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## Canadian Stroke Consortium - Brain Canada - Heart and Stroke Foundation of Canada 2022 Stroke Clinical Research Catalyst Grants Request for Applications

### **About Canadian Stroke Consortium**

The Canadian Stroke Consortium is the national professional association for physicians interested in stroke. Our associate members are colleagues who represent other disciplines involved in stroke prevention and treatment. Together, we are committed to reducing the burden of stroke through the translation of clinical research into clinical practice.

### **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, 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 \$130 million through the CBRF which has been matched by Brain Canada Foundation and its donors and partners. [www.braincanada.ca](http://www.braincanada.ca)

### **About Heart and Stroke Foundation of Canada**

Heart & Stroke is a national, non-profit organization whose mission is to improve the heart and brain health of Canadians by preventing and reducing disability and death from heart disease, stroke and vascular cognitive impairment through research, health promotion and advocacy.



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## Description

The purpose of the *Canadian Stroke Consortium-Brain Canada-Heart and Stroke Foundation of Canada 2022 Stroke Clinical Research Catalyst Grants* program is to increase capacity for clinical stroke research within Canada. The primary aim is to provide seed funding to develop new lines of research and generate preliminary data that would support successful applications to larger grants from granting agencies, while broadening the researcher's clinical research program. Projects which fall under the scope of this funding opportunity aim at reducing the burden of stroke through clinical research geared towards improving our understanding of stroke and advancing stroke care with the ultimate goal of preventing stroke recurrence and improving patient outcomes. The project's primary focus should be the brain and it should contribute to improved care along the continuum of stroke including acute care, secondary prevention, rehabilitation, and recovery. Successful projects will be those that demonstrate value to the research and clinical community.

The Canadian Stroke Consortium, Brain Canada, and Heart and Stroke Foundation of Canada recognize that early-career investigators are at a unique position to formulate innovative and impactful research projects but funding and resources to obtain preliminary data required to apply for larger grants are often scarce. Given this, early-career investigators who are within seven years of their first academic appointment are strongly encouraged to apply.

## Grant Details

The *2022 Stroke Clinical Research Catalyst Grants* program has a total funding envelope of \$1,000,000 and will support up to ten grants of \$100,000 each over two years. A minimum of four grants are intended for early-career investigators; this number is subject to change based on the proportion of applications received from early-career investigators and their scientific merit as determined by peer review.

## Equity, Diversity, and Inclusion

Canadian Stroke Consortium, Brain Canada, and Heart and Stroke Foundation of Canada are committed to advancing the principles of Equity, Diversity and Inclusion (EDI) in all of our endeavours. Evidence clearly shows that increasing equity, diversity and inclusion 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 the partners position on EDI and articulated in CIHR's position on EDI, available in the [Tri-Agency Statement on Equity, Diversity and Inclusion](#).

In addition to EDI considerations in the research design, the Canadian Stroke Consortium, Brain Canada, and Heart and Stroke Foundation of Canada 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 affiliated with and conducting research at an eligible Canadian institution for the entire duration of the grant. Academic appointments must have started by the Full Application submission deadline. The Principal Investigator must be considered an independent researcher at their institution. Such an individual normally holds the rank of assistant or associate 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). Postdoctoral fellows or adjunct faculty are not eligible to apply.
- Research projects with established seed funding of greater than \$75,000 are not eligible. Research projects with established seed funding of less than \$75,000 are only eligible if a budgetary shortfall is demonstrated in the budget of the present application, with appropriate accompanying justification. It is the responsibility of the applicant to notify Canadian Stroke Consortium immediately should substantial overlap arise from new funding awarded during the application and review process of this competition.
- Research work must be conducted at a Canadian institution.
- Applicants must submit a Registration Form to be eligible to submit a Full Application.
- Applicants must be able to initiate the project in December 2022, when funding will start.
- The project's population should consist entirely of patients with acute stroke, transient ischemic attack or established stroke.

**Note:** An individual researcher can only submit one application as Nominal Principal Applicant.

In addition to the above, early-career investigators applying to this program must:

- Be within seven years of their first academic appointment by the deadline to submit Full Applications. Leaves of absence (e.g., maternity and parental leave, sick leave, etc.) will not be included in calculating the seven-year window.
- Early-career investigators are required to designate a mentor at the time of submission for the Full Application. An individual can serve as a mentor on multiple applications.
- Please note that members of the Canadian Stroke Consortium may be available for mentorship upon request by early-career investigators without established mentorship.

## 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. Funds cannot be allocated for costs and expenses incurred outside of Canada.

### Eligible costs

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

- Supplies and materials;
- Provision of special services and user fees;
- Maintenance of essential equipment;
- End-of-Grant Knowledge Mobilization costs; 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 (workshops, brochures, books), knowledge diffusion activities via online technologies (webinars, podcasts);
- Salaries for technical personnel;
- Stipends of trainees;
- New equipment that is currently unavailable but essential for the project.

