



Health Santé Canada Canada





Basics of Better Mental Health

2023 Request for Applications (RFA)

About Brain Canada Foundation

Brain Canada Foundation (Brain Canada) is a national registered charity that enables and supports excellent, innovative, paradigm-changing brain research in Canada. For more than two decades, 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, and brain and spinal cord injuries. Looking at the brain as one system has underscored the need for increased collaboration across disciplines and institutions, and to ensure that Canada has a robust pipeline of talent to remain at the forefront in the field of brain research. Brain Canada's vision is to understand the brain, in health and illness, to improve lives, and achieve societal impact.

The Canada Brain Research Fund (CBRF) is an innovative arrangement between the Government of Canada, through Health Canada, and Brain Canada Foundation, designed to encourage Canadians to increase their support of brain research, and maximize the impact and efficiency of those investments. The Fund supports 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. To date, Health Canada has invested over \$155 million through the CBRF which has been matched by Brain Canada Foundation and its donors and partners. www.braincanada.ca

About Krembil Foundation

The Krembil Foundation is a Canadian family-led non-profit organization which supports medical research. The goal of the Foundation is to accelerate research, expand knowledge and ultimately impact lives through discoveries that will lead to scientific advancements in medicine. With this goal in mind, the Foundation focuses it's funding on areas that have been historically underfunded: neurodegenerative diseases, and autoimmune diseases. The Foundation supports research with the intention of bridging gaps in knowledge, and ultimately helping discover treatments and cures for neurodegenerative diseases. www.krembilfoundation.ca

About Women's Brain Health Initiative

Many disorders associated with brain aging inexplicably affect women, and there has been a lack of research to understand why. Taking sex (biological factors) and gender (social influences) into account is necessary for equality in health and precision medicine.

Women's Brain Health Initiative (WBHI) is a Canadian and U.S. charitable foundation established in 2012 and is solely dedicated to protecting the brain health of women.

WBHI helps protect women's brain health by focusing its resources on research to combat brain-aging disorders that disproportionately affect women, and by creating compelling preventative health programs, grounded in science, so there is a greater understanding of the best ways to prolong our cognitive vitality. To learn more, please visit womensbrainhealth.org.

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Rationale

Mental illnesses include several mental health disorders and refer to a wide range of mental health conditions — disorders that affect the mood, thinking, and behaviour. Evidence-based research has established that mental illness is a significant cause of disability and limited quality of life, an important risk factor for premature mortality, and costly with respect to societal welfare. Signs and symptoms of mental illness can vary, depending on the disorder, circumstances, and other factors. A better understanding of such disorders at the fundamental level will enhance our knowledge of the nature, onset, and progression of specific mental illnesses, and may lead to novel discoveries that are relevant to other conditions with shared characteristics. The availability of additional data and the emergence of new approaches presents an opportunity to examine the underlying mechanisms of specific disorders, which forms a critical role in making the case for global investment in mental health. To this end, Brain Canada now seeks to fund bold, transformative basic mental health research projects in partnership with the Krembil Foundation and Women's Brain Health Initiative (WBHI), and with the support of Power Corporation of Canada and the Erika Legacy Foundation.

Scope

The Basics of Better Mental Health Program will fund experimental research that will provide insight into the causes and onset of mental illnesses and explore the neuropathological changes and information-processing deficits that may eventually lead to new directions for treatments and interventions. This consists of research with the goal of understanding signs and symptoms at the fundamental level, which may include studies at the molecular, cellular, organ system and/or whole-body levels, including development of tools and techniques to be applied for this purpose. The inclusion of sex-specific biological considerations in the rationale, hypothesis, and objectives will be instrumental in understanding the biological roots of mental illnesses. Mental illnesses that may be of interest include, but are not limited to, depression, bipolar disorder, anxiety disorders, eating disorders, personality disorders, schizophrenia, and substance use disorders.

Grant Details

The Basics of Better Mental Health Program has an overall funding envelope of \$3.3M CAD to support three team grants of \$1.1M each, over three years. Grants are non-renewable.

