Canada Research Chair in Applied Climate Change and Adaptation

Tier 2 (SSHRC)

The University of Prince Edward Island (UPEI) invites a highly engaged academic to join our research team in the role of Canada Research Chair (CRC) in Applied Climate Change and Adaptation. The successful candidate will be a dynamic researcher who engages in independent and collaborative multidisciplinary research, and who is recognized by their peers as a potential leader in areas of increasing national and international significance and of emerging importance at UPEI.

This position is situated within the innovative new School of Applied Climate Change and Adaptation, which offers a Bachelor of Science in Applied Climate Change and Adaptation and has a Master of Science in Climate Change and Adaptation under development. The strategic areas of research for the School of Applied Climate Change and Adaptation include data and policy analysis for transition to low-carbon economies, coastal system impacts, clean technology innovation in support of agriculture and aquaculture, and climate change and human health.

A CRC with research interests in these areas will be in a strong position to contribute to the advancement of knowledge, products, and services to better inform decision makers about climate change related risks and optimal adaptation approaches. Through an integrated approach to climate change and adaptation research, the Chair will contribute to an interactive environment that will foster new knowledge and R&D for climate change innovation and adaptive solutions.

Preference will be given to those candidates who have developed a research profile that suggests obvious future collaboration with members of the UPEI research community.

Our Vision: We seek a dynamic researcher who engages in independent and collaborative multidisciplinary research who is recognized by their peers as a potential leader in areas of increasing national and international significance and of emerging importance at UPEI. UPEI has identified experiential learning as one of it pillars within <u>UPEI's Strategic Plan</u>. This CRC position is situated within the innovative new School of Applied Climate Change and Adaptation, with strong links to the University's program in Environmental Studies. As such, the CRC position is intended to maximize the benefit that undergraduate students will gain from the expertise, experience, and experiential learning opportunities provided by the successful candidate.

Our focus: Building on existing and emerging expertise, UPEI is accelerating knowledge capacity and innovation in climate change and adaptation – one of the greatest global challenges of our time. The newly developed School of Applied Climate Change and Adaptation is focused on climate change governance; policy and strategy development, implementation and evaluation; and sustainability assessment and strategy development. The strategic priorities of the School are intended to:

 accelerate knowledge capacity to support evidence-based decision making that will benefit the development of governance strategies, government policies and actions to support long-term climate mitigation and adaptation, and economic investment in infrastructure; support for the sustainability of sectors such as agriculture, fisheries, aquaculture and other key economic sectors in relation to climate change mitigation and adaptation; advance knowledge of municipalities and industry associations in climate change

- **contribute to improvements in assessment of climate risk and impact** in relation to critical infrastructure, key sectors and industries and impacts such as coastal erosion, that are critical to economies and planning
- grow knowledge acquisition and skills related to observation, monitoring, and surveillance networks that directly impact climate-related health, wildlife and ecosystem health, food production and supply (e.g., climate science, climate observations, scenarios of future climate, mapping and visualization of climate change, climate mitigation and adaption, economics of climate change)
- **contribute to developing "clean growth economies"** that support economic growth and competitiveness through collaborative higher learning and research partnerships, with government, industry, private sector, as well as advancing evidence-based finance and investment capacity for resiliency to climate change impacts
- provide vital support through highly qualified personnel and future climate change and adaptation leaders for government, private businesses, entrepreneurs, and startups required to identify climate related risks and opportunities and to transform knowledge and research into action to support clean technology development
- promote knowledge integration, leadership, and impact to support climate change resiliency, environmental innovations, institutional development and policy making, and long-term sustainability

Applicant requirements: The CRC in Applied Climate Change and Adaptation will be a tenure-stream appointment at the rank of Assistant or Associate Professor, conditional on the successful applicant being approved as a Tier II Canada Research Chair by the CRC Secretariat.

The Canada Research Chairs Program has been established by the Government of Canada to enable Canadian universities to foster and enhance their role as world-class centres of research excellence. Tier 2 chairs are intended for exceptional emerging scholars. Applicants who are more than 10 years from having earned their highest degree (and where career breaks exist, such as maternity, parental or extended sick leave, clinical training, etc.) may have their eligibility for a Tier 2 chair assessed through the program's Tier 2 justification process. Further information about the CRC program and nominee eligibility is available at http://www.chairs.gc.ca.

To be qualified, a candidate must have a PhD and have developed a strong, collaborative research program that will align well with the objectives of the School of Applied Climate Change and Adaptation and have a research focus in one or more strategic areas of research interest including data and policy analysis for transition to low-carbon economies, coastal system impacts, clean technology innovation in support of agriculture and aquaculture, and climate change and human health.

A record of attracting competitive research funding and mentoring students, and the demonstrated potential to assume a leadership role at UPEI are essential requirements for the successful candidate. Preference will be given to those candidates who have developed research profiles that connect well with current research initiatives at UPEI.

Visit the UPEI Human Resources Academic Positions web site for the link to the Canada Research Chair in Applied Climate Change and Adaptation posting: http://www.upei.ca/hr/academic-positions.

Review of applications will begin on July 16, 2018 and will continue until a nominee is selected.

Applicants are requested to submit a curriculum vitae, a cover letter that addresses research and teaching interests, and the names, addresses, phone numbers, and email addresses of at least three references to Strategic Research Initiatives Manager, Jan Coffin jdcoffin@upei.ca. Please include your name in the file name(s).

