entertain appeals against the assessment of the Selection Committee.

The membership of all committees involved in the adjudication of this funding opportunity will be posted on the Brain Canada website after the results are published.

### **Timeline**

Call for Applications:	December 15, 2014
Deadline for Receipt of Letters of Intent	16.00 EST, February 9, 2015
Invitations to submit full application issued	Week of March 30, 2015
Deadline for Receipt of Applications	16.00 EST, May 19, 2015
Notification of Award:	Week of July 6, 2015
Funding begins (earliest date):	October 1, 2015

## **Application Procedure**

Team leaders should contact Brain Canada (<a href="mailto:programs@braincanada.ca">programs@braincanada.ca</a>) with enquiries about the application process.

All LOIs must be submitted using Brain Canada's electronic grant management system (https://braincanada.smartsimple.ca/s\_Login.jsp). The Team Leader must sign on to the Brain Canada electronic grant application submission portal before **16.00 EST February 9, 2015** to complete all application fields.

# **LOI Application Components:**

### 1. Project summary:

- Project title
- Project start and end dates (note: choose dates within a 36 month window)
- Keywords (including freeform): up to 10 words

- A summary of the research project and its goals, emphasizing its innovative and original features. It is also important to explain how the project is feasible within the time and funding available from the requested MIRI grant (maximum 1000 words).
- A description of the anticipated impacts of the project outcomes on reducing the social and/or economic burden of brain and mental health problems through advancing fundamental knowledge and/or improved prevention, diagnosis, and treatment (maximum 500 words).
- An explanation of how the intended project furthers the research capacity-building, knowledge translation, or other objectives of the intended sponsor(s) (maximum 500 words).

### 2. Project Team details:

- If not registered already, please have your co-applicants register with the Brain Canada grant management system (<a href="https://braincanada.smartsimple.ca/s Login.jsp">https://braincanada.smartsimple.ca/s Login.jsp</a>). Registered applicants will receive a Brain Canada PIN found under their "Personal Profile" and have access to co-write the application with the Team Leader.
- Add up to ten co-applicants using their Brain Canada PIN and last name.
- If there are more than ten co-applicants, select those most essential to the project.
- Team member publications: For each of the up to ten team members, cite up to five of their publications, of which at least three must have been published in 2010 or later. "Publications" means any type of document or medium, print or electronic, which best illustrates the member's relevant research experience, expertise and achievement. Ideally, these describe paradigm-shifting ideas and findings, or examples of effective application and knowledge translation of research findings, and demonstrate the applicant's ability to contribute to the proposed research project. Each item should be annotated with a brief reason for its selection. Include the DOI, URL or PMID of publications where applicable so that reviewers can access them.
- Explain the role of any trainees in the project and the unique learning opportunities they will experience.
- Explain the role that each applicant will play, and conclude with an overview of how the entire team will work together. For those ineligible to receive Brain Canada funding, explain how their contribution to the project will be funded (maximum 300 words).
- Please note that CVs are not required.

### 3. Budget:

- For each grant year, provide the total amount of requested grant funding in the budget table.
- Provide a brief justification for the budget for the full period of funding, listing the major line items as described under "Use of Funds", above, supplemented by a brief statement explaining how this expenditure will support the intended operation of the grant (Maximum 600 words)

#### 3. Attachments:

- Figures and references (maximum 1 page).
- Support letters from potential Sponsors (voluntary, no limit to number) LOIs do not have to
  be accompanied by a funding commitment from Sponsors, but a letter of support from a
  sponsor potentially interested in supporting the project, explaining why the project is
  important to the sponsor may influence the LOI Selection Committee's assessment of the
  significance of the proposal, the likely uptake of the research results, and the overall
  impact of the project.

### 4. Optional information:

- Provide the names and contact information for up to three individuals who are not in conflict and would be competent to review the LOI and the subsequent full application, if invited.
- Provide the names and contact information for up to three individuals who should not be contacted for review

### 5. Signatures and Certification:

The Team Leader must click the "I Agree" box to certify the following agreement: "I certify that all members of the team have agreed to their inclusion in this LOI, and allow me to represent them throughout the application process. I also certify that all team members permit Brain Canada to circulate this LOI and subsequent full application to third parties, under a confidentiality agreement, for the purpose of securing additional funding." Please note that institutional and team signatures are **not** required for the LOI application.

It is the sole responsibility of the applicants to ensure their LOI submission is acceptable and received before the deadline. Those received in any other format, exceeding the page limits, incomplete, or late, will be rejected. Brain Canada will acknowledge receipt of LOIs by email within two working days. Brain Canada does **not** require at the LOI stage: signatures denoting institutional support; regulatory or ethical approval; copies of publications; evidence of preliminary results; methodological appendices; etc. Extraneous material will be deleted before the LOI is sent to the reviewers.

