



Heart and Stroke Foundation of Canada  
Canadian Stroke Network  
CIHR Institute of Aging  
CIHR Institute of Circulatory and Respiratory Health

**Request for Applications**  
**"Focus on Stroke 9"**  
**June 2009**

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*BUILDING RESEARCH CAPACITY IN STROKE*

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NOTE: The emphasis of this strategic initiative is on building capacity in the later themes/pillars of stroke research (i.e., clinical, health services/policy, and/or population health research) and supporting research training of health professionals (e.g. nurses, occupational therapists, pharmacists, physiotherapists, speech therapists).

Funding priority will therefore be given to highly rated applicants whose research is 60% or more in the area of clinical, health services/policy, and/or population health research. While applications with a basic biomedical research focus are eligible for this competition, a limited amount of funds is available to support research in this area.

**Deadlines:**

Deadline for application:

Research Scholarships:

**September 1, 2009**

Research Fellowships & Doctoral Research Awards:

**October 30, 2009**

Notification of decisions:

**May 2010**

Anticipated start date for successful applications:

**July 1, 2010**

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**Background**

The impact of stroke in Canada is profound. Each year, between 40,000 and 50,000 Canadians suffer a stroke. The resulting quality of life issues for patients and their families and the economic impacts on the Canadian health care system are enormous. The Heart and Stroke Foundation of Canada (HSFC), the Canadian Stroke Network (CSN), and the Canadian Institutes of Health Research's (CIHR) Institute of Aging (IA) and Institute of Circulatory and

Respiratory Health (ICRH) are dedicated to addressing stroke and improving the lives of Canadians.

At present, Canada has a shortage of highly qualified personnel including stroke physicians, nurses, and other health professionals involved in research. Increased stroke research capacity is needed in Canada to build on recent advances in stroke medicine and to prepare the health care system for the rising burden of stroke due to the aging population.

This strategic initiative aims to address the research capacity issue and to augment the work of the [Canadian Stroke Strategy \(CSS\)](#).

Stroke services and care in Canada vary widely from province to province and region to region. The goal of the CSS is to help support an integrated approach to stroke prevention, treatment and rehabilitation in every province and territory by 2010. With support from the CSS, each province and territory is currently implementing a stroke strategy, reflective of their particular regional needs that will help to improve health service delivery and address these disparities. For more information, please visit <http://www.canadianstrokestrategy.ca/eng/home.html>.

Health professionals will play a key role in the research that needs to be undertaken in order to strengthen Canada's health care system and address treatment and care needs of stroke patients and their families.

This initiative has been launched for the the past eight years. A total of 126 awards has been supported to date.

## **Objective**

The aim of this initiative is to build greater capacity for stroke research in Canada and to encourage more research by health professionals such as those in nursing, social work, pharmacology, physiotherapy, occupational therapy, speech therapy, nutrition, pathology, and medicine.

## **The Partners**

**HSFC**, a volunteer-based health charity, leads in eliminating heart disease and stroke and reducing their impact through the advancement of research and its application, the promotion of healthy living, and advocacy.

The mission of the **CSN** is to reduce the effects of stroke on the lives of Canadians and on Canadian society. The CSN will place Canada at the forefront of stroke research through its multi-disciplinary research program, high-quality training for Canadian scientists and clinicians, and national and global partnerships. The new knowledge generated by the network's research activities will help launch a competitive Canadian commercial presence.

**CIHR** is Canada's premier federal funding agency. Its objective is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system.

The fundamental goal of the **CIHR-IA** is the advancement of knowledge in the field of aging to improve the quality of life and the health of older Canadians. IA has identified five priority areas for research on aging and health: aging and maintenance of functional autonomy; biological mechanisms of aging; cognitive impairment in aging; healthy and successful aging; and health services and policy relating to older people.