### Ineligible costs

- Salaries and consulting fees of any investigator or researcher holding an academic appointment.
- As this grant is to be used for the specific project that is proposed, the purchase of general office and lab equipment are ineligible expenses.
- Indirect costs or overhead costs associated with managing the research project.

Please note that this list is not exhaustive, and the Canadian Stroke Consortium, as the administrator of the competition, 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 of Assessment

*There will be equal weighting of the following criteria:*

**Potential contribution to stroke care and capacity-building in Canada.** The degree to which the proposed project has the potential to contribute to improved care along the continuum of stroke including acute care, secondary prevention, rehabilitation, and recovery. The degree to which the application includes a clear plan and considerations for how the applicant's skill and career will be developed and contribute to stroke care and stroke research.



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**Quality of the research proposal.** Appropriateness of the conceptual framework, design, methods, and analyses, and how these will be integrated to achieve the aims of the project. This includes the degree to which the project can succeed 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 if available. Applications should acknowledge potential pitfalls or obstacles and how they will be overcome. Applicants should 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.

**Research environment.** The potential of the research environment to contribute to the successful completion of the proposed research, including a confirmation of the applicant’s protected research time and details on the infrastructure put in place to complete the project. The researcher should be qualified and well-suited to carry out the proposed research. Early-career investigators must demonstrate access to experienced mentorship.

**Researcher qualifications.** The applicant’s training, research track record, and research potential contributes to the feasibility of the proposed project. The resources and knowledge to achieve the aims of the project are based on prior experience and know-how. Preference will be provided to applicants that have demonstrated a commitment to clinical stroke research and care within Canada.

### Timeline

Launch of Request for Applications	May 2 <sup>nd</sup> , 2022
<b>Deadline for Registration Forms/CCV</b>	<b>16:00 EDT, May 31<sup>st</sup>, 2022</b>
Notification of Eligibility	June 10 <sup>th</sup> , 2022
<b>Deadline for Receipt of Full Applications</b>	<b>16:00 EDT, August 5<sup>th</sup>, 2022</b>
Notification of Decision	October 2022
Funding Begins	December 15 <sup>th</sup> , 2022

### How to Apply

**Registration Forms, Project Summaries, and the Nominal Principal Applicant’s Canadian Common CV (CIHR Biosketch template)** are to be submitted via email to Karen Earl ([karen@strokeconsortium.ca](mailto:karen@strokeconsortium.ca)) by **16:00 EDT on May 31<sup>st</sup>, 2022**. Submission of a Registration Form is a requirement to submit a Full Application. Upon confirmation of receipt and eligibility, the Canadian Stroke Consortium will invite applicants to then submit a Full Application by **16:00 EDT on August 5<sup>th</sup>, 2022**, through the provision of a *Full Application Form*. There will be no appeal for late submissions. Receipt of the Registration Form and the Full Application will be acknowledged by the Canadian Stroke Consortium within two working days.

## Registration Form

Please click [here](#) to download the template to complete the Registration Form.

Please send the completed Registration Form as a PDF file and the Nominal Principal Applicant's Canadian Common CV (CIHR biosketch) to Karen Earl ([karen@strokeconsortium.ca](mailto:karen@strokeconsortium.ca)). The PDF and accompanying attachment(s) 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. Use of a condensed font and spacing is not permitted. Registration Forms and Project Summaries 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 by **16:00 EDT on May 31<sup>st</sup>, 2022**.

### Applicant Information

We encourage researchers of diverse backgrounds to apply and be involved in this funding opportunity. With this partnered funding opportunity, we are thus implementing a demographic survey, led and developed by Brain Canada, to evaluate the progress of our programs in fostering EDI. Please note that the survey will be sent via email to the Nominal Principal Applicant upon confirmation of their Registration Form submission. The information collected will not be shared in an identifiable form with the public, external stakeholders (e.g., Health Canada), or reviewers, and will have no impact on the evaluation of submitted 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;
- A summary of the research and its goals, emphasizing the innovative and original features and how it meets the purpose of the competition (maximum 500 words).

## Full Application

Upon confirmation of receipt and eligibility, the Canadian Stroke Consortium will invite applicants to then submit a Full Application by **16:00 EDT on August 5<sup>th</sup>, 2022**. 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.

## Project Summary

- Project title;
- Project start and end dates (Note: The project start date must be in December 2022);
- Keywords (including freeform): up to 10 words;
- A summary of the research and its goals, emphasizing the innovative and original features and how the research could lead to improved stroke care in Canada (maximum 500 words)

## Lay Summary (maximum 300 words)

- Suitable for publication and understandable by non-scientists.
- The lay summary should be written for a patient, caregiver or community member audience so that it is easily understood by a non-technical audience. It should inspire and speak to relevance and meaningfulness of the work and to the desired outcomes. Authors are advised to use one of the commercially available tools to ensure readability at a maximum of a grade 9 level.