### **Full Application Procedure**

### A. Sponsors

- Sponsors must provide the Team Leader, well before the application deadline, with official letters of commitment that specify the title of the application(s) that will be supported, and the amount and duration of funding that the sponsor commits to provide to Brain Canada.
- The aggregate commitment from all Sponsors must be 50% of the total funding requested in the application(s).
- It is understood that this commitment is contingent on the application being recommended for funding, and the availability of matching Brain Canada funds, which will be allocated to applications in order of merit.

- Some sponsors may intend to use the application process to help them select the most meritorious applications that they will actually fund. For example, a university may commit to funding the two most-highly rated and fundable applications from among the three submitted by applicants from that university. This is permissible, so long as this additional contingency is clearly stated in the letter of commitment that accompanies all the applications to which it applies. The commitment must still be to fund 50% of the requested funding for the individual projects, if selected. It is important that the applicants understand that this additional contingency, essentially an inter-sponsor competition, applies to their application.
- If these contingencies are met, the Sponsor(s) will be required to sign a formal Sponsorship
  Agreement consistent with the terms of the letter of commitment, and with Brain Canada's
  Funding Terms.
- Team Leaders must forward the Sponsor letters with the full application. These will be reviewed on receipt to ensure the amounts committed are sufficient, and if not, the application will be withdrawn.

### **B. Team Leaders**

### Full applications are due on or before 16:00 EST on May 19, 2015

Applications must be submitted using Brain Canada's electronic grant management system (<a href="https://braincanada.smartsimple.ca/s">https://braincanada.smartsimple.ca/s</a> <a href="Login.jsp">Login.jsp</a>). The system will be made available to invited research teams following a successful LOI decision notification.

The details for submitting a full application will be provided to the Team Leaders of the successful LOIs following the LOI review process. A full application will require a more detailed and well-developed rationale, research plan, and explanation of anticipated impacts.

## Ownership, Confidentiality, and Intellectual Property

Brain Canada will keep all materials submitted to it for this funding opportunity confidential, and will take reasonable steps to keep these materials confidential, and divulge them only to reviewers, Selection Committee members and observers, and Sponsors, who have signed confidentiality agreements. Funded applications will be retained for comparison of intended and actual outcomes, as part of the final evaluation of the Canada Brain Research Fund.

Brain Canada does not claim ownership of intellectual property (I.P.) arising from research it funds, and expects that its funds will be used to create I.P. that is developed and commercialized according to the policies of the research institutions in which the research is performed. Team members must resolve I.P. ownership issues with Sponsors before submitting an application. Where the Sponsor is a for-profit entity, Brain Canada must be consulted to determine if the I.P. arrangements are acceptable, and this will be a component of the Sponsorship agreement with Brain Canada.

## Reporting, Communications, and Evaluation

Brain Canada will support truly innovative and therefore risky research and need to know that these risks are acceptable. As a condition of continued annual funding of MIRIs, Brain Canada requires a brief yearly narrative and financial progress report from the team leader, outlining use of funds,

project achievements and impacts realized, as well as difficulties encountered and steps taken to overcome them. Continued funding will be based upon a satisfactory review of the progress report by Brain Canada. If Brain Canada considers that a progress report is questionable, after discussion with the team, the funding partners may agree to extend the period over which the funds are available, or cancel further funding. Details of the reporting process will be provided to funded MIRIs. Brain Canada will share the report with the Sponsors.

In order to demonstrate to Canadians the ongoing value of the Canada Brain Research Fund, MIRI team members must contact Brain Canada in advance of the publication, release or public presentation of research results obtained with the MIRI grant, so that a press release or other publicity can be prepared. Embargoes will be strictly respected. Acknowledgment of Brain Canada's and Sponsor funding (as agreed upon between Brain Canada and the Sponsor) must accompany all publication, release or presentation of such research results.

Brain Canada commits to acknowledging the Sponsors' support in all communications regarding the jointly supported MIRI grants. Sponsors will be informed of any upcoming media and communications opportunities in advance and provided with the opportunity to be involved in any publicity activities regarding the Sponsored grants.

At the end of the current Brain Canada Research Fund, Brain Canada wants to show that exceptional value was received for the investments of the federal government and the Sponsors. It needs to know the impact of every grant and award. Ten percent of the final year's funding will be withheld and released on receipt of a satisfactory end-of-project report that describes the current and estimated future outputs and impacts of the MIRI research project.

## For further Information

For further Information

For any other information or questions:

- About the MIRI competition and application process, please contact programs@braincanada.ca
- About Brain Canada and the Canada Brain Research Fund: go to <a href="http://braincanada.ca/">http://braincanada.ca/</a>