

**Canadian Institutes of Health Research
Regional Partnership Program
University of Prince Edward Island
Strategic Plan**

Updated: October 2007 (DRAFT)

PREAMBLE

The Medical Research Council of Canada (MRC) decided at its June, 1999 Council meeting to expand its Regional Partnerships Program (RPP) to include PEI. This program provides an opportunity to significantly increase human health research at UPEI and lead to sustainable growth. In 2000, the MRC was transformed into the Canadian Institutes of Health Research (CIHR) with further funding available for all aspects of health research. The CIHR will meet all obligations of the MRC and will provide expanded coverage of health research across Canada.

The CIHR initially provided an annual commitment of \$200,000/year for 7 years to support health research on PEI if matching funds were provided through other sources. This program has been extended for a further 5 years. In total, this program will result in an additional \$4,800,000 in health research funding on PEI over 12 years. CIHR's regular peer review is used for the evaluation of proposals. An Institutions' success in regular applications to these programs does not count towards CIHR's investment through the RPP.

To access these funds, a strategic plan for health research and use of the funds is required. Development of the strategic plan has involved consultation with researchers at UPEI and local stakeholders that have an interest in supporting health research on Prince Edward Island. The objectives of the strategic plan were to identify the needs and goals of the Program for UPEI, current and developing areas of health research strength, and a plan for administration of the Program at UPEI. The following strategic plan is intended to be flexible to meet the needs of UPEI as the full impact of the RPP takes effect.

HEALTH RESEARCH STRENGTHS AT UPEI

An assessment of current health research strengths was carried out through meetings with interested researchers, a call for submission of current individual research strengths and perceived institutional strengths, and a review of current support and publications. Areas were considered to be strengths if there were more than 3 researchers working in an area, if at least some of the researchers in the area were supported by external, peer-reviewed grants, if the programs in those areas currently

supported graduate trainees, and if active publications were arising from those areas. The areas identified all have the potential for further development. The addition or loss of faculty members can have a significant impact on strength in specific research areas. It is therefore recognized that the areas of strength may change with time. However, the following reflect areas where there are significant numbers of individuals that can lead to effective synergies. Faculty members may find their work fits under one or more of these areas. Current collaborations exist within and across these areas at the University and involve collaborations with researchers in the provincial government and in the health care community.

The following are current and growing areas of health research strength at UPEI.

A) Cardiovascular and Respiratory Health Research

Research into understanding the function and dysfunction of the cardiovascular and respiratory systems; research into maintaining the health and treating diseases of the cardiovascular and respiratory systems. Researchers in this group encompass, for example, physiologists, pharmacologists, nurses, nutritionists, and pathologists. Examples of active research programs include role of estrogen in cardiovascular disease, prevention of stroke-induced brain damage, asthma education, and pulmonary pathology. Research approaches range from cellular and molecular studies to epidemiology.

B) Metabolism, Nutrition and Diabetes

This area encompasses research in nutrition, nutraceuticals, diabetes, obesity, bone metabolism and function, connective tissue function and health, and other areas in this general category. Research methodologies employed vary from cellular and molecular biology through to nutritional surveys. They share the common goal of understanding the concepts of how metabolism and nutrition contribute to the health of individuals. Examples of research programs in this area include dietary factors in cancer, pathophysiology of the pancreatic beta cell in diabetes and obesity, and the role of micronutrients in health.

C) Human Development and Cognition

This area encompasses research into human development, cognition, neurobiology and behaviour as it impacts on human health. Included are studies ranging from basic understanding of learning and memory to understanding the social and health consequences of dementia in aging. Examples of research programs in this area include the neuropharmacology of excitatory amino acid receptors, the Canadian Study of Health and Aging, and human development, literacy and health.

D) Cancer Research

Cancer research is an area of growing strength at UPEI. The cancer research programs at UPEI encompass both behavioural as well as biomedical research. For example, studies on modification of behaviours that increase the risk of cancer

(including smoking), nutrition and cancer, and effects of polymorphisms in estrogen metabolism on breast cancer risk are on-going. Many of these studies involve effective collaborations with investigators outside of UPEI.

E) Applied Health Services and Health Promotion

Health services and promotion research is a growing area at UPEI. Collaborations with researchers with the provincial government are particularly important in this area. Primary care is a cornerstone of the health research philosophy of the Faculty of Nursing.

F) Natural Products and Human Health

Research directed at the discovery or development of natural products as therapeutic agents. Research in this area can include: the discovery of natural products with biomedical activity from terrestrial or marine sources, development of production methods of bioactive natural products, development of novel screens to assess biological activity, or other areas involving the pharmacology or toxicology of natural products. Examples of active research programs include: marine natural product biosynthesis, evaluation of traditional Chinese medicines, and exploration of marine bacteria for novel therapeutics.