Equity, Diversity, and Inclusion

Evidence clearly shows that increasing equity, diversity and inclusion (EDI) in research environments enhances excellence, innovation and creativity. The funding partners are committed to excellence through equity and encourage applicants of diverse backgrounds to apply to our funding opportunities, which will promote the expression of diverse perspectives, approaches, and experiences, including those of underrepresented groups.

Eligibility

The funding opportunity is open to teams of two or more independent investigators from different institutions, or distinct research groups within the same institution.

Applicants must be conducting research at, and affiliated with, an eligible Canadian institution for
the entire duration of the grant, and must be considered an independent researcher at their
institution. Such an individual normally holds the rank of assistant, associate, or full professor; can
initiate and direct their own independent lines of research as principal investigator; has full
responsibility for running their laboratories; has full control of their research funds; and is

permitted to supervise trainees (if applicable, as per their institution's policy). Academic appointments must have started by the deadline for Full Application submission. Postdoctoral fellows, research associates, or adjunct faculty are not eligible to apply.

- Research applications may be related but cannot be identical to any other currently funded projects. It is the responsibility of the applicant to notify Brain Canada immediately should overlap arise from new funding awarded during the application and review process of this competition.
- Applicants must be able to initiate the project in February 2024 when funding is expected to begin.

Use of Funds

Funds must contribute towards the direct costs of the biomedical research project for which they were awarded and should be directly attributable to the project or activity being performed. A maximum of 20% of the funds can flow outside of Canada.

Eligible Costs

These funds may be used to support any aspect of the research project, including:

- Salaries for technical and administrative personnel;
- Stipends of trainees;
- Supplies and materials;
- Maintenance of essential equipment and/or purchase of equipment that is currently unavailable but essential for the project;
- Provision of special services and user fees;
- Knowledge Mobilization, including, but not limited to, travel of the Principal Investigator and trainees for presentation of results at conferences, publication costs in peer-reviewed and openaccess journals or repositories (including article processing charges), knowledge exchange activities (workshops, brochures, books), knowledge diffusion activities via online technologies (webinars, podcasts).

Ineligible Costs

- Salaries and consulting fees of any investigator or researcher holding an academic appointment;
- General office and lab equipment;
- Indirect costs or overhead costs associated with managing the research project.

Please note that this list is not exhaustive, and Brain Canada must be consulted on expenses that are not listed here, so that any partners involved can determine the eligibility of other categories of expenditure.

Criteria for Assessment

There will be equal weighting of the following criteria:

Innovation and Originality

Quality of the project which, while solidly based in scientific principles and technically feasible, offers new concepts in the role of sex-specific biological factors in mental illness, with the potential to change the paradigms of the field of mental health, open the field to new experimental directions, or address a critical barrier to progress in our understanding of the brain and nervous system and in our approach to mental health research.

Feasibility

The degree to which the project can be successfully executed using the proposed methodology within the timeframe, budget, and resources available. Appropriate background and justification for the proposed research should be provided through literature citations and data from other sources. The team's potential to successfully complete the project based on their expertise and track record will also be considered.

Potential for Impact

The degree to which the proposed research has the potential to fundamentally change our understanding of the underlying basic mechanisms of mental illness, including sex-specific biological factors, in the long-term. The incorporation of these considerations in the rationale, research question, and experimental design is critically important for broadening the potential impact of the work and the potential for new knowledge to be translated into health benefits for all.

Timeline

Launch of Request for Applications	May 26, 2023
Deadline for Registration Form	17:00 ET, June 27, 2023
Invitation to Full Application	Week of July 3 – 7, 2023
Deadline for Receipt of Full Applications	17:00 ET, September 8, 2023
Notification of Decision	December 2023
Funding Begins (earliest date)	February 1, 2024

How to Apply

Please note that the Basics of Better Mental Health Program competition includes a Registration Form and a Full Application stage. Applicants must submit a Registration Form via email to Brain Canada at mentalhealthgrants@braincanada.ca in order to be eligible to submit a Full Application. It is the sole responsibility of the Principal Investigator to ensure their submission adheres to the requirements and is received by the deadlines outlined above. There will be no appeal to late submissions. Brain Canada will acknowledge receipt of the Registration Forms and Full Applications within two business days.