**CIHR-ICRH** supports research into the causes, mechanisms, prevention, screening, diagnosis, treatment, support systems, and palliation for a wide range of conditions associated with the heart, lung, brain (stroke), blood, blood vessels, critical and intensive care, and sleep. The ICRH vision is to achieve international leadership by fostering an environment of openness, excitement, energy, commitment and excellence in highly ethical, partnered initiatives focused on research, research training, and research translation for the circulatory and respiratory sciences and for the betterment of the health of Canadians. In March 2007, following consultations with the ICRH community and Institute Advisory Board, the following eight priorities were identified:

1. obesity, diabetes and cardiovascular complications;
2. technology for diagnostic and therapeutic advances, including imaging technologies for early detection of disease;
3. psychological, social, behavioral and environmental determinants of at risk behaviour for chronic disease, and means of effective interventions;
4. sleep: circadian impact on respiratory and cardiovascular diseases, metabolism and obesity, and means of diagnosis, treatment and prevention;
5. biomarkers for chronic disease, including genetic, proteomic and phenotypic markers for prevention, diagnosis and guidance for therapy;
6. aging and the cardiorespiratory system: changing epidemiology, physiology and means to healthy aging and disease prevention;
7. injury repair and inflammation: mechanisms leading to the development of chronic diseases and their potential prevention;
8. transplantation-regeneration-cell based therapies to affect cure rather than palliation, including relevant bioethics aspect.

### Program Description

The programs within this initiative are:

Award Type	Description	Value
<a href="#">Doctoral Research Award</a>	Support for highly qualified graduate students undertaking full-time research training towards a PhD.	\$21,000 stipend + \$1,000 research allowance per annum. For up to 3 years.
<a href="#">Research Fellowship</a>	Support for highly qualified postdoctoral candidates wishing to receive further research training.	PhD \$40,000 stipend/ MD \$50,000 stipend + \$5,000 research allowance per annum. For up to 3 years.

Award Type	Description	Value
<a href="#">Research Scholarship</a>	<p>Support for applicants with a health professional degree such as nursing, social work, pharmacology, physiotherapy, occupational therapy, respiratory therapy, speech therapy, nutrition, pathology, dentistry and medicine.</p> <p>The applicant must be involved in an active clinical practice and have a faculty appointment.</p>	<p>\$45,000 stipend + \$5,000 research allowance per annum.</p> <p>For up to 2 years.</p>

Note: funding under this initiative is subject to the availability of partners' funds.

### Eligible Research Areas

Applicants must clearly articulate relevance of the proposed research to stroke in order to be eligible for funding. While all areas of stroke research are relevant to this competition, priority will be given to highly rated applicants whose research is primarily (60% or more) in later [health research themes/pillars](#) (i.e. clinical, health services/health systems and population health). Applications with a basic biomedical research focus will be reviewed for excellence and considered for funding. However, a limited amount of funding is available for applications with a basic biomedical focus.

The CIHR-IA will provide its funds for meritorious applications with an emphasis on the Research Scholarship category, that are relevant to the Mobility in Aging Initiative (<http://www.cihr-irsc.gc.ca/e/29994.html>). Under this Initiative, the IA is interested specifically in research that deals with the functional limitations of individuals as a consequence of stroke rather than the disease itself. As well, the research and research design must include aging and/or the aged (generally above the age of 65) as essential elements of the objectives, hypotheses and analyses (e.g. dynamics of aging, age-relevant models and/or aged subjects, uniqueness of aging or aged population).

### Eligibility Criteria

The eligibility criteria under HSFC's Research Fellowship, Research Scholarship, and Doctoral Research Award apply to Focus on Stroke awards.  
<http://www.hsf.ca/research/en/guidelines-for-applicants/guidelines-for-applicants.html>.

In addition to the regular HSFC guidelines, applicants must adhere to the following:

- *Applicants to the Doctoral Research Award program* - please note the CIHR requirement that at the time of application, candidates must have completed at least 12 months of graduate study at the Masters or PhD level, **is NOT required** for this stroke training initiative.

- *Applicants to the Research Fellowship program* – please note that as indicated in HSFC’s guidelines, as of July 1 of the award year, applicants must not have completed more than four years of post-PhD research experience. Undergraduate medical school and residency training is not considered research experience.
- *Applicants to the Research Scholarship program* – please note that applicants must have a Masters and/or PhD with credentials in a regulated accredited health discipline such as but not limited to nursing, social work, pharmacy, physiotherapy, occupational therapy, respiratory therapy, speech-language pathology, nutrition, dentistry, and medicine. Applicants must also hold or have a commitment to hold no later than July 1 of the award year, a faculty position from an accredited university in Canada. The focus of the proposed study must have at least 60% in any one of the three later themes of health research: clinical, health services/systems, and population health.