G) Population Health

The Centre for Veterinary Epidemiological Research (CVER), established at UPEI in 2007, serves as the focus for population health research activities at UPEI. It is an internationally recognized Centre that conducts research and provides graduate level research training (particularly in the area of epidemiological methodology). Although, as the name implies, the primary focus of the group is animal health research, strong collaborative links with health researchers, coupled with active human health related research within the group makes this Centre an ideal focus for population health research. Members and Associate Members of CVER come from the Faculties of Veterinary Medicine, Nursing and Science as well as outside agencies such as the Canadian Food Inspection Agency, PEI Department of Health, Department of Veterans Affairs and the PEI Addictions Research Centre. The Centre provides support in areas such as study design and data analysis to many other groups on campus such as Nursing faculty working on population based research projects.

RELEVANCE OF HEALTH RESEARCH AT UPEI TO PRINCE EDWARD ISLAND

The research strengths identified above highlight areas where UPEI will be able to grow and expand its health research endeavours. It is important to note that these areas are also highly relevant to Prince Edward Island. Cardiovascular disease is the leading cause of morbidity and mortality on PEI. PEI has one of the highest rates of respiratory disease in Canada. The close juxtaposition of agriculture and residential areas on PEI make environmental safety a major concern. Diabetes, asthma, and cancer were recently identified by the PEI government as areas of importance in health research on

PEI. The areas of research strengths identified focus on health research, and include the concepts of wellness and preventive medicine. This ability to span the range from understanding wellness to biomedical research on specific disease processes, and to bring these researchers together, is important.

ECONOMIC BENEFITS

Increasing health research on PEI will bring a number of economic benefits to PEI. As well as the immediate economic benefits associated with the RPP supported research activity itself, long-term economic benefits will result from a sustainable increase in research activity, from improved health as a result of the knowledge arising from the research, and from economic spin-offs resulting from discoveries made through research. The University of Prince Edward Island recognizes the importance of maximizing the economic benefits associated with research activity and the importance of this activity to the long-term development of the Island economy. While recognizing that establishing an active and respected research program at the University must be the first priority in reaching this goal, the University will endeavor to achieve maximum economic benefits derived from its work during the period of the RPP, as well as thereafter.

GOALS OF THE RPP

The establishment goals for the RPP at UPEI are critical to designing a strategic plan. However, the response of the research community to the program and the success of the program may lead to new goals. Therefore, the following goals and the subsequent guidelines will be reviewed after three years and a supplemental strategic plan developed if required.

1) Increase funding of human health research programs at UPEI

The major need for funding to support health research at UPEI is for operating funds. Many faculty members are conducting health research but the work is often underfunded. The RPP will be a valuable asset in recruiting new faculty that will complement and expand on-going health research. Operating and strategic grants provided through the RPP may include funds to support research trainees and research programs for research trainees must be adequately funded.

2) Increase the number of researchers at UPEI supported by the CIHR

The primary goal is to have at least twenty researchers funded by the CIHR, either directly or through the RPP. The intent is to maximize the number of researchers who can benefit through the program without significantly compromising their ability to do research by restricting their funds. Thus, restrictions will be placed on the holding of multiple RPP grants, the number of grants funded per cycle.

3) Develop high quality, sustainable health research at UPEI

It is intended that participation in the RPP will improve the quality of grantsmanship and the competitiveness for continued funding by the CIHR on conclusion of the RPP program. Towards this end, it is important that the RPP guidelines provide mentoring and support for new and established researchers. Researchers who are funded through the RPP program will be expected to participate in the internal review of grants.

For health research to be sustaining at UPEI, it must be of top quality and able to meet the rigorous standards of national and international peer review. Therefore, it is the intention that the focus of the program should be on excellence, rather than on a specific research area. We will however promote existing and developing areas of human health research and researchers will be encouraged to capitalize on the unique opportunities that will set their research apart from others. There is a requirement to evolve strategically as the RPP increases externally funded health research at UPEI.

4) Encourage collaborative research at UPEI

Collaboration within and across disciplines is an important step towards achieving excellence. Therefore, collaboration, within and outside UPEI, will be encouraged and supported. Collaboration with other groups and organizations on PEI is to be particularly encouraged. The identification of areas of research strength above will provide researchers with knowledge of areas where critical mass exists at UPEI to have effective collaborations. It is also recognized that within small universities, individual researchers can have a significant impact. Therefore, the goal is to support the best research without restrictions on areas or collaborations. The RPP guidelines below have been developed to encourage collaboration, particularly between those that are successful and researchers attempting to establish themselves within the system, without restricting the ability of individual researchers to access the program

5) Attract funding partners that are interested in continuing support of health research at UPEI

The two major determinants of continued ability to attract funding are excellence and relevance. These have been dealt with above. All participants in the RPP will be encouraged to communicate their work and its relevance to the larger scientific and lay communities. Collaborative work with other groups will contribute significantly to our ability to attract matching funding for programs. Non-governmental organizations (Heart and Stroke Foundation, National Cancer Institute of Canada, Canadian Diabetes Association), industry, economic development, and the provincial government are all potential partners.

Guidelines for the UPEI-CIHR RPP

These guidelines will be reviewed at the end of 2013.