Registration Form

Please click <u>here</u> to download the Registration Form.

Please send the completed Registration Form, along with the required attachments, as a PDF file to mentalhealthgrants@braincanada.ca. The PDF and accompanying attachments will need to be formatted using 12-point Times New Roman or 10-point Arial font, single-spaced, on a letter-size page with 1" minimum margins. The font size for figures and legends must be a minimum of 10 points. Use of a condensed font and spacing is not permitted. Registration forms received in any other format, exceeding the word limits, incomplete, or late, will be rejected.

Applicant Information

Brain Canada has implemented a demographic survey to evaluate the progress of its programs in fostering EDI. Please note that the survey will be sent via email, upon confirmation of the applicant's submission of the Registration Form. The information collected will not be shared in an identifiable form with the public, external stakeholders (e.g. Health Canada, funding partners), or reviewers, and will have no impact on the

evaluation of submitted grant applications. Survey responses are completely anonymized and aggregated to ensure protection of the identity of any individual. Please see Brain Canada's <u>Privacy Policy</u>.

Project Summary

- Project title
- Keywords describing the research project (maximum 10 words)
- A summary of the research project and its goals (maximum one page), emphasizing the innovative and original features, and highlighting how sex-specific biological factors will be incorporated as a main point of interest in the study.

Team Details

List the names and affiliations of the Principal Investigator and any co-investigator(s) that are part
of the team; the team must consist of two or more independent investigators from different
institutions, or distinct research groups within the same institution. Please include a brief
description of their roles in the proposed research project.

Optional Information

- Provide names and contact information for up to three individuals (within Canada and/or
 internationally) who are knowledgeable in the research area and would be able to evaluate the
 application. Individuals should not have a conflict of interest.
- Individuals to whom the application should not be sent for review.

Certification and Signature

The Principal Investigator must certify that all members of the team have agreed to their inclusion in the application and allow them to represent the team throughout the application process. Please note that institutional signatures are not required at the Registration Form stage.

Full Application

Full Applications must be submitted using Brain Canada's electronic grant management system, SmartSimple; access will be granted upon invitation to the Full Application stage.

The Full Application will need to be formatted using 12-point Times New Roman or 10-point Arial font, single-spaced, on a letter-size page with 1" minimum margins. The font size for figures and legends must be a minimum of 10 points. Use of a condensed font and spacing is not permitted. Applications received in any other format, exceeding the page limits, incomplete, or late, will be rejected.

Project Summary

- Project title
- Keywords describing the research project (maximum 10 words)
- A summary of the proposed research project and its goals (maximum 300 words)

Lay Summary (maximum 300 words)

• Suitable for publication and understandable by non-scientists.

Proposal (maximum 10 pages, including figures and legends, excluding references)

Proposals should include the following information, structured to best address the Criteria for Assessment outlined above:

- 1. The **overall objectives** to be achieved by the end of the funding period.
- 2. The **rationale** for undertaking the study now, including:
 - The current state of research on the topic and key knowledge gaps that motivate this study;
 - A statement about the innovation and originality of the project, preliminary evidence supporting the proposed research, and the research hypotheses.
- 3. The work plan, including:
 - The approaches, methods, and techniques that will be used to achieve the stated objectives;
 if applicable, outline the specific contributions of any collaborators involved in the project;
 - Methods of data analysis, including statistical methods and calculations to show that the study will be adequately powered;
 - Potential pitfalls or obstacles, and how they will be overcome.
- 4. The **expected outputs** from the study, and how the findings will be disseminated:
 - How the outcomes and long-term impacts of the study will advance knowledge on the research topic, including the role of sex-specific biological factors in mental illness?
 - Plans for making the data from the project available to other qualified researchers.
 - Plans for knowledge translation, exchange, diffusion, and dissemination, and how the
 project's findings will be adapted and shared with the target audience including broader
 knowledge users. Applicants are encouraged to visit CIHR's <u>Guide to Knowledge Translation</u>
 Planning.
 - The expected broad impacts of the results refer to the six main categories of research impacts: advancing knowledge; building capacity; informing decision making; health impacts; and broad economic and social impacts.
 - If applicable, briefly describe how the outcomes of the study could be applied to other diverse populations, such as those based on gender, age, Indigenous identity, visible minority identity, or disability?

