



**Brain Canada
Platform Support Grants (PSGs)
Request for Applications (RFA)**

About Brain Canada

Brain Canada is a national, charitable organization with the vision to understand the brain, in health and illness, to improve lives and achieve societal impact. Brain Canada is achieving its vision by:

- Increasing the scale and scope of funding to accelerate the pace of Canadian brain research;
- Creating a collective commitment to brain research across the public, private and voluntary sectors;
- Delivering transformative, original and outstanding research programs.

About the Canada Brain Research Fund

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.”

Rationale2

Grant details2

Eligible costs.....3

Eligibility.....4

Funding Partners.....5

Criteria for Assessment.....6

Timeline7

Application process.....7

Review and Decision Process.....10

Due diligence11

Confidentiality and Ownership.....11

Reporting, Communications, and Evaluation11

For further Information12

Rationale

High-impact research in neuroscience and mental health has always required skill, imagination, determination and insight, and nowadays it also requires access to shared equipment, facilities, services, databases, computing and informatics facilities, patient repositories, and biobanks, collectively referred to as technology “platforms”. Such platforms are too expensive for a single research laboratory or program to purchase or maintain, and are complex and highly sophisticated. They need to be operated and regularly maintained by skilled technical staff to ensure they operate at peak performance and efficiency and are accessible on demand. Some are of such large scale that they should only be provided on a regional or national basis.

Brain Canada identified support for operations and maintenance of research platforms as a gap in the research funding environment for the neurosciences, and now intends to address this funding gap by sponsoring a competition for Platform Support Grants (PSGs).

Grant details

PSGs support, for up to three years, major research platforms that provide enhanced technical and research capability to multiple investigators working in the brain sciences. Maximum annual grant amounts (including matching funds) are:

- Local: serving a single institution or city, \$100,000
- Regional: serving a province or several contiguous provinces, \$300,000
- National: serving investigators in every region (BC, Prairies, ON, QU, Atlantic), \$1,000,000

There is flexibility in the annual funding profile to accommodate the needs of specific platforms. Platforms could include brain banks, clinical trials networks, imaging facilities, transgenic animal facilities, specialized high-throughput genomics facilities, drug discovery platforms, data repositories, informatics systems and data-sharing systems. The linking and coordination of existing local or regional facilities into a national resource or network is especially encouraged under this scheme, as is the integration of Canadian resources into an international platform or consortium, as long as these actions improve its accessibility and utility to Canadian investigators. Since technical approaches used in the neurosciences are common to many other fields of the health sciences, platforms may serve researchers working in other fields, however neuroscience usage must be predominant, or the proposed platform enhancement must be of specific and unique benefit to the neurosciences.

Central to PSGs is the concept of added value, that is, the support from Brain Canada and Partners must result in at least one of the following outcomes:

- Improved operations and capabilities of existing platforms so that research is facilitated and accelerated.

- Integration and coordination of existing infrastructure so that it works better and is more widely accessible.
- Creation of new data pools and improved access to data, permitting research activities that were not previously possible.
- A discernable impact on Canada’s capabilities in neuroscience research, even for local and regional platforms.

Examples of added value *include*:

- purchasing improved maintenance in order to extend the lifespan of platforms and keep them providing the most advanced capabilities;
- performing essential repairs, and upgrading hardware (see eligible costs);
- increasing or upgrading technical support in order to offer additional services, improved client support, or extended hours of service;
- reducing user fees to academic-sector users if this will allow those previously unable to access the platform to do so;
- enhancing the ability of neuroscience researchers to share and retrieve research data, biological samples, and adopt common protocols;
- standardizing the acquisition and curation of material, and developing standard operating procedures that will improve the reliability and reproducibility of operations;
- undertaking demonstration projects of the types of research that would be impossible without the services or information provided by the platform (see eligible costs);
- training researchers in advanced and novel techniques available through the platform;
- developing novel technical and methodological approaches for neuroscience research, including informatics tools and software, that will have wide applicability and impact on research progress;
- engaging end-users of research and decision-makers so that new knowledge is more rapidly translated to practice, and ethical issues of neuroscience research are addressed.

