Brain Canada

Youth Mental Health Platform
Powered by RBC Future Launch
Request for Applications (RFA)

About RBC

Royal Bank of Canada is a global financial institution with a purpose-driven, principles-led approach to delivering leading performance. Our success comes from the 88,000+ employees who leverage their imaginations and insights to bring our vision, values and strategy to life so we can help our clients thrive and communities prosper. As Canada's biggest bank, and one of the largest in the world based on market capitalization, we have a diversified business model with a focus on innovation and providing exceptional experiences to our 17 million clients in Canada, the U.S. and 27 other countries. Learn more at rbc.com.

We are proud to support a broad range of community initiatives through donations, community investments and employee volunteer activities. See how at rbc.com/community-social-impact.

About Brain Canada

Brain Canada is a national registered charity headquartered in Montreal that enables and supports excellent, innovative, paradigm-changing brain research in Canada. For 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, 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. This will lead to a smarter way to invest in brain research that is focused on outcomes that will benefit patients and families. 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 is an innovative partnership between the Government of Canada (through Health Canada) and Brain Canada, 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. Since 1998, Brain Canada and its donors and partners have invested $277 million in more than 370 research projects across the country.

www.braincanada.ca

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Rationale

Mental illness disproportionately affects young people worldwide between the ages of 15 and 29. It accounts for approximately half of the overall burden of disease in this age group, making it the leading cause of disability. Given the negative impact of the COVID-19 pandemic on youth mental health, we are at a crucial point in time where the ideas and conversations around improving information sharing need to be turned into tangible action.

The purpose of the **Brain Canada Youth Mental Health Platform** is to introduce a call to action to the youth mental health research community for the development of a national youth mental health platform with the ultimate goal of sharing data across disciplines, including people with lived experience, in order to create synergies across these groups while accelerating the practical application of research findings in improving youth mental health services.

Scope

The purpose of this RFA is to establish a group of investigators to develop a resilient and sustainable research platform that enhances the sharing of centralized research resources to increase access to equipment, expertise, data, protocols, patient repositories, biobanks, and more in the area of youth mental health. **It is anticipated that funding from the Brain Canada Youth Mental Health Platform will allow investigators to:**

- Develop a national platform for the open sharing of youth mental health research data;
- Showcase the impact of leveraging interdisciplinary partnerships and interactive networks of collaborators;
- Demonstrate the platform's ability to enable its users to capitalize on the platform's availability and accessibility with the overall goal of improving youth mental health outcomes;
- Establish a base for determining and addressing the youth mental health community's immediate needs and allow for the preparation of future national mental health crises;
- Provide evidence for a sustainable impact on practice, programs and/or policy that could ultimately lead to a change in health outcomes.

This program will support a national research platform with the goal of providing *enhanced technical and research capabilities* to multiple investigators in the field of youth mental health. Based on the principles of Open Science, high-impact research has recognized the importance of creating access to shared equipment, facilities, services, databases, computing/informatics facilities, patient repositories, and biobanks through the development of "platforms" that enable open access to such technologies across a variety of research networks. The availability and accessibility of platforms represent an important avenue for capacity building and a cost-effective means of accessing cutting-edge equipment, technology, and services beyond what any researcher could achieve on their own. Despite the known advantages of using platforms in research and their proven ability to foster interdisciplinary collaborations and innovation, a national platform in the youth mental health research sector has yet to be developed.

Central to this platform grant is the concept of added value. Support from Brain Canada and RBC must result in at least one of the following outcomes:

- Improvement in operations and capabilities of a platform such that research is facilitated and/or accelerated;
- Access to specialized technology or integration and coordination of existing infrastructure such

that quality is improved and more widely accessible to the research community as well as people with lived experience and the youth mental health community at large;
- Creation of new data pools, or improved access to existing data, which allows for the conduct of research activities not previously feasible;
- A discernable impact on Canada's capabilities in youth mental health research.