Timeline and Anticipated Milestones

Please indicate the key intermediate stages in achieving the overall objectives, and the projected timeframe for achieving them. A template will be provided at the Full Application stage.

Team Member Details

Biographical sketches (maximum four pages) of the Principal Investigator and all other faculty-level co-Investigators and collaborators on the team must be submitted. A template will be provided at the Full Application stage. Biosketches are not required for consultants, trainees, technical personnel, or people with lived and living experience on the team.

Letters of Collaboration or Support (Optional)

Applicants can submit up to two letters of support (maximum one page per letter) from collaborators, if applicable. The letters should explain the nature of collaboration and outline the specific contributions of the collaborator(s) involved in the proposed project.

Budget

A yearly budget must be provided, along with a written budget justification (maximum one page) describing the proposed costs in each of the major categories. A template will be provided at the Full Application stage. Please provide sufficient information to allow reviewers to assess the appropriateness of the cost allocation.

Sources of Funding

A summary of other sources of funding, if any, related to the proposed project, including current or pending grant applications from any team member.

Please note: Research applications may be related but cannot be identical to any other funded projects. It is the responsibility of the applicant to notify Brain Canada immediately should overlap arise from funding awarded during the application and review process of this funding opportunity.

Institutional Approvals

Applicants will be required to provide documentation, where applicable, demonstrating institutional approvals and compliance with policies on the ethical use of human subjects, animals, and biohazards prior to funding release. As such, please outline what applicable policies you will have in place for the Full Application deadline, and timeline for any addenda or additional approvals specific to the proposal that may need to be added thereafter (maximum one page).

Certification and Signatures

All signatures must be submitted with the application by the deadline for Full Application submission.

- Signature of the Principal Investigator is mandatory for the application to be considered complete.
- Institutional Signature: Signature of the responsible official of the institution where the Principal Investigator will conduct the research is required.

Review Process

Registration Form

Registration Forms submitted by the deadline will undergo an administrative check and relevance review by Brain Canada to ensure alignment with the scope of this funding opportunity and all eligibility criteria are met. All applicants will be notified regarding the administrative check and relevance review of their application. Eligible applications will be invited to the Full Application stage; ineligible applications will be withdrawn from the competition.

Full Application

Brain Canada will manage the peer review process, in collaboration with the funding partners. Full Applications submitted by the deadline will be reviewed by at least two members of an external Peer Review Panel composed of international and/or Canadian researchers with broad experience and expertise in the relevant field(s). Brain Canada will take into account any conflicts of interest and other relevant considerations to ensure a balanced panel.

Based on the reviewer scores, the Peer Review Panel will discuss the top applications. The Panel will recommend to Brain Canada the applications that have received a high merit score. Applicants will receive anonymized written reviewer comments. Applicants whose applications were discussed at the Peer Review Panel meeting will additionally receive Scientific Officer notes from the proceedings. Brain Canada will not entertain appeals against the assessment of the Peer Review Panel.

Confidentiality and Ownership

Brain Canada will keep all materials submitted for this funding opportunity confidential and only share them with reviewers, Review Panel members, and observers who have signed confidentiality and non-disclosure agreements. The funding partners do not claim ownership of intellectual property (IP) arising

from the research they fund, and expects that any IP arising from this funding is developed and commercialized according to the policies of the research institutions in which the research is performed.

Communications

Recipients of the Basics of Better Mental Health Program grants must make every effort to attend events organized by the funding partners, and present their projects, if applicable, to demonstrate the importance and impact of their research for moving the field of mental health forward.

Contact Information

For more information, or if you have any questions regarding the application process, please contact mentalhealthgrants@braincanada.ca.