







Addressing Mental Health in Paediatric Rheumatic Diseases Team Grants

Request for Applications

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, 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 Cassie + Friends

Cassie + Friends' mission is to transform the lives of children and families affected by Juvenile Arthritis and other rheumatic diseases through research, education, connection and support. Our vision is a pain-free future for kids.

Working hand-in-hand with patients, caregivers, healthcare professionals and researchers across every province and territory in Canada, we've created a vibrant, engaged and connected community that helps kids, teens, young adults and their families face the ups and downs of life with a chronic condition — so that no child has to live in pain alone.

As the only charity in Canada focussed 100% on kids, we've now raised nearly \$3.5 million through the help of families, organizations and dedicated friends. Together, we will ensure the 24,000 kids and teens affected by childhood rheumatic disease in Canada - a leading cause of chronic disability in kids - receive the attention, resources and research they deserve. To learn more and join our mission, please visit <u>cassieandfriends.ca</u>.

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Rationale

Paediatric rheumatic diseases, such as juvenile idiopathic arthritis, systemic lupus erythematosus, and juvenile dermatomyositis, are autoimmune diseases that can have long-term physical and psychosocial effects on an individual. These conditions often result in chronic pain, fatigue, and physical limitations that can impact the day-to-day and overall quality of life of children. Moreover, children with these conditions are at increased risk of developing mental illnesses, characterized by alterations in thinking, mood or behaviour associated with significant distress and impaired functioning, such as anxiety and depression.

Despite the prevalence of co-occurring mental illnesses in paediatric rheumatic diseases, estimated at up to 40%, there is a lack of understanding regarding the factors that contribute to their development, mental health screening for early identification and assessment, as well as limited treatment options to provide appropriate care and support.

Investing in mental health research within the paediatric rheumatic disease community is critical to improving the overall health and well-being of those living with these diseases. By addressing this research gap, we can provide much-needed support to children and young adults and their families living with paediatric rheumatic diseases and ensure they receive timely care and treatment for their mental health needs.

Scope

The Addressing Mental Health in Paediatric Rheumatic Diseases funding opportunity aims to support research that will improve our understanding of the prevention, diagnosis, and/or treatment of mental illnesses in children and young adults aged 0 to 27 years with rheumatic diseases.

Grant Details

The Addressing Mental Health in Paediatric Rheumatic Diseases funding opportunity has an overall funding envelope of \$480,000 CAD to support two team grants of \$120,000 per year for two years.

Equity, Diversity, and Inclusion

Evidence clearly shows that increasing equity, diversity and inclusion (EDI) in research environments enhances excellence, innovation and creativity. Brain Canada and Cassie + Friends 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

• Investigators must be conducting research at, and affiliated with, an eligible Canadian academic 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.

- This funding opportunity is open to interdisciplinary research teams of two or more members and must include the following:
 - a minimum of two independent investigators, as described above, with at least two distinct institutions in Canada represented on the team;
 - one paediatric rheumatologist <u>and</u> one member with demonstrated research and/or clinical experience and expertise in the mental health field, one of which must be designated as the Principal Investigator;
 - o at least one person with lived and/or living experience of paediatric rheumatic disease as a collaborator, including caregivers (e.g., parent, guardian, spouse, sibling, etc.).
 - Additional team members and collaborators may be included, as needed, to ensure the required expertise is present to carry out the proposed research.
- 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.
- 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 research project for which they were awarded and should be directly attributable to the project or activity being performed.

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, user fees, payments to study participants;
- 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 and products (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 supplies and lab equipment;
- Indirect costs or overhead costs associated with managing the research project;
- Costs incurred outside of Canada. While international investigators and collaborators are eligible to be part of the research team, funds cannot flow outside of Canada.

Please note that this list is not exhaustive, and Brain Canada and Cassie + Friends must be consulted on expenses that are not listed here to determine the eligibility of other categories of expenditure.

Criteria for Assessment

There will be equal weighting of the following criteria:

Innovation and Originality

The potential of the project to, while solidly based in scientific principles and technically feasible, offer new concepts, change the paradigms of the field, open the field to new experimental directions, or address a critical barrier to improving our understanding of mental illness in the paediatric rheumatic disease community.

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, data from other sources, and preliminary results, where available. The team's potential to successfully carry out the proposed research based on their experience and expertise will be considered.