Examples of added value include:

- Enhancing the ability of youth mental health researchers to share and retrieve research data, biological samples, and/or adopt common methodology;
- Standardizing the acquisition and curation of materials and developing standard operating procedures that will improve reliability and reproducibility;
- Demonstration of research projects that would be otherwise impossible without the services and/or information provided by the platform (see eligible costs);
- Faster uptake of novel techniques due to the availability and shared resourcing of trained personnel;
- Developing novel technical and methodological approaches for youth mental health research, including informatics tools and software, that will have broad applicability and impact on research progress;
- Engaging stakeholders to ensure that knowledge is more rapidly translated to practice and that ethical issues in youth mental health research are addressed.

The Brain Canada Youth Mental Health Platform is not intended to replace current sources of funding or merely sustain current levels of platform service and capability.

Grant Details

The Brain Canada Youth Mental Health Platform is intended to support the development and maintenance of a largescale national platform, as well as its operating costs, for a period of three years. The total amount available to support the platform is $5.13 million dollars.

Equity, diversity, and inclusion

Evidence clearly shows that increasing equity, diversity and inclusion (EDI) in research environments enhances excellence, innovation and creativity. In addition, incorporation of principles of EDI in the design and execution of research involving human participants is critically important for broadening the potential impact of the work and the potential for new knowledge to be translated into health benefits. Given this heterogeneity and the diversity of the Canadian population, applicants must consider biological variables (i.e., sex, age, etc.) and social determinants of health (i.e., gender, socioeconomic status, etc.) in the research design, where appropriate. We encourage applicants to refer to CIHR's guidance on How to integrate sex and gender into research for more information. Applicants are also encouraged to consider how their proposed research addresses EDI consistent with CIHR's position on EDI, available in the Tri Agency Statement on Equity, Diversity and Inclusion.

In addition to EDI consideration in the research design, Brain Canada and RBC are committed to excellence through equity and encourage applicants of diverse backgrounds to apply to this funding opportunity, which will promote the expression of diverse perspectives, approaches, and experiences, including those of underrepresented groups.

Eligibility

This competition is open to groups of investigators working in youth mental health research. Broadly, this encompasses all areas of youth mental health from basic to clinical sciences and any disciplines (i.e., neuroscience, behavioral, clinical, biological, cognitive, social, and cultural) across the full span of the mental health community including people with lived experience.

- One of the platform investigators will be designated the Principal Investigator (PI), nominated by the platform research group, to be the individual responsible for submitting the application on its behalf and for all communications with Brain Canada. The PI is generally the individual responsible for overall management of the platform. If the platform is a physical entity, it would generally be located at the PI's institution. The PI must be conducting research at, and affiliated with, a Canadian institution for the entire duration of the grant. Academic appointments must have started by the deadline for Full Application submission.
- The platform research group must be composed of investigators from at least three Canadian institutions and be eligible to receive funding from federal granting agencies. Investigators must be considered independent researchers at their institution. Such individuals normally hold the rank of assistant, associate, or full professor; can initiate and direct their own independent lines of research as principal investigator; have full responsibility for running their laboratories; have full control of their research funds; and are permitted to supervise trainees (if applicable, as per their institution's policy).
- The platform investigators should include a **knowledge translation expert** that will be engaged to help shape an integrated knowledge translation plan throughout the three-year funding period to ensure the knowledge generated will be acted on, and will have a meaningful, tangible impact on youth mental health care within the project timeframe and in the long term.
- The platform investigators should also include **at least one knowledge user** who is likely to be able to use research results to make informed decisions about health policies, programs and/or practices. The engagement of the knowledge user in the research process may vary in intensity and complexity depending on the nature of the research. A knowledge user can be, but is not limited to clinicians, social workers, school administrators, physicians, policy makers, decision makers, community leaders, or a person with lived experience that will work with the platform investigators to advocate for findings from the platform that are likely to be highly relevant and used by other users.
- The youth mental health platform will have additional impact if it increases opportunities for interaction and partnerships with knowledge users such as people with lived experience, and Associate Members from different sectors, countries and socioeconomic backgrounds who intend to use the platform such as scientists, international researchers, clinicians, and key stakeholders (i.e., industry, government and other non-academic sectors). While these other users cannot receive Brain Canada funding, they should be listed in the application and their interaction with the platform team should be described.
- Applicants must be able to initiate the project in July 2022, when funding will start.