## Proposal (maximum 4 pages, excluding Figures and References)

- The overall objectives to be achieved by the end of the funding period.
- The rationale for undertaking the study now and how it will lead to improvements in stroke care, including:
  - A clear statement of the unique and innovative features of the project;
- The work plan, including:
  - The approaches, methods and techniques that will be used; if applicable, outline the specific contributions of any collaborators involved in the project; how people with lived experience (PWLE) will be meaningfully involved;
  - Potential pitfalls or obstacles, and how they will be overcome;
  - Methods of data analysis, including statistical methods and calculations to show that the study will be adequately powered.
- The expected outputs from the study, and how its findings will be disseminated.
- The role of trainees in the project and the unique learning opportunities they will experience, if applicable.
- Figures (maximum 3 pages) and References.

## Timeline and Anticipated Milestones

A template will be provided. Please indicate the key intermediate stages in achieving the overall objectives, and the projected dates for the achievement.

## Budget

Applicants must upload a yearly budget (template will be provided) and a written budget justification describing the proposed costs in each of the major categories (maximum 1 page). Provide sufficient information to allow reviewers to assess the appropriateness of the cost allocation. Research projects with established seed funding greater than \$75,000 are not eligible.



Those with established funding of \$75,000 or less are eligible, but they must provide adequate justification for the non-overlapping budgetary shortfall that is being sought through this competition.

### **Sex, Gender and Diversity Considerations (maximum 1 page)**

Sex, gender and other determinants (ethnicity, income, age, education, etc.) may affect health and must be considered. 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.

#### Sex and Gender Considerations

Describe how sex- and gender-based analysis plus (SGBA+) will be taken into account in the research projects.

#### Equity, Diversity and Inclusion Considerations

Please describe how the research project or its results will include or benefit 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.

### **Biographical Information**

A Canadian Common CV CIHR biosketch will need to be provided for the Principal Investigator and mentor (where applicable).

**Letters of Support** – should be provided from:

- Collaborators (1 page maximum each) and/or;
- Mentorship (2 pages maximum);
  - Early-career investigators require a letter of support from an individual that has agreed to act as a research mentor for the duration of the award. Please note that the letter of support should include the mentoring plan over the course of the two-year grant.

### **Certification and Signatures**

- Signature of the principal investigator and mentor, where applicable, is mandatory for the application to be considered.
- Institutional Signature: Signature of the responsible official of the institution where the principal investigator will conduct the research is required.

## Confidentiality and Ownership

The Canadian Stroke Consortium, Brain Canada, and Heart and Stroke Foundation of 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 and who do not have any conflicts of interest as defined under the Evaluation Process. Canadian Stroke Consortium, Brain Canada, Heart and Stroke Foundation of Canada do not claim ownership of intellectual property (IP) arising from the research funded through this competition 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.

## Review Process

### Registration

Registration Forms (RF), Project Summaries and the Nominal Principal Applicant's Canadian Common CV (CIHR Biosketch template) submitted by the deadline will undergo an administrative check for eligibility. Any applications deemed ineligible through this initial check will be reviewed by a panel convened by the funding partners and consisting of members of the Canadian Stroke Consortium's Research Committee and Brain Canada and Heart and Stroke Foundation of Canada to ensure accuracy. Submission of a RF is a requirement to submit a Full Application.

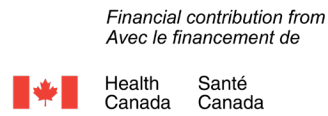
### Full Application

All eligible applicants who have submitted a RF by the submission deadline may submit a Full Application. Applications submitted by the deadline will be reviewed externally by a panel purposefully constructed to review the *Stroke Clinical Research Catalyst Grant* applications.

The Canadian Stroke Consortium will manage the peer review process. The peer review panel will consist of individuals with the expertise and experience to conduct a rigorous review process to assess scientific merit and achievement of the criteria for assessment described above. Given the size of the clinical stroke research community in Canada, and the potential for conflict of interest within that community, it is expected that the panel will primarily be composed of international experts. The Canadian Stroke Consortium, Brain Canada, and Heart and Stroke Foundation of Canada will take into account conflicts of interest and other relevant considerations when selecting reviewers to ensure a balanced panel.

The peer review panel will discuss the top-ranked applications via a virtual meeting, and will recommend to the Canadian Stroke Consortium, Brain Canada, and Heart and Stroke Foundation of Canada the applications that have received a high merit score.

Applicants will receive anonymized written comments from the reviewers and a summary of the peer review (Scientific Officer notes). The Canadian Stroke Consortium, on behalf of the partners, will not entertain appeals against the assessment of the peer review panel.



## Contact Information

For more information, or if you have any questions regarding the application process, please contact the Canadian Stroke Consortium: Karen Earl ([karen@strokeconsortium.ca](mailto:karen@strokeconsortium.ca)) or Dr. Ashkan Shoamanesh (CSC Research Committee Chair, [ashkan.shoamanesh@phri.ca](mailto:ashkan.shoamanesh@phri.ca)).