PSGs are not intended to replace current sources of funding or merely sustain current levels of platform service and capability.

Eligible costs

Eligible	Ineligible
Purchase of service contracts, equipment repairs and other improvements to prolong the life of the platform and ensure it remains “state of the art”; and to increase its performance, capacity and the number of users supported. <i>Purchase of equipment and hardware may not exceed one</i>	Renovation or construction of space, purchase of standard office and laboratory furniture (cabinets, stools, computer desks, etc.)

<i>quarter of the total value of the grant.</i>	
Specialized supplies and services necessary for operation, to increase the platform's performance and number of users supported.	Basic laboratory services (heat, light, HVAC, municipal water supply, natural gas, security, cleaning, etc.) and research support services normally provided by an academic institution (e.g. libraries and other repositories of published works, basic animal care, technology transfer functions)
Salaries and benefits for technical and professional personnel responsible for developing, operating, and maintaining the platform.	Salaries of any individual eligible to apply for Brain Canada's MIRI grants, or students at any stage of training, or postdoctoral fellows.
Development and dissemination of, and access to: databases; data repositories; and patient registries. Development of informatics platforms and portals to access and deposit data; development of technical protocols; data standards; and standard operating procedures.	Costs involved in meeting regulatory or ethical requirements, occupational health and safety requirements, audits or requirements for licensing, etc. Insurance.
Training programs for new users and technical staff; advertising the availability and capability of the platform to users; communications between users intended to improve utilization and operation of the platform; meetings of management committees for purposes of improving operations of the platform.	Costs for the operation of platforms that are for other than neuroscience research, and incurred by users who are ineligible to receive funding from the federal granting agencies (CIHR, NSERC and SSHRC).
Operating costs of a demonstration research project intended to demonstrate the utility and value of a newly-formed platform and secure sustaining funding from other sources, <i>not to exceed one-half of the total value of the grant.</i>	For platforms that integrate research with other activities, such as service delivery or education and advocacy, costs that are not directly attributable to research and associated knowledge translation activities.

Note that this list is not exhaustive, and Brain Canada may rule any other expenditure eligible or ineligible. Applicants are advised to contact Brain Canada before submitting an application requesting support for other types of expenditure.

Eligibility

This competition is open to User Groups of investigators working in the brain sciences. Broadly defined, this embraces all areas of neuroscience, and any disciplines that are being applied to the study of the nervous system in health and disease. It includes the neurological and mental health disciplines, as well as social, biological, chemical, physical, engineering, mathematical and computer science research that has as its objective to advance our understanding of the brain, nervous system, and special senses, or to resolve problems arising from their dysfunction. A User Group is composed of investigators based in Canada whose research depends on use of the

platform for which support is requested, or who are involved in the development of the platform.

- **Members** of the User Group must be eligible to receive funding from the federal granting agencies. The User Group may be based in one or several research institutions.
- One of the User Group Members will be designated the **Lead User**, nominated by the User Group to be the individual responsible for submitting the application on its behalf, for all communication with Brain Canada. The Lead User will normally be the individual responsible for overall management of the Platform, and if the Platform is a physical entity it will normally be located at the Lead User's institution.
- Brain Canada's PSGs will have additional impact if they also increase opportunities for interaction and collaboration between researchers from different sectors and countries who intend to use the platform. **Associate Members** of the User Group are researchers from industry, government, other non-academic sectors, and international researchers, who intend to use the platform. While these other users cannot receive Brain Canada funding, they should be listed in the application, and their interaction with the User Group described (see "Application Process", page 6, below).
- In order to apply, **it is necessary to have written commitments from funding partners** who in aggregate will provide 50% of the amount requested (if the application is approved).

Funding Partners

As a public-private partnership, Brain Canada grants are derived 50% from the Canada Brain Research Fund (CBRF) and 50% from a funding partner. Eligible funding partners 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. It is expected that PSGs will be particularly attractive to partners from universities and research institutions that are already supporting research platforms.