Use of Funds

The funds must be directed towards the direct costs of the research project for which the research team is awarded and should be directly attributable to the project or activity being performed.

Eligible Costs	Ineligible Costs
Purchase of service contracts, equipment repairs and other improvements to sustain the life of the platform, ensure it remains "state of the art", to increase its performance, capacity, and/or number of users supported. *Purchase of equipment and hardware may not exceed one quarter of the total value of the grant.*	Renovation or construction of space, purchase of standard office and laboratory furniture (cabinets, stools, computer desks, etc.).
Specialized supplies and services necessary for operation which will 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 Principal investigator or researcher holding an academic appointment.
Development and dissemination of, and access to: databases, data repositories, patient registries, 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, Insurance, etc. Costs associated with protection of intellectual property.
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 the purpose 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, *not to exceed one-half of the total value of the grant*.	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 expenditures.

Criteria for Assessment

A highly rated application will have the following attributes:

1) ***Quality and impact of the research that is conducted using the platform.*** The platform enables excellent investigators 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 youth mental health and illnesses;
   - Could not have been conducted in its absence, except at much greater cost (i.e., by duplicating existing infrastructure) and with significant delay;
   - Will enhance Canada's capacity in youth mental health research;
   - Has an ultimate impact which will reduce the burden of illness and improve the quality of life of youth in Canada;
   - Will stimulate intersectoral (e.g., university/industry, university/health care service) and/ or interdisciplinary and/or international partnerships, including collaborations with people with lived experience;
   - For platforms where some funding will be used for a research project, the project is scientifically excellent and of high potential impact.

2) ***Distinctiveness of the platform.*** The platform is unique in its capabilities within the nation, region, or locality.

3) ***Management of the platform.***
   - The governance and organizational structure are strong, effective, and are intended to be well understood by users;
   - There is an equitable and user-friendly process for access, and users receive training and assistance when applicable, 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;
   - The operation of the platform is reviewed or audited regularly against defined performance benchmarks and identified deficiencies are corrected.

4) ***The added value of Brain Canada and RBC support.*** The platform grant will facilitate user access to the platform and improve its operational capabilities, quality, or capacity. Linkages to other databases, repositories, biobanks, and registries are described. The application is clear on the extent to which the existing platform, or the components that will be coordinated or integrated using the grant, is/are supported from other sources.

5) ***Sex, Gender and Diversity Considerations.*** Incorporation of sex, gender and diversity considerations in the design and execution of research is critically important for broadening the potential impact of the work and the potential for new knowledge to be translated into health benefits to all. As such, the application clearly demonstrates how sex, gender and diversity considerations will be integrated in the development and use of the platform.

6) ***Integrated knowledge translation plan***. The platform involves the participating collaboration of knowledge users and responds to their knowledge needs. The application should clearly illustrate how it will potentially have a demonstrable and sustainable impact on practice, programs and/or policy that could ultimately lead to a change in health outcomes.

7) ***Open Science.*** The platform makes scientific information available to all. The scientific research outputs of the platform are "FAIR", i.e. Findable, Accessible, Interoperable, and Reusable, and promote open education, open access publications, open data and materials, etc. The platform adopts a sustainable approach with concrete steps forward and commitment for Open Science

so that, subject to applicable laws and regulations, its data and specimens will be useful and accessible to the youth mental health community including stakeholders, researchers, clinicians, and end users. *Applications for support of repositories, databases, and registries which contain personal health information must explain how their platform conforms to the relevant ethical guidelines.*

8) ***Long-term sustainability of the platform.*** The application provides a feasible proof of concept for the sustainability of the platform during and beyond the grant period of the Brain Canada Youth Mental Health Platform.

Timeline

Launch of Request for Applications	November 2, 2021
Deadline for Receipt of Registration Form	**December 14, 2021 at 16:00 ET**
Invitation to Full Application	December 20-23, 2021
Access to Grant Applications System	
Deadline for Receipt of Full Applications	**February 15, 2022 at 16:00 ET**
Notification of Award	April 2022
Funding begins	July 2022

How to Apply

Registration forms are to be submitted via email to platformgrant@braincanada.ca Submission of a registration form is a requirement to submit the full application. Access to Brain Canada's electronic grant management system will be made available upon invitation to submit the full application. The principal investigator must complete all required application fields in SmartSimple before the deadline. **There will be no appeal to late submissions.** Brain Canada will acknowledge receipt of the full application within two working days.