Potential for Impact

The degree to which the proposed research has the potential to address mental illness in the paediatric rheumatic population and transform lives through improved identification, prevention, and intervention. While accounting for sex as a biological variable is important for transparency and reproducibility, incorporating considerations for sex, gender, and diversity into study design additionally broadens the potential impact of the work to expand knowledge and turn discovery into health.

Engagement of People with Lived and Living Experience

The quality of the plan to meaningfully engage people with lived and living experience of rheumatic diseases throughout the research process to ensure appropriate research design, delivery of findings, and maximum impact of results for the community will be considered.

Timeline

Launch of Request for Applications	June 20, 2023
Deadline for Registration Forms	17:00 ET July 26, 2023
Invitation to Full Application	Week of July 31 - August 4, 2023
Deadline for Receipt of Full Applications	17:00 ET September 12, 2023
Notification of Decision	December 2023
Funding Begins (earliest date)	February 2024

How to Apply

Please note that this funding opportunity includes a Registration Form and a Full Application stage. Applicants must submit a Registration Form via email to 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 proposed research project and its goals (maximum one page)

Team Member Details

• List the names, affiliations, and roles of the Principal Investigator, co-Investigators, and team members, ensuring the composition of the team meets the eligibility criteria outlined above.

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

Applicants invited to submit a Full Application will be provided with an application package, including all relevant templates, by email. Please submit the completed Full Application as a single PDF file to mentalhealthgrants@braincanada.ca. The Full Application will need to be formatted using 12-point Arial or Georgia 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.

The application components must be submitted in the following order:

Project Summary

- Project title
- Keywords describing the research project (maximum 10 keywords)
- A summary of the research project and its goals (maximum one page)

1. Lay Summary (maximum 300 words)

Suitable for publication and understandable by non-scientists.

2. Proposal (maximum 8 pages, including figures and legends, excluding references)

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

- i. The **overall objectives** to be achieved by the end of the funding period.
- ii. The **rationale** for undertaking the study now, including:
 - The current state of research on your topic and the key knowledge gap that motivates this study
 - A statement about the innovation and originality of the project, preliminary evidence supporting the proposed research, and the research hypotheses
- iii. 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
 - Plans for engagement of people with lived and living experience of paediatric rheumatic diseases
 - 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
- iv. The **expected outputs** from the study, and how the findings will be disseminated:
 - How the outcomes from the study will advance knowledge on mental illness in paediatric rheumatic disease
 - 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>
 <u>Planning</u>.
 - 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.

3. Timeline and Anticipated Milestones

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.

4. Sex, Gender, and Diversity Considerations

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 results of the project.

Please describe (maximum two pages):

- How sex and/or gender considerations will be addressed in the research project. Research projects proposing to use only one sex or gender should provide strong justification from the scientific literature or preliminary data to support this decision.
- Description of any targeted research including diverse populations, such as that based on age, Indigenous identity, visible minority identity, or disability.

Applicants are encouraged to review CIHR's <u>Online Training Modules for Integrating Sex and Gender in</u> Health Research.

5. 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.

6. Letters of Collaboration or Support

Letters should describe the collaborator's role in the proposed project, if applicable, and/or
describe the impact of the research (one page per letter, maximum two letters).

7. 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.

8. 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. Please provide sufficient information to allow reviewers to assess the appropriateness of the cost allocation. A budget template will be provided at the Full Application stage.

9. 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 addendums or additional approvals specific to the proposal that may need to be added thereafter (maximum one page).

10. Certification and Signatures

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

Review Process

Registration Form

Registration Forms submitted by the deadline will undergo an administrative check and relevance review by Brain Canada and Cassie + Friends to ensure all eligibility criteria are met and alignment with the scope of this funding opportunity. 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 Cassie + Friends. 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), in addition to a person with lived experience. 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 and Cassie + Friends 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 and Cassie + Friends will not entertain appeals against the assessment of the Peer Review Panel.

Confidentiality and Ownership

Brain Canada and Cassie + Friends 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. Brain Canada and Cassie + Friends 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 Addressing Mental Health in Paediatric Rheumatic Diseases must make every effort to attend events organized by Brain Canada and Cassie + Friends, and present their projects, 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 mentalhealthgrants@braincanada.ca.