1) The PEI Health Research Institute (PEI HRI) Research Committee will be responsible for ensuring that the following guidelines are followed. The PEI HRI Advisory Council will provide general policy guidance for the RPP.

2) The Director of the PEI HRI is responsible for notifying the CIHR of eligible submissions and will serve as the contact point with the CIHR.

3) Applications from all areas of human health related research will be eligible for RPP support provided they meet the criteria laid out in other points. All **operating and strategic programs** will be eligible for RPP support. However, at this time equipment grants will not be eligible. Priority funding will be for operating and strategic programs. However, if funds remain, post-doctoral fellowship can be considered for match funding.

4) Investigators who wish their applications to be considered for the RPP must submit a draft of the application 2 months prior to the competition date to the Director of the PEI HRI for internal and external peer review (the date will be established for each competition and publicized). (Exception: applications previously submitted but not successful need only to provide the PEI HRI Research Committee with notification of re-submission, the new grant and copies of the reviews from the CIHR two weeks prior to the next competition date for review). The draft submission must contain an abstract, the research proposal, a draft budget, and the CV module of the principal investigator. Reviews will be returned to the Investigator one month prior to the final deadline and all relevant issues must be addressed by the Investigator prior to submission. Applications that are not consensus ranked at 3.5 or above by this review process will not be eligible for submission to the CIHR under the RPP unless revised to the satisfaction of the PEI HRI Research Committee. Such applications may still be submitted through the regular program.

4a) Post-doctoral applications may be considered for match funding under the CIHR RPP program provided funds are still available after operating and strategic grants have been decided. Investigators who wish their applications to be considered for the RPP must submit a draft of the application 1 month prior to the completion date to the Director of the PEI HRI for peer review. Applications that are consensus ranked at 3.5 or above by this review process will be eligible for submission to CIHR under the RPP program. If the application is consensus ranked below 3.5, the applicant may revise and resubmit to the PEI HRI Research Committee and may be eligible for submission to CIHR under the RPP program if revised to the satisfaction of the PEI HRI Research Committee.

5) The UPEI researcher must be the Principal Investigator on the grant application. Although external collaborations are encouraged, at least 75% of the funds must stay on Prince Edward Island.

6) A researcher may only be the principal investigator (PI) on one successful RPP

application. A PI on a regular CIHR grant may also be the PI on an RPP application provided that there is at least one other co-applicant from UPEI on the RPP application who is not currently a CIHR grant holder. In keeping with CIHR policy, consecutive RPP grants are not allowed.

7) Selection of successful applications will be on the basis of excellence. That is, applications receiving RPP support will be selected based on their relative ranking by the CIHR peer review process. Grants submitted to CIHR will be ranked by the respective committee(s), and the CIHR will provide the Vice President of Research and Development at UPEI with a rank order of the grants based on their ranking by the Committees. The grant applications with the highest rankings will be awarded RPP funds until the maximum amount of grants available for that competition have been issued.

8) A project must have matching funds to receive CIHR RPP funds. While all attempts will be made by the PEI HRI to assist in obtaining matching funds, ultimately the responsibility lies with the individual investigator(s). Applicants are encouraged to obtain their own partner funding. After successful receipt of an RPP grant, the Principal Investigator will have 12 months to identify the source of matching funds.

9) Grants up to the CIHR recommended level of funding over 3 years will be supported through the UPEI-CIHR RPP contingent upon availability of funds and on ensuring that maximum numbers of award are supported. In keeping with CIHR policy, the maximum reduction in funds that will be allowed is to 75% of the CIHR approved funds (not the Committee recommended funds). Should the UPEI-CIHR RPP on a 1:1 match not provide sufficient funds to meet the minimum 75% level, the grant is not eligible for support or else the researcher may find additional funds from other sources to meet the required minimum. In all cases, the recommendation for budget from the peer review committee and any CIHR-imposed reduction on general grants will determine funds.

10) The maximum number of RPP grants will be awarded over the 10 competitions, pending funding availability. The maximum amount awarded for a single grant will be \$100,000 per annum for up to 3 years.

11) Investigators receiving RPP support will have an obligation to participate in the review of subsequent RPP submissions and to serve as mentors for other researchers submitting applications.

12) These guidelines will be reviewed yearly by the PEI HRI Research Committee. A complete review and report will be made by the PEI HRI Advisory Council at the Annual meeting. Any recommended changes will be acted upon at that time. A final evaluation of initiatives funded through the programs will be performed at the end of term of the program. Criteria for evaluation include productivity of new investigators and research teams, the ability to attract high quality researchers to UPEI, and success at generating

additional investments based on the RPP.

SUMMARY

The RPP will serve to promote high quality human health research at UPEI. The University will work with its faculty to encourage collaborative research in those areas that have critical mass. The University recognizes that individual investigators can perform excellent research and that collaborations outside of the University may be highly successful. Therefore, the primary criteria for funding will be quality as determined by peer review. The intent is to be inclusive rather than exclusive and to ensure the development of sustainable health research programs at UPEI.

Last revised: October 2007