Registration Form

Please click here to download the Registration Form.

Please send the completed Registration Form, along with the required attachment, as a PDF file to platformgrant@braincanada.ca. The PDF and accompanying attachment 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. **It is the sole responsibility of the applicant to ensure their submission adheres to these requirements and that it is received before the deadline.**

Applicant Information
Brain Canada has implemented a demographic survey to evaluate the progress of 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, etc.), 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 [Privacy Policy](#).

Platform Summary
- Title of proposal;
- Project start and end dates (Note: choose dates within a 36-month window);
- 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 youth mental health, and the impact of the platform on the field; include an explanation of the special services, capabilities, or expertise that the platform will offer to researchers, clinicians, key stakeholders, people with lived experience and other knowledge users within the national scope of the platform. Explain how the data or materials acquired, curated or analyzed by the platform will be made available to other qualified researchers and the end users (with appropriate safeguards in the case of human data) (maximum 1-page).

Member Details
- List the names, affiliations, and roles of each investigator of the platform research group;
- List of identified knowledge users and Associate Members who intend to use the platform such as scientists, international researchers, clinicians, and key stakeholders (i.e., industry, government and other non-academic sectors).

*Please briefly explain how each individual will use the proposed platform.

Optional Information
- Provide names and contact information for up to three individuals (Canadian and/or International) who are knowledgeable in your 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.

Reviewers will be selected by Brain Canada, taking these and other considerations into account.

Full Application

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. **It is the sole responsibility of the applicant to ensure their submission adheres to these requirements and is received before the deadline.**

Platform Summary - Same as in Registration Form, update as needed.
- Title of proposal;
- Project start and end dates (within a 36-month window);
- Keywords (including freeform): up to 10 words;
- Provide a summary description of the platform and how it will be used to advance research in youth mental health, and the impact of the platform on the field; include an explanation of the special services, capabilities, or expertise that the platform will offer to researchers, clinicians, key stakeholders, people with lived experience and other knowledge users within the scope of the platform (local, regional, national, or international). Explain how the data or materials acquired, curated or analyzed by the platform will be made available to other qualified

Funding by:

researchers and the end users (with appropriate safeguards in the case of human data) (maximum 1-page).

Lay Summary (maximum 300 words)
- Suitable for publication and understandable by non-scientists.

Proposal (maximum 6 pages)
- Provide details of the proposed use of the youth mental health platform grant while addressing all of the assessment criteria listed above;
- Describe the anticipated collective impact and outcomes of the platform on the research of the platform team, including the potential for intersectoral, interdisciplinary and international partnerships and collaborations with people with lived experience. In addition, please describe the potential impact of the proposed platform on Canada's capabilities in youth mental health research;
- Explain how integrated knowledge translation will be implemented throughout the research process;
- Figures and references (maximum 3 additional pages).

Research Plan and Timeline (maximum 4 pages; excluding the timeline and anticipated milestones Gantt Chart)
- List the overall objectives of the platform;
- List *project milestones*. Milestones are significant steps in the project. Important milestones to be reached within the three initial years include, but are not limited to, the development of the organizational framework including administration, governance, collaborations and partnerships; an enhanced scalability and interoperability plan; the development of programs for training, workshop and user group support; the planning of integration and support tools in response to community need; the establishment of models to facilitate the sharing of rich datasets in a manner that respects the privacy and expectations of participants, complies with regulatory requirements, and aligns with international best practices for open science data governance. Milestones should be described for at least every 6 months of the proposed project and must be accompanied by a set of metrics that can be evaluated by a third party to gauge progress.
- Please include a 1-page timeline and anticipated milestones Gantt Chart (template will be provided) separately which outlines the general timeline for the project within the requested funding period (36 months). The Gantt chart should reference the milestones listed above.