Inquiries can be sent to:

Dr. Kathy Gottschall-Pass, Dean of Science University of Prince Edward Island 550 University Avenue, Charlottetown, PE, Canada C1A 4P3 Email: kgottschall@upei.ca

UPEI - A Sense of Place

The Program: The School of Applied Climate Change and Adaptation provides strong interdisciplinary programming and research opportunities in climate sciences; climate change governance; climate and sustainability-related policy development, implementation and assessment; innovation creation to support a clean-growth economy; technologies to mitigate human activities on the environment; and understanding of broader context specific environmental issues and solutions. The expertise and programming within the School are of global significance.

On the programming side, the School offers the Bachelor of Science in Applied Climate Change and Adaptation. This largely experiential program is intended to provide government and industry with next generation professionals and scientists who have the skills and expertise to help communities develop resiliency in the face of climate change, from the perspectives of economic, environmental, social, well-being/health, and culture.

With respect to research and innovation, key areas include:

- impacts on coastal systems
- clean technology innovation in support of local agriculture and aquaculture, as well as support for global applications including solar, water conservation treatment, and clean energy generation and storage
- climate change and human health
- data and policy analysis for transition to low-carbon economies
- development of policy innovations and approaches in adaptation and sustainability planning

The School has developed a strong global partnership network to ensure the application of new knowledge and innovation within local and global communities and to promote research collaborations. Partnerships include collaborative programs with the Smithsonian Institute, Stanford University, the University of Waterloo, Brock University and Queen's University, in addition to several community groups and provincial governments.

Recent research achievements include the development of a virtual reality tool known as CLIVE (CoastaL Impacts Visualization Environment) that won an award and recognition from MIT for translating the impacts of climate change on coastal environments. Faculty and students at the School also are using drone technology extensively to create high-resolution maps of the PEI coastline, as well as to survey agricultural crops and estuaries using a variety of sensors. For example, a graduate student has discovered a relationship between the greenness of potato plants

in a potato field in July, as assessed using a drone, and the yield of potatoes in October, as measured using a global positioning system (GPS) on the potato harvester. The researcher is now able to advise farmers regarding where to best utilize fertilizers and water in their July growth phase to boost yields of potentially under-performing areas of their crop in October.

The Faculty of Science at UPEI: Numerous collaborative research opportunities exist with faculty in the Departments of Chemistry (ocean acidification), Biology (ecology of rivers and estuaries) and the School of Sustainable Design Engineering (sensor development, innovative agriculture, sustainable farming solutions), as well as with members of the Faculty of Business (cost-benefit analyses of adaptation strategies) and the School of Mathematical and Computational Sciences (big data analytics, risk assessment).

In addition, the School of Applied Climate Change and Adaptation is closely linked with the Environmental Studies program at UPEI. The latter incorporates an interdisciplinary and multidisciplinary liberal arts and sciences approach to the theory, research, and practice of environmental studies. Students have the opportunity to take courses offered in 16 different departments across the Faculties of Arts, Science, Education and Business. The program provides an emphasis on exploring the roles of governments, markets and collective action in environmental policy and management, with examples of governance drawn from different parts of the world and different ecological contexts.

The University of Prince Edward Island

UPEI is located on a 136-acre (55 hectare) campus in Charlottetown, the capital of Prince Edward Island. Established in 1969 through the amalgamation of St. Dunstan's University and Prince of Wales College, UPEI is the province's only university. As a public liberal arts and science institution, UPEI is committed to encouraging and fostering critical, creative, and independent thinking. It offers a rich blend of academic programs in Arts, Science, Business, Education, Nursing, Graduate Studies and Veterinary Medicine to approximately 4,600 full- and part-time students. UPEI is consistently ranked as one of Canada's top primarily undergraduate universities. It is home to an increasingly diverse student body, many talented educators, a thriving research community that includes more than a dozen funded research chairs, and a growing network of successful alumni.

The University is committed to facilitating the ongoing growth and success of its faculty members as researchers, and to the education and training of new generations of critical thinkers, researchers, and scholars across the full range of intellectual, scholarly, and creative endeavours. It is grounded in and strongly connected to Prince Edward Island's communities, industries, governments, and not-for-profit sectors. UPEI has seen significant research growth over the last decade. This growth has been spurred by expanded research infrastructure, enhanced federal support for research, and the presence of a dynamic faculty.

The areas of research pursued at UPEI cluster within three themes: Health, Environment, and Community and Culture. Within each cluster, and at their intersections, we find the excellence of the solitary researcher working independently, as well as dynamic collaborative research teams. Together these themes provide an integrating perspective of our emerging and existing areas of excellence. UPEI's eleven research constellations provide a rich opportunity to foster on-going dialogue and collaborative research. Examples of research groups at UPEI are found at http://www.upei.ca/research/institutes-centres-and-groups.

Information on research and researchers at UPEI can be found at http://research.upei.ca/ or http://www.islandscholar.ca/.

Information on UPEI Chairs can be found at http://www.upei.ca/research/research-chairs.

Commitment to Employment Equity

The recruitment and nomination of Canada Research Chairs at UPEI conforms to the principles of the Canada Research Chair Program and UPEI's Canada Research Chair Action Plan in order to ensure equity, diversity and inclusion. To this end, we invite applications from Aboriginal peoples, women, persons with disabilities, members of visible minorities, persons of any sexual orientation or gender identity, individuals with eligible career interruptions, and others with the skill and knowledge to productively engage with diverse communities. Hiring at UPEI is based on merit and a diverse pool of candidates contributes to the excellence of the university and the research enterprise. We encourage members of equity-seeking groups to self-identify within the application process.

In accordance with Canadian immigration requirements, all qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. UPEI is committed to the principle of equity in employment.