Partners must provide a letter of commitment that accompanies the application. If the application is recommended for funding, Partners will be required to sign a formal agreement with Brain Canada. Potential partners are advised to contact Brain Canada well ahead of the application deadline to ensure that their intended financial contribution is eligible. Matching contributions must be paid to Brain Canada (in-kind contributions are not eligible). Brain Canada will add 50% from the Canada Brain Research Fund and issue the grant to the institution of the Lead User.

By administering this 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.

Since funding partners share with Brain Canada the objective of supporting high-quality research, they may adopt their own pre-screening mechanisms to determine which PSG applications they wish to support. They may also provide recommendations to Brain Canada on the selection of reviewers for the application(s) to which they are committed. They are also invited to send a representative to attend the part of the meeting of the Selection Committee at which the application(s) is/are considered. Partners will receive the progress reports that successful applicants provide to Brain Canada (see "Reporting, Communications, and Evaluation"), and if they consider the reports unsatisfactory may withdraw the remainder of their support.

Partners' support of PSGs 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.

Criteria for Assessment

A highly-rated application will have the following attributes:

- ***Excellence and impact of the research that is conducted using the platform.*** The platform enables excellent researchers to generate novel results that contribute to the advancement of theory and concept, or lead to the development of new approaches for prevention, diagnosis and treatment of neurological and mental illness. The research enabled by the platform could not be conducted in its absence, except at much greater cost and more slowly, and support for the platform will enhance Canada's capability in neuroscience research. The ultimate impact of this research will be to reduce the burden of disease, improve quality of life, and/or stimulate economic development in Canada. The platform enhancements will stimulate intersectoral (e.g. university/industry, university/health care service) or international collaboration. For new platforms where some funding will be used for a demonstration research project, the project is scientifically excellent and of high potential impact.
- ***Distinctiveness of the platform.*** The platform is unique in its capabilities within the nation, region, or locality.
- ***Management of the platforms.*** The governance and organizational structure is strong, effective, and widely understood by users. There is an equitable and user-friendly process for access, and users receive training and assistance, allowing them to use the platform and its services in the most efficient, safe, and economical fashion. There is regular budget planning for operations and maintenance, and for technical modifications to keep pace with

scientific progress. For established platforms, users attest to the smooth operation and minimum down-time of the platform, and know how to communicate suggestions and concerns to the responsive operators. The operation of the platform is reviewed or audited regularly against defined performance benchmarks and identified deficiencies are corrected.

- **The added value of Brain Canada and Partner(s) support.** The PSG will facilitate user access to the platform and improve its operational capabilities, quality, or capacity.
- **Sustainable commitment to platform support.** The application is clear on the extent to which the existing platform, or the components that will be coordinated or integrated using the PSG, is/are supported from other sources. There are explicit commitments from the other funding partners of the platform, and assurances that the PSG will not merely displace the financial commitment of other supporters. There is a credible plan for sustaining the platform after the expiry of Brain Canada funding.
- **Data sharing and standardization.** The platform adopts standard protocols and standardized data collection so that, subject to applicable laws and regulations, its data and specimens will be useful and accessible to other qualified researchers. Linkages to other databases, repositories, biobanks, and registries are described. *Applications for support of repositories, databases and registries which contain information about patients or human subjects must explain how their platform conforms to the relevant sections of the “Neurological Registry Best Practice Guidelines” published in Canadian Journal of Neurological Sciences, Vol. 40 No. 4 Supplement 2, July 2013 and also available at <http://canadianregistrynetwork.org/>.*

Timeline

No letter of intent is required. Application is open both to those who sent an expression of interest for the May 20th 2013 deadline, and those who did not.

Call for Applications: November 1, 2013

Deadline for Receipt of Applications: April 11, 2014

Notification of Conditional Award sent: June 16, 2014

Funding begins (earliest date): July 1, 2014

Application process

Lead Users should contact Brain Canada (programs@braincanada.ca) with enquiries about the application process.