Member Details
- List the names and affiliations of each investigator of the platform as well as their role in the proposed platform project. It is recommended to include a URL for each individual's institutional or personal webpage. Provide a brief CV in standard NIH biosketch format (template will be provided; maximum 4-pages) outlining each Member's qualifications and achievements.
- List of identified knowledge users and Associate Members who intend to use the platform such as scientists, international researchers, clinicians, and key stakeholders (i.e., industry, government and other non-academic sectors). Briefly explain how each individual will use the proposed platform.

Budget
- For each grant year, provide the total amount of requested grant funding in the budget table (template will be provided).

- Provide an outline budget for the full period of funding, listing the major line items as described under "Eligible Costs", alongside a budget justification explaining how these expenditures will support the intended operation of the platform (maximum 2-pages).

Sex, Gender and Diversity Considerations

Sex, gender and other determinants (ethnicity, income, age, education, etc.) may affect health. Throughout the research process, from conceptualization (research hypothesis development) to completion (knowledge translation), the removal of systemic barriers and biases to enact the practice of inclusion ensures that all individuals have equal access to and benefit from the platform. Integrating considerations for sex, gender, and other determinants of health in research projects ensures they produce better outcomes and are beneficial for all people living in Canada.

Sex and Gender Considerations (maximum 1 page)
How sex- and gender-based analysis plus (SGBA+) will be taken into account in any of the research projects that will utilize this platform (led by the PI, Knowledge users, or Associate Members)?

Equity, Diversity and Inclusion Considerations (maximum 1 page)
Please describe how the platform will target the inclusion of diverse populations, such as indigenous peoples, women, members of the LGBTQ+ community, newcomers, racialized communities, those that self-identify as low socioeconomic status, people not in employment, education or training, and individuals in both rural and remote areas, which may utilize this platform.

Ethical, Social and Legal Aspects (maximum 1 page)
For the Full Application, applicants will be required to provide documentation, where applicable, demonstrating approvals and compliance with national policies on the ethical use of human subjects, animals, and biohazards. As proof of institutional approvals are required prior to funding release, please outline what applicable policies you will have in place for the Full Application deadline, and timeline for any addendums or additional approvals specific to your proposal that may need to be added after. Additionally, please address any ethical, social, and legal implications that may be raised by the application of youth mental health research findings from your research project.

Certification and Signatures

- Signature of the Principal Investigator is mandatory for the application to be considered.
- Institutional signatures: Signature of the responsible official of the institution where the principal investigator will conduct the research is required.
- All signatures must be submitted along with the application by the deadline for Full Application.

Review Process

Registration Forms

The purpose of the registration form is to provide Brain Canada with a basic overview of the level of interest in a Youth Mental Health Platform within the research community, confirm eligibility of applications, and to help inform the selection of reviewers (Review Panel) which will evaluate the merit of full applications. While the registration document itself will not be evaluated for scientific merit, the submission of a registration form is a requirement to move on to the full application stage.

Brain Canada will manage the review process and recruit a Review Panel composed of experts, from within and outside Canada, with a broad range of expertise and training to review full applications.

Review Panel members will be recruited according to the topics of the applications proposed in the registration phase and are not in conflict with the applications. Review of full applications will take place during a virtual adjudication meeting.

Full Application

The Review Panel will provide a merit score based on the assessment criteria described above for each full application and recommend to Brain Canada those applications which have received a sufficiently high merit score to deserve an offer of funding. The successful applicant will be notified that their proposal has been conditionally approved and informed of any conditions that must be met before funding can be released.

Applicants will receive written comments from the expert reviewers, unless considered uncompetitive by all reviewers. Brain Canada will not enable an appeal process against the assessment of the Review Panel.

Brain Canada may require documentation (e.g., service contracts, or repair/upgrade estimates, etc.) only from those applicants whose proposal has 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 PI. In case of multi-site platforms, the PI is responsible for distributing funds to the other institutions.

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. 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 (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

The recipient of the Brain Canada Youth Mental Health Platform must make every effort to attend events organized by Brain Canada and/or RBC, and present the outcomes, if applicable, to demonstrate the implications and importance of their research.

Contact Information

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