The Heart and Stroke Foundation of Canada and the Canadian Institutes of Health Research’s Institute of Circulatory and Respiratory Health (ICRH)

Request for Applications (RFA) for Team Grants in the Area of Monitoring and Optimizing CPR

Objectives

The objective of this strategic initiative is to support research in the area of monitoring and optimizing CPR, which will ultimately result in enhanced quality CPR and improved outcomes in both adult and pediatric populations.

The Heart and Stroke Foundation of Canada (HSFC), and the Canadian Institutes of Health Research’s Institute of Circulatory and Respiratory Health (ICRH) seek to fund research in the area of monitoring (assessing/evaluating) and optimizing the technical aspects or technique of CPR, which will ultimately result in enhanced quality CPR and improved outcomes in both adult and pediatric populations.

Research findings supported by this RFA should also contribute to the development of the updated version of the Guidelines for Resuscitation in 2010. The implementation of any new guidelines or programs will be more effective when introduced within an evidence-based framework. A secondary objective of this initiative is to build research capacity in resuscitation research in Canada. Applications that incorporate trainees and new investigators are strongly encouraged.

Highlights

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<th>Date</th>
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<td>December 1, 2006</td>
<td>RFA Launch</td>
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<td>March 1, 2007</td>
<td>Letter of Intent Due</td>
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<td>April 2, 2007</td>
<td>Notification of results of Letter of Intent stage. Invitations for full applications.</td>
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<td>June 29, 2007</td>
<td>Full applications due</td>
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<td>August 15, 2007</td>
<td>Announcement of decisions</td>
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<td>September 4, 2007</td>
<td>Anticipated start date</td>
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<td>Up to 3 years</td>
<td>Duration of Award</td>
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<td>Up to $200 000 per year</td>
<td>The maximum amount per grant, including equipment, staff and travel.</td>
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Introduction
Resuscitation is one of three strategic priorities of the Federation Research Fund. Background research syntheses and a February 2006 consensus workshop narrowed the areas of priority for research in Resuscitation to the following three: 1. Knowledge Transfer: Community; 2. Knowledge Transfer: Health Care Providers; and 3. Monitoring and Optimizing CPR (the science around CPR).

This RFA intends to support research exclusively in the area of Monitoring and Optimizing CPR. (Note: An Operating Grant RFA in areas 1 and 2, Knowledge Transfer: Community and Health Care Providers will be launched simultaneously in December 2006.)

The Heart and Stroke Foundation of Canada (HSFC) and the Canadian Institutes of Health Research’s Institute of Circulatory and Respiratory Health (ICRH) seek to fund research in the area of monitoring and optimizing CPR, which will ultimately result in enhanced quality CPR and improved outcomes in both adult and paediatric populations.

It is also anticipated that research findings supported by this RFA will contribute to the development of the updated version of the Guidelines for Resuscitation in 2010.

This RFA is being launched through the Federation Research Fund’s Managed Research Cycle (MRC). The MRC is an approach to funding research that links research outcomes to the end users. The goal is to accelerate the transfer of research results into policy and practice. For more information, please refer to the following link: http://www.hsf.ca/research/fund/about.html

Background
In February 2006, the HSFC hosted a “Resuscitation Research Forum” in Vancouver which was attended by researchers, clinicians and representatives from governments, non-government organizations, academia, partner agencies and industry. The objective of the Forum was to
identify specific areas of Canadian resuscitation research strengths, priorities, opportunities and capacities that HSFC and partners could address in a Request for Applications.

The following 6 priority areas arose from the Forum: i) resuscitation care and treatment across the continuum of care; ii) the need to support the development of a national database; iii) knowledge transfer: community; iv) knowledge transfer: health care providers; v) monitoring and optimizing CPR; vi) patient outcome measures. A small subset of advisors subsequently narrowed the priority list of six to three, recognizing the immediate needs in monitoring and optimizing CPR and knowledge transfer and the readiness of the research community to respond.

The Partners
The Heart and Stroke Foundation of Canada, 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 Foundation is a leading funder of heart disease and stroke research in Canada and is committed to supporting research across the full spectrum.

