Fondation Brain Canada Foundation

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Health Canada Santé Canada

KREMBIL FOUNDATION

Accelerator Grants: Neurodegeneration x Immunology

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. www.braincanada.ca

About Krembil Foundation

The Krembil Foundation is a Canadian, family-led non-profit 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 its funding on areas that have been historically underfunded: neurodegenerative, and autoimmune diseases. www.krembilfoundation.ca

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Rationale

Neurodegenerative diseases, such as Alzheimer's disease (AD) and Parkinson's disease (PD), pose a significant and growing public health challenge given the changing demographics of an aging population. In Canada, there are currently 771,939 people living with dementia[1] – with AD the most common cause of dementia - with cases projected to double by 2050. More than 110,000 people in Canada live with PD[2] and by 2050 this number is estimated to rise by 69%[3]. Current therapies for neurodegenerative diseases manage symptoms or slow disease progression, but do not stop or reverse the underlying disease processes, highlighting the critical need to advance our understanding of the fundamental mechanisms involved in neurodegeneration.

Emerging evidence increasingly points to the role of the immune system, both centrally and peripherally, in the onset and progression of neurodegeneration. For example, within the central nervous system (CNS), chronic neuroinflammation is associated with neuronal injury and the accumulation of pathological proteins (e.g. amyloid beta, tau and alpha-synuclein), while circulating immune cells in the periphery have been shown to influence CNS inflammation and contribute to disease pathology. Further understanding of the shared and distinct immune-related mechanisms involved in AD, PD and Huntington's disease (HD) has the potential to uncover novel mechanistic insights into neurodegeneration and potential therapeutic targets.

Scope

The *Accelerator Grants: Neurodegeneration x Immunology* program aims to support innovative, bold, and exploratory research to understand the role of the immune system in neurodegeneration in Alzheimer's disease, Parkinson's disease, and/or Huntington's disease. The program will fund experimental research, in the early conceptual or fundamental stages, with potential to provide insights on disease pathogenesis, progression, diagnosis, prevention, and/or treatment. Preference will be given to projects with novel hypotheses or unconventional approaches that, if successful, could shift existing paradigms and open new lines of inquiry for the field.

Projects must explore the role of immune mechanisms and how they contribute to and/or modulate neurodegeneration. Examples of immune mechanisms include, but are not limited to, the role of innate or adaptive immunity, neuroinflammation, central or peripheral immune responses, interaction between the nervous system and immune system in aging, or the gut-immune–brain axis.

Recognizing that groundbreaking ideas require diverse perspectives, this opportunity will support multidisciplinary research teams that bring together needed expertise in neuroscience and immunology along with other fields of study. Early career researchers are encouraged to apply, and researchers studying the immune system in other neurological diseases are invited to transfer their expertise to the neurodegenerative diseases covered in this funding opportunity. It is anticipated that this funding will catalyze new insights and support the generation of preliminary data and/or tools to provide teams and the field with new research directions.

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[1] "Dementia numbers in Canada." Alzheimer Society of Canada. https://alzheimer.ca/en/about-dementia/what-dementia/dementia-numbers-canada.

[2] "What Is Parkinson's - Parkinson Canada." Parkinson Canada, June 24, 2025. https://www.parkinson.ca/what-is-parkinsons/.

[3] E. Ray Dorsey et al., "Global, Regional, and National Burden of Parkinson's Disease, 1990–2016: A Systematic Analysis for the Global Burden of Disease Study 2016," *The Lancet Neurology* 17, no. 11 (November 2018): 939–53, https://doi.org/10.1016/s1474-4422(18)30295-3.

Grant Details

The *Accelerator Grants: Neurodegeneration x Immunology* has an overall funding envelope of $3 million CAD to support up to 10 team grants of $300,000 ($150,000 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. We 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, and adjunct faculty are not eligible to apply.
- This funding opportunity is open to multidisciplinary research teams and must include the following:
    - a minimum of two independent investigators, as described above, with at least two distinct Canadian institutions or distinct research groups within the same institution represented on the team;
    - additional team members and collaborators, 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. Overlap is defined as having the same objectives and/or experimental aims as any other funded work.
- Applicants must submit a Registration Form in order to be eligible to submit a Full Application.
- Applicants may only submit one application as Principal Investigator.
- Applicants must be able to initiate the project in March 2026 when funding is expected to begin.

Use of Funds

The 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. Requests for general operating support or maintenance funding are not eligible. 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, 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 open-access 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 independent academic or research appointment;
- General office supplies 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 to determine the eligibility of other categories of expenditure.

Criteria for Assessment

There will be equal weighting of the following criteria:

Innovation and Originality

Projects should demonstrate bold, novel thinking that has the potential to yield new insights, preliminary data and/or tools, open the field to new experimental directions, or address a critical barrier to progress, with preference for ideas that have the potential to significantly shift current paradigms for research in neurodegeneration. While grounded in sound scientific rationale, proposals should pursue novel hypotheses, challenge prevailing assumptions, or integrate previously unexplored connections between neurodegeneration and immune system mechanisms. The diverse expertise of the team will be considered in the innovation and originality of the proposed research.

Feasibility

The feasibility of the project will be assessed based on the clarity and coherence of the proposed approach, the appropriateness of the methods with consideration for mitigation strategies, and the alignment of the research plan with the available resources and timeline. While preliminary data are not required, a clear rationale, hypothesis, and experimental plan must be articulated. 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 application should describe how the proposed research could generate meaningful preliminary data that may serve as the foundation for long-term investigations and future funding. Reviewers will evaluate the extent to which the project could lead to long-term scientific impact by advancing mechanistic

understanding of neurodegenerative diseases and establishing novel conceptual or methodological directions in neuroimmunology. Proposals should equally address impacts beyond scientific advancement, such as capacity building and potential future health impacts, where applicable. While the research may be early stage, it should show strong potential to yield transformative insights and build the foundation for a sustainable research program. Accounting for sex as a biological variable is important for transparency and reproducibility, and 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.