### **Details of the Peer Review Process**

HSFC peer review process will be used to assess the scientific excellence of applications to this initiative. *Please note that application information will be shared with partner organizations in this strategic initiative for program administration and record-keeping purposes.*

### **Conditions of Funding**

\$1.6M is available overall for this initiative through partner contributions. Through the creation of two separate funding “pools”, 70% of the available funds have been earmarked for applications with an emphasis (60% or more) in later [health research themes/pillars](#) and approximately 30% of the available funds have been earmarked for basic biomedical research.

Offers will be made to the highest rated applications in each of the funding pools, until the available funds within that pool have been exhausted. Only applications deemed excellent in the peer review process will be considered for funding through this initiative.

Unspent funds in one pool may be transferred to the other pool, if there are an insufficient number of applications deemed fundable through peer review.

### **Evaluation**

Applications will be assessed using the following criteria:

- The quality of the applicant, including:
  - a) Academic Record. For Doctoral Research Award applicants, an undergraduate 4<sup>th</sup> year GPA > 3.5 and GPA > 3.5 for all graduate level courses is a minimum requirement.
  - b) Research experience and potential.
  - c) Documented publications. Applicants **must** have at least one first or second authored paper as a minimum requirement. Greater consideration will be given to those applicants with at least one first author paper.
- The research environment, including the supervisor with whom the applicant intends to work.

- The quality of the research project.

### **Instructions for Submitting an Application to Focus on Stroke**

Applicants should carefully review the [HSFC Junior Personnel Guidelines](#). Please follow the instructions for completing an HSFC application, noting the following special instructions for Focus on Stroke applicants:

1. Complete the appropriate [HSFC application form](#). The HSFC application form **must** be used. Note clearly at the top of your application form “Focus on Stroke” so that your application may be considered for both the regular HSFC and Focus on Stroke competitions.
2. Attach a cover letter requesting that your application be considered for Focus on Stroke.
3. Ensure that section 10a (for Research Fellowship and Doctoral Research Award) or section 9a (for Research Scholarship) of the application form is completed to correctly indicate the percentage of your research across health research themes/pillars (for descriptions of each theme/pillar, please visit: <http://www.hsf.ca/research/en/guidelines-for-applicants/health-research-themes.html>). This information will be used to assign applications to funding “pools”.
4. When completing the structured lay summary (section 21 on the application form for the Doctoral Research Award and the Research Fellowship, section 20 for the Research Scholarship), detail how the application relates specifically to stroke (demonstrate relevance to the Focus on Stroke competition). If your research is also relevant to the CIHR IA Mobility in Aging Initiative (<http://www.cihr-irsc.gc.ca/e/29994.html>) within this competition, provide justification in this section as well.
5. Focus on Stroke applicants must submit 4 additional paper copies of the application (total 5 paper copies). Instructions outlined in the award guidelines for submitting applications on CD-ROM must be followed.
6. Email the following information to [anguyen@hsf.ca](mailto:anguyen@hsf.ca) at HSFC on or before the application deadline: a) your project title, b) type of award requested, and c) project lay summary (the text from section 21 of the Research Fellowship or Doctoral Research Award application form, or section 20 for the Research Scholarship). This information will be used to facilitate communications to partners, the public, and our donors about the research supported by the Foundation.
7. Complete the [Focus on Stroke consent form](#) to allow the HSFC to provide details of your application to funding partners. Note: consent is required in order to be eligible for a Focus on Stroke award.
8. Applications must be sent to HSFC by 4:00 p.m. on the deadline date (no post-marking):  
Heart and Stroke Foundation of Canada  
222 Queen Street, Suite 1402  
Ottawa ON K1P 5V9  
Fax: 613 569 3278

### **For more information about this program, please contact:**

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