The Canadian Institutes of Health Research (CIHR) is Canada’s premier federal funding agency for health research. 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 research services and products and a strengthened Canadian health care system. The mission of the CIHR Institute of Circulatory and Respiratory Health (ICRH) is to support research into the causes, mechanisms, prevention, screening, diagnosis, treatment, support systems, and palliation for a wide range of conditions associated with heart, lung, brain (stroke), blood, blood vessels, critical and intensive care, and sleep. ICRH will consider funding highly ranked relevant applications based on availability of funds.

Project Scope
Examples of research areas include, but are not limited to, the following:
- How to manage compression interruption
- Human factors, e.g., education, attitudes, collaboration skills, socioeconomic indicators
- Impact of real time feedback on CPR outcomes
- Impact of technique on CPR outcomes
- Use of novel technology quantifying CPR as outcome measure in CPR intervention trials

Examples of research questions that may be supported under this Request for Applications include, but are not limited to:
- What are the determinants of health that influence the ability and/or willingness to perform lay person CPR?
- What is the impact of real time, immediate, post event feedback technology on CPR outcomes in the paediatric population?
- How do we measure and improve the quality of by-stander CPR?
- What is the most efficient and effective CPR process for infants and children?
- Are CPR prompt devices effective in improving CPR quality? Does quality of CPR matter?
- Does using a CPR prompt device effect outcome?
- Does monitoring of physiologic variables (with feedback) during or after cardiac arrest affect outcome?
- What is the impact of different methods of CPR instruction on willingness to perform CPR, quality of CPR, retention of resuscitation skills?
• Should bystanders ever perform ventilations? Should Health care providers? When and how often?

Eligibility
The Principal Investigator must be based at a Canadian post-secondary institution or affiliated hospital or research institute. Individuals from public, community or private sector organizations that are active in areas relevant to the themes of the RFA are eligible to apply as Co-investigators and Collaborators.

The Peer Review Process
The HSFC peer review process will be utilized to assess the scientific excellence of applications to this initiative.

Letters of Intent must be submitted prior to full application as these will be used to screen for relevance to the objectives of this Initiative and to determine expertise requirements for the peer review committee. Delegates from the HSFC and ICRH will take part in the relevancy review. Committee members will be selected based on suggestions from the funding organizations and other sources. Names of committee members will be available upon request. The peer review process will be conducted in accordance with the HSFC’s, and CIHR’s standards and guidelines.

The funding organizations will invest in high quality projects ranking among those judged to be very good to excellent through peer review. Applications will be funded from the top-ranked down, based on the total funds available for the Initiative. Applications receiving a score less than 3.5 out of a possible score of 5.0 will not be considered for funding. For more information, please see the HSFC guidelines www.hsf.ca/research.

Evaluation Criteria
• Track record of investigators
• Strength of research proposal
• Appropriateness of budget request
• A clear plan for knowledge transfer and exchange. For additional information, please see the HSFC Monitoring and Optimizing CPR Application Form. www.hsf.ca/research
• Multidisciplinary applications are strongly encouraged
• Applications which include a representation of investigators at different stages of their careers are strongly encouraged

How to Apply
There are two stages to the application process:

i) Letter of Intent (LOI)
The applicant must submit one original and six copies of a Letter of Intent, which will be reviewed for responsiveness. Letters of Intent must be received by the HSFC no later than 4:00 p.m. EST on March 1, 2007. The Letter of Intent is comprised of:

a) A completed LOI form indicating the names of the investigators, keywords, title of project and institutional information.

b) A two-page letter describing the proposed project and how it relates specifically to the objectives of the Monitoring and Optimizing CPR Initiative.

c) One page maximum describing the Knowledge Transfer/Knowledge Exchange Plan.
d) Attachments: 1. an abbreviated CV (maximum 2 pages) for the applicant and any co-applicants which must include information on grants held, relevant publications from the last five years and expertise key words; and, 2. a short bibliography of any references cited in the Letter of Intent.

ii) Full application
Full applications (original, plus 10 copies) must be received at the HSFC office by 4:00 p.m. EST on June 29, 2007.

The application form is available at: www.hsf.ca/research and must comply with the requirement to include an appropriate structured lay summary of the proposed work and a Knowledge Transfer/Knowledge Exchange Plan.

Personal information should be provided using the Canadian Common CV, details for which can be found at: www.commoncv.net/index_e.html

Applications must be sent to:

The Heart and Stroke Foundation of Canada
222 Queen Street, Suite 1402
Ottawa, Ontario
K1P 5V9
Reference: RFA on Monitoring and Optimizing CPR