All applications must be submitted using Brain Canada’s electronic grant management system. The system will be made available on the Brain Canada Website at least three weeks before the deadline date.

Before 16.00 EDT on April 11th 2014, the Lead User must sign on to the Brain Canada electronic grant application submission portal and complete an application containing the following sections:

Application Components:

1) Cover:

- Title of proposal;
- Name and contact details of lead user;
- Total amount requested

2) Applicant Details

A) User Group Members

Provide the names and institutional affiliations of up to 10 selected Members of the User Group. Describe how the PSG will improve and accelerate their research, and indicate the anticipated source of funding for their research projects that will utilise the platform. If there are more than 10 Users, provide only the names and affiliations of the additional Users.

B) Associate Members

Provide the name, affiliation, and position of up to five selected Associate Members. Describe how the PSG will enhance their interaction and collaboration with the members of the User Group, and how their use of the Platform is funded. If there are more than five Associate Users, provide only the names and affiliations of the additional Users.

3) Platform Summary:

- List up to 10 key words describing the platform;
- Provide a summary description of the platform and how it will be used to advance research in the brain sciences, including an explanation of the special services, capabilities or expertise that the platform will offer to researchers in the locality, region, nationally, or internationally

4) Proposed Use of PSG (maximum 6 pages).

Provide details of the proposed use of the PSG, addressing all the evaluation criteria. *For platforms where funding will be used for a demonstration research project, an additional three pages may be added so that the project may be described in more detail and properly evaluated.*

5) Impact

Provide a **description** of the anticipated collective impact of the PSG on the research of the user group, including the potential for intersectoral and international collaboration, and on Canada's capabilities in neuroscience research.

6) Budget

Complete the budget section for the platform for each of three 12-month funding periods beginning on the first day of a regular quarter starting on or after July 1 2014. In the revenue section, identify all sources and the amount expected, including the PSG. In the expenditure section identify major cost categories only (e.g. personnel, maintenance contracts, supplies and expendables) and indicate how the PSG funding would be allocated. If the platform is currently in operation, attach a similar outline of the current fiscal year budget for operation and maintenance of the platform, including and identifying all sources of funding

7) Publications (maximum 5 pages)

For each of the selected User Group Members identified in (2), cite up to five of their publications, of which at least three must have been published in 2009 or later. Publications should be those that are high-impact and best illustrate the use of or need for technology and services relevant to the platform. Each item should be annotated with a brief reason for the selection. Include a DOI, URL or PMID for each so that reviewers can access the publications if they wish.

8) Suggested Reviewers

Provide names and contact information for:

- (i) up to five individuals not in conflict who would be competent to evaluate the application;
- (ii) Individuals to whom the application should **not** be sent for review.

Reviewers will be selected by Brain Canada, taking these suggestions into account.

9) Attachments

- References (maximum 3 pages).
- Letters of Commitment: Provide Letters of Commitment from partners who in aggregate have agreed to contribute to Brain Canada 50% of the amount requested, contingent on the application being recommended for funding by the Selection Committee.

10) Certification and Signatures:

- The following statement: "I certify that all members of the user group have agreed to their inclusion in this application, and allow me to represent them throughout the application process. I also certify that all members of the user group permit Brain Canada to circulate this application to third parties, under a confidentiality agreement, for the purpose of securing matched funding",
- Signature of the lead user, date.

- Signature¹ of the responsible representative of the institution of the Lead User
- Signature¹ of the responsible representatives of the other institutions of User Group Members, or institutions where Brain Canada funds will be expended in support of the Platform.

Application format:

It is the sole responsibility of the applicants to ensure their application is properly formatted, complete, including commitment letters from Sponsors, and received before the deadline. Applications received in any other format, exceeding the page limits, incomplete, or late, will be rejected. Applications for which there are no or inadequate letters of commitment from Partners (<50% of requested funds) will be returned. Brain Canada will acknowledge receipt of applications by email within one working day.

Material extraneous to that requested above will be removed before the application is sent for review.

