

Guidelines - PEI HRI Bioscience Scholar Award Program

November, 2007

Description

A “PEI HRI Bioscience Scholar Award” (BSA) program, funded by the Atlantic Canada Opportunities Agency (ACOA), the Prince Edward Island Provincial Government and the University of Prince Edward Island, is offered through the PEI Health Research Institute and the University of Prince Edward Island, who will be the host institution(s) for this award. The purpose of the award is to build new capacity in the bioscience cluster, with particular emphasis on health-related research, by supporting highly qualified researchers to carry out quality research with strong capacity for progressing to commercialization. Priority will be given to research related to the Bioscience sector that may address one or more of the four pillars of research, including: biomedical research, clinical research, health services and population health research.

Evidence of potential for commercialization of research outcomes is a strongly-weighted criterion for success.

The award provides partial salary contributions to support investigators who wish to devote the major portion of their time to research activities at different stages of their career. In addition, one-time, non-renewable Establishment Grants are available to assist specific groups of investigators with the start-up of their laboratories and/or research projects/programs.

Health Research Themes

The four themes, as defined by the Canadian Institutes of Health Research, include:

Biomedical Research - that has the goal of understanding normal and abnormal human functioning, at the molecular, cellular, organ system and whole body levels, including development of tools and techniques to be applied for this purpose; developing new therapies or devices which improve health or the quality of life of individuals, up to the point where they are tested on human subjects; and studies on human subjects that do not have a diagnostic or therapeutic orientation.

Clinical Research - that has the goal of improving the diagnosis, and treatment of disease and injury; improving the health and quality of life of individuals as they pass through normal life stages; and research on, or for the treatment of, patients.

Health Services Research - that has the goal of improving the efficiency and effectiveness of health professionals and the health care system, through changes to practice and policy. Health services research is a multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviours affect access to health care, the quality and cost of health care, and ultimately our health and well-being.

Population Health Research - that has the goal of improving the health of the Canadian population, or of defined sub-populations, through a better understanding of the ways in which social, cultural, environmental, occupational, and economic factors determine health status.

Applicants are expected to specify one of the four themes which, in their opinion, best describes their research. Only applications that fall into one of the four health research themes will be considered. A clear link to human health research must be evident from the research proposal. PEI HRI reserves the right to make the final allocation.

General Eligibility Requirements

Applicants must meet both the general and specific eligibility criteria of the award category applied for. To meet general eligibility requirements, the applicant:

- must hold a PhD (or equivalent), DDS, DVM, DPharm, or MD.
- are Canadian citizens or permanent residents by start of award or can provide documentation that application for permanent residency in Canada has been made;
- are sponsored by a Prince Edward Island organization and have a letter of support (consideration may be given to organizations outside of PEI, pending recruitment of potential applicants); the letter of support should specify the host's contribution of at least 25% of the salary costs
- commits at least 75% of their time to health research activities

Canada Research Tier II Chairs are eligible to apply.

Ineligible to Apply

Canada Research Tier I Chairs are not eligible.

Applicants with major administrative responsibilities are normally not eligible to apply (or may have support withdrawn if such responsibilities are assumed during the term of a Bioscience Scholar Award), unless the required 75% time commitment to research activities can be assured.

Applicants who are not able to be seconded to UPEI on an Adjunct Appointment.

Commitment from Host Organizations

The host organization must:

- ensure that the care of animals, studies involving human subjects and the use of biological materials meet the standards of the Canadian Council on Animal Care, Research Ethics Boards and Biohazard Safety committee of the host organization, as well as the Federal Guidelines on Laboratory Bio-Safety;
- provide appropriate research facilities to the PEI HRI Award recipient;
- provide the recipient with at least 75% protected time for research activities by way of reduction of teaching load, administrative responsibilities, etc.
- be responsible for maintaining equipment purchased with PEI HRI funds, as the equipment belongs to the host organization.
- ensure the policies for appointments within the host organization's collective agreement are followed.

A statement by the host organization is required regarding the use of the funds that will be freed up due to the PEI HRI Bioscience Scholar Award. The use of these funds must be consistent with PEI HRI expectations, and will form part of the administrative review to determine the general eligibility of the application prior to the peer review process.

Award Amount and Duration

75% of salary (up to \$75,000 per year) for three years, inclusive of benefits. It is expected that the host institution will provide the remaining salary costs (minimum 25%). The award is not transferrable.

Establishment Grant

Establishment Grant is linked to the PEI HRI Bioscience Scholar award, and applications for both awards must be submitted concurrently. The Establishment Grant cannot be applied for independently. The Establishment Grant has a total value of \$75,000 (\$37,500 p.a., over the first two years of the BSA) and is a one-time award. A detailed budget is required as part of the application for the Establishment Grant. The grant is not transferrable.