Timeline

Launch of Request for Applications	July 2, 2025
Deadline for Registration Forms	17:00 ET, September 16, 2025
Invitation to Full Application	September 22, 2025
Deadline for Receipt of Full Applications	17:00 ET, October 21, 2025
Notification of Decision	January 2026
Funding Begins	March 2026

How to Apply

Please note that this funding opportunity includes a Registration Form and a Full Application stage. Applicants must submit a Registration Form in order to be eligible to submit a Full Application. Following an administrative check and relevance review, applicants deemed eligible will be invited to submit a Full Application.

Registration Forms and Full Applications must be submitted using Brain Canada's electronic grant management system – SmartSimple (https://braincanada.smartsimple.ca/s_Login.jsp). **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.** Receipt of the Registration Form and Full Application will be acknowledged by Brain Canada within two business days.

Registration Form

Project Summary

- Project title
- Keywords describing the research project (up to 10 words)
- A summary of the proposed research project and its goals, emphasizing the innovative and original features, and highlighting the immune mechanism to be studied in Alzheimer's disease, Parkinson's disease, and/or Huntington's disease (maximum 500 words).

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.

We will take these and other considerations into account when establishing the composition of the external Peer Review Panel.

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

The Full Application must be formatted using 12-point Times New Roman or 11.5-point Arial font, single-spaced, on a letter-size page with 1" minimum margins. Use of a condensed font and spacing is not permitted. Other fonts and font sizes are acceptable for text in tables, charts, figures, graphs and legends only, as long as it is legible when the page is viewed at 100%. The Full Application should be aligned with information provided at the Registration Form stage. *Applications received in any other format, exceeding the page 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 Full Application. 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 Privacy Policy.

Project Summary
- Project title
- Keywords describing the research project (up to 10 words)
- A summary of the proposed research project and its goals, emphasizing the innovative and original features, and highlighting the immune mechanism to be studied in Alzheimer's disease, Parkinson's disease, and/or Huntington's disease (maximum 500 words).

Lay Summary (maximum 300 words)
Suitable for publication and understandable by the general public.

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:

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 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, if applicable, and the research hypotheses

3. The **work plan**, including:
    - the approaches, methods and techniques that will be used to achieve the stated objectives.
    - methods of data analysis, including statistical methods and calculations to show that the study will be adequately powered.
    - potential pitfalls or obstacles, and mitigation strategies to overcome them.
    - considerations of biological variables (e.g., sex, age, etc.) and social determinants of health (i.e., gender, socioeconomic status, etc.) in the research design, as appropriate.
4. **SGBA+ and EDI considerations**, including:
    - how sex and/or gender considerations will be incorporated into the work plan. 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. Applicants are encouraged to review CIHR's Online Training Modules for Integrating Sex and Gender in Health Research.
    - how EDI is considered in the research design in all stages of the research process including identification of the research question(s), study design and population groups, methodology, data collection, data analysis and interpretation, identification of stakeholders, and knowledge mobilization.
5. The **expected outputs** from the study, and how the findings will be disseminated, including
    - the expected impacts (short and long term) of the results in advancing knowledge and improving the diagnosis, prevention, and/or treatment of neurodegenerative diseases. Refer as needed to these categories of research impacts: advancing knowledge, building capacity, and potential for future health impacts.
    - plans for making the data and knowledge generated throughout the project available to other stakeholders.
    - knowledge mobilization plan describing the intended target audiences for the findings, plans for dissemination and stakeholder engagement toward achieving research impact, and how the findings may be adapted and shared with broader knowledge users.

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.

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

Any publications listed should include the DOI, URL, or PMID, where applicable, so reviewers can access them.

Letters of Support (Optional)
Applicants may submit letters of support from their collaborators, if applicable. Letters should explain the nature of collaboration and outline the specific contributions of the collaborator to the project. A maximum of two letters (one page per letter) is permitted.

Sources of Funding

Using the template provided, list 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.

Budget
Applicants must submit a **yearly budget** and a written **budget justification** (maximum one page) describing the proposed costs in each category of expenditure. Provide sufficient information to allow reviewers to assess the suitability of the cost allocation. A template will be provided at the Full Application stage.

Institutional Approvals
Briefly describe what applicable approvals (such as ethics for human subjects or animals, biohazard approval, etc.) you have in place at the Full Application deadline, and timeline for any addendums or additional approvals specific to the proposal that may need to be added thereafter. Please note that, if awarded, applicants will be required to provide documentation, where applicable, demonstrating institutional approvals and compliance with policies on the ethical use of human participants, animals, and biohazards prior to funding release.

Certification and Signatures
All required signatures must be submitted along with the application by the submission deadline for Full Applications.

- Signature of the Principal Investigator
- Institutional Signature: Signature of the responsible official of the institution where the Principal Investigator will conduct the research

Review Process

Registration Form
Registration Forms submitted by the deadline will undergo an administrative check and relevance review 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 Krembil Foundation. 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). Conflicts of interest and other relevant considerations will be taken into account to ensure a balanced panel.

Based on the reviewer scores, the Peer Review Panel will discuss the top applications. The Panel will recommend 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. Appeals against the assessment of the Peer Review Panel will not be entertained.

Confidentiality and Ownership

All materials submitted for this funding opportunity will be kept confidential and only shared with reviewers, Review Panel members, and observers who have signed confidentiality and non-disclosure agreements. Brain Canada and Krembil Foundation 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 *Accelerator Grants* must make every effort to attend events organized by Brain Canada and Krembil Foundation, 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 programs@braincanada.ca.