Review and Decision Process

Selection Committee

Brain Canada will recruit a PSG Selection Committee, which will be composed of experts, from within and outside Canada with a broad range of expertise and training who will be recruited according to the topics of the PSG applications and are not in conflict with the applications. Applications will be reviewed by two Selection Committee members, and may also be sent to external reviewers. Taking into account the selection criteria, the Selection Committee will provide a merit score and recommended funding amount for each application to the Brain Canada Board, indicating those applications that are of fundable quality

Applicants will receive written comments from the reviewers. Brain Canada will not entertain appeals against the assessment of the Selection Committee.

The Selection Committee membership will be posted on the Brain Canada website after the competition.

¹ These signatures indicate that the Institutions approve of the application and understand its implications, should it be funded. They also bind the institution to: allow the User Group Members to conduct the research planned in the proposal in suitable laboratories or other research facilities; to administer in trust the funds provided by Brain Canada and to prepare an annual accounting of the use of funds to Brain Canada; to ensure that research conducted with Brain Canada funding meets all applicable ethical and regulatory guidelines, standards and regulations; and to acknowledge that the relationship between the institution and Brain Canada is the same as that between the institution and the federal granting councils, as described in the “Agreement on the Administration of Agency Grants and Awards by Research Institutions” to which the institution is a signatory

Allocation of funding

Only applications judged to exceed the high standard of excellence set by the Selection Committee will be funded. The Board will determine the total Brain Canada contribution to the competition and this will be allocated to applications in descending order of merit, until the dedicated funds are exhausted or all recommended applications are funded. Successful applicants will be notified that their proposals have been conditionally approved, pending confirmation of Partner funding, and informed of any conditions that must be met before funding can be released. Brain Canada, in consultation with Partners, may require that certain applications are combined before they are funded.

Due diligence

In order to reduce the burden on applicants, Brain Canada may require documentation (e.g. service contracts, or repair/upgrade estimates, ethics approval where relevant) only from those applicants whose PSG proposals have been conditionally approved. Where the platform involves the management of personal information or material derived from or to be used in human studies, the applicants will be required to provide copies of appropriate institutional ethical, confidentiality and other approvals as necessary before funds are released. The required documents must be received and other conditions resolved within a reasonable period specified by Brain Canada, before funds can be released to the institution of the Lead User. In case of distributed platforms, the lead user is responsible for distributing funds to the other directors of the other cost centres, through their institutions.

Confidentiality and Ownership

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, 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. User Group Members must resolve I.P. ownership issues with funding partners before submitting an application. Where the Partner 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 Partnership agreement.

Reporting, Communications, and Evaluation

As a condition of continued annual funding of PSGs, Brain Canada requires a brief yearly narrative and financial progress report from the lead users, outlining how PSG funds were used

and what impacts were realised, as well as difficulties encountered and steps taken to overcome them. Progress reports will be reviewed by Brain Canada and Partners, with continued funding based upon a satisfactory review. Details of the reporting process will be provided to successful lead users.

Additionally, an End of Grant report will be required from all funded teams. Ten percent of the final year's funding will be withheld by Brain Canada and released on receipt of a satisfactory end-of-grant report that describes the overall impacts of the PSG grant.

In order to demonstrate to Canadians the ongoing value of the Canada Brain Research Fund, acknowledgment of Brain Canada and Partner funding must accompany all publication, release or presentation of research results obtained using platforms supported by Brain Canada. User team members must contact Brain Canada in advance of the publication, release or public presentation of significant research results obtained through the use of platforms supported by a Brain Canada PSG, so that a press release or other publicity can be prepared. Embargoes will be strictly respected. Brain Canada will advise Partners of impending significant publication.

For further Information

For any other information or questions:

- About the PSG competition and application process, please contact Haifa Staiti, Manager Research Programs, at haifas@braincanada.ca or at 647-428-5279
- About becoming a Funding Partner or for any partnership issues, please contact Astrid Eberhart, Director, Partnerships and Stakeholder Relations at astridE@braincanada.ca or at 416-231-4087.
- About Brain Canada and the Canada Brain Research Fund: go to <http://braincanada.ca/>