The intent of the Establishment Grant is to provide investigators with reasonable start-up funds for the development of their proposed research programs/projects and/or laboratories. The Establishment Grant is intended to be supplemental to, not in place of, the host organization's commitment to provide appropriate start-up funds and infrastructure support for the researchers.

Applicants who receive PEI HRI Establishment Grants may retain the grants even if they subsequently receive a national/international peer-reviewed award.

Requests for major equipment costing more than \$10,000 must be accompanied by justification as to why this equipment is absolutely essential to establishing a research program and is not available through other means. Two quotations are required for the major equipment request.

Establishment Grant funds cannot be used for secretarial/clerical support and renovations/maintenance of laboratory/equipment.

Evaluation Criteria

All Applications will be peer-reviewed.

Peer Review Process

Applications will be evaluated by a selection committee comprised of members of the PEI HRI Research Committee; the PEI BioAlliance; the UPEI technology transfer office and the business sector. This group will be responsible for rating the applications according to established criteria and ranking them in order of merit. The merit of the research proposals will be evaluated by two external referees, who are experts in the field.

The applications will be evaluated based on: the track record of the applicant; the quality and relevance of the research proposal; the potential for commercialization of research outcomes.

Applicants must submit a detailed commercialization strategy and plan, and the successful

applicant will be required to submit an Annual Report to the PEI HRI. The strength of both the research and commercialization plan will be critical to successful recipient of this award.

Specific factors include:

Applicant's academic and research training; prestigious awards or acknowledgment of academic achievement; appropriateness of the research proposal/program of research to the experience level of the applicant; primary authorship of research publications in peer reviewed journals and extent of the applicant's contribution to the work published; research accomplished to date and demonstration of independence and originality by the applicant; peer reviewed grant funding obtained by the applicant; demonstration of leadership by the applicant in their field of research; evidence of recruiting and training graduate students, post doctoral fellows, research assistants and others; ability to collaborate with other host institution researchers to enhance further Research and Development capacity. Preference will be given to those applicants with a proven track record of success in acquiring peer-reviewed research funding, and in training Highly Qualified Personnel.

Bioscience Scholar Application

Research Proposal

The research proposal should follow the relevant Canadian Tri-Council guidelines (CIHR, NSERC or SSHRC), and address the following questions:

Is the project original and innovative?

Does it challenge existing paradigms or clinical practice, address an innovative hypothesis or critical barrier to progress in the field?

Does it develop or employ novel concepts, approaches, methodologies, tools or technologies in this area?

Does the applicant acknowledge potential problem areas and consider alternative tactics?

What is the rationale for choosing particular methods and approaches?

Does this study address an important problem? If achieved, will it advance scientific knowledge or clinical practice or a critical issues related to health services or population health? What will be the effect of these studies on the concepts, methods, technologies, treatments, services or preventative interventions in this area?

Will the proposed research impact the applicant's future goals?

Is the rationale for the proposal well-grounded in a critical review of the pertinent literature?

Does it adhere to principles of ethical research?

Is the time line feasible?

Commercialization Strategy

The applicant must identify a potential commercial product or knowledge transfer opportunity that they wish to pursue. The proposal should describe and identify how the product or

knowledge transfer will provide health benefits. The committee which is reviewing the applications will use the following questions to rank the opportunities in terms of commercial opportunity or value to the health system.

A. For a potential product such as a new drug or medical device:

Does the proposal identify and contain quantified total market size, targeted market segment size, projected market share?

Does it identify competitive products and or competitive technologies and their price ranges?

Does it outline appropriate regulatory agency and requirements?

Does it outline the methodology to identify and protect IP?

Does it identify prospective commercial partners and a strategy to approach, collaborate with or license to?

Does it clearly identify various “go/no go” decision points in the research proposal and their impact on commercialization potential and strategy?

Does it clearly articulate a pathway for commercialization that includes potential further work requirements, potential anticipated funding sources and points where commercial partners can be sought?

Does it identify potential commercialization problems and mitigation strategies?

Is the commercialization timeline feasible?

B. For a knowledge transfer opportunity:

How will the transfer of this knowledge to the health community or public improve the current situation?

What are the potential health benefits and associated cost savings and how are these realized?

What other costs must be covered off to implement the proposed strategy and where will this funding be sought?

What are the current practices and which institutions and agencies have to be convinced of the importance of the proposed changes in order to get these accepted by both the professional health service community and the public?

Are there clear measures of what a successful trial would accomplish?

Are the resources and timelines for the project realistic?