

**University of Prince Edward Island (UPEI)**  
**Strategic Summary (2021-2024) for the Canada Research Chairs Program**

*UPEI is committed to advancing reconciliation through higher education.*

The UPEI Strategic Plan (2018-2023) outlines the University's commitment to delivering on its vision of being a leader in outstanding programs and experiential learning opportunities that enable students to develop to their full potential in both the classroom and the community. Working together, UPEI is committed to ensuring students emerge from their studies ready to excel and contribute to the betterment of our world.

Central to this commitment is advancing scholarship, research, and discovery. As outlined in the institutional plan, UPEI has a strong reputation for research impact and for being home to world-class researchers and talented graduate students. The University is committed to exploration and discovery and is driven in its desire to contribute outcomes that benefit our communities. Through collaborative endeavors and scholarly activities, UPEI seeks to create new knowledge and provide solutions to challenges facing our world. Core to this process is the development of the next generation of academic, scientific, community, and artistic leaders.

UPEI has forged a strategic direction that builds upon the development of **sustainable, unique** programs that leverage the University's ability to transform lives and communities. This includes new programming in areas such as Sustainable Design Engineering; Clinical Psychology with a focus in cross-cultural competencies; Applied Climate Change and Adaptation; Applied Communications, Leadership and Culture; and focus areas such as Actuarial Science and Data Science within the UPEI School of Mathematics and Computational Science. Innovative programming lays a foundation on which existing research expertise and emerging knowledge form an integrated framework to support UPEI's culture of discovery, innovation, and collaboration.

*The UPEI Strategic Plan and initiatives are developed through consultation with the campus learning community and broader stakeholder groups. The strategy is aligned with University values of academic freedom and rigour; accountability and integrity; excellence; and inclusion, equity, and reconciliation. The University has an Equity, Diversity, and Inclusion Strategy, a UPEI Canada Research Chairs EDI Plan, and is currently working to develop its first comprehensive Indigenous Strategic Plan with the guidance of Indigenous elders, faculty, staff, students, local Indigenous community, and the newly formed Faculty of Indigenous Knowledge, Education, Research and Applied Studies.*

### **Research Focus**

UPEI offers world-class resources as well as access to global leaders and outstanding partner networks within a small, comprehensive university setting. UPEI has a proven ability to leverage its scale and size to be a nimble, innovative, globally competitive community of researchers and scholars. UPEI research impact and opportunities are considerable. Over the past decade, UPEI was the only small university in Canada to be home to: a Canada Excellence Research Chair; a Lévesque Research Chair and three Lévesque Professors; a Centre of Excellence for Commercialization and Research (CECR); an UNESCO Chair (the only one east of Quebec), and Canada First Research Excellence Funding (CFREF).

The Canada Research Chair (CRC) program has provided UPEI with significant support to attract and retain world-class researchers. UPEI's CRCs contribute to the depth and breadth of knowledge and research

capacity at our institution, providing new pathways for research excellence, collaborations, and development of next generation leaders.

Growth in research capacity, interdisciplinary collaborations, and graduate programs have all contributed to UPEI's reputation as destination for outstanding higher learning and research opportunities. UPEI will continue to place priority on research excellence and mentorship to develop the next generation of scientific and creative leaders and highly skilled workers who are able to contribute to the health and prosperity of local and global communities. As outlined in the University strategic plan, UPEI will continue to place emphasis on:

- encouraging and supporting innovation, creativity, and collaboration;
- developing an integrated research culture at UPEI that further builds pathways for technology transfer and commercialization; and
- growing institutional supports to assist researchers in effectively identifying and pursuing funding to support ongoing development of research expertise.

UPEI currently has two active CRCs:

1. Canada Research Chair in Geospatial Humanities
2. Canada Research Chair in Veterinary Social Epidemiology

CRC positions that are in development include:

3. Canada Research Chair in Climate Change and Adaptation
4. Canada Research Chair in Biomedical Genomic Engineering
5. Canada Research Chair in Business Analytics

### **Areas of Strategic Focus for UPEI Research Collaborations and Networks**

The strategic foci are based on these five CRC areas and include:

- UPEI's Applied Communications, Leadership & Culture program is home to the *CRC Chair in Geospatial Humanities*. This research theme and strategic focus for UPEI increase understanding of the physical transformations of place and their social impacts. It provides the foundation for better land-use planning, resource co-management, and risk management.
- The Atlantic Veterinary College (AVC) at UPEI is one of only five veterinary colleges in Canada. The *CRC in Veterinary Social Epidemiology* combines social science, veterinary epidemiology, and animal welfare research to bring forth new best-practice advancements in animal care.
- The newly formed Faculty of Sustainable Design Engineering (FSDE) at UPEI has provided collaborations with the AVC. This close collaboration provides a veterinary medicine engineering theme for tools, devices, methods, and processes. It is the center of a newly identified *CRC in Genomic Biomedical Engineering*.
- The School of Climate Change and Adaptation, focusing on sustainable agriculture, will combine Climate Change, Humanities and Sustainable Design Engineering. The *CRC in Climate Change and Adaptation* is a strategic focus for UPEI.
- Combining business data and artificial intelligence with analytics offers a melding of business and computer science research. A future Canada Research Chair is identified in this emerging area.

The focus areas strongly emphasize the ability to collaborate, interdisciplinary approach to research and complex questions, and the strength of outreach within the community. The CRC focus areas and the projects for which CFI funding will be applied were purposefully selected because they lend themselves well to expanding our connections through collaborations and partnerships.

UPEI encourages interdisciplinary approaches to research. Unique areas of study at UPEI have proven to provide opportunities for highly collaborative investigation and research. Examples of such units include:

- UPEI Faculty of Sustainable Design Engineering delivers innovative, industry-linked, project-based learning that focuses on developing students with a strong interdisciplinary background in engineering design, strengthened by solid professional and technical skills that enable them to contribute to solutions that are sustainable. Graduates are well-positioned to work in a diverse range of industry sectors such as: bio and food processing, robotics, industrial automation, aerospace, automotive, advanced manufacturing, sustainable and alternative energy, marine applications, and others. The Faculty of Sustainable Design Engineering is a collaboration hub for other UPEI disciplines and researchers, as well as industry, government, and not-for-profit community partners.
- UPEI Island Studies: UPEI is home to an UNESCO Chair in Island Studies and Sustainability. This expertise brings together academics, policy-makers, community organizations, and practitioners from around the world to look at best practices from small island development and other sub-national jurisdictions, like PEI. Research areas with UPEI Island Studies include: sustainable development; climate change adaptation; governance; culture; outmigration; and educating our youth and our workforce. These areas are natural collaborators for other UPEI research priorities as well as other partners from around the world.

### **CFI Infrastructure Funds**

UPEI receives CFI funds from the John R. Evans Leaders Fund (JELF) via the Small Institutions Fund (SIF). UPEI does not have affiliate institutions. The UPEI SIF envelope will support the proposed CRCs and the noted strategic research areas.

### **CRC Planning and Approval**

Planning and approval for new research initiatives, including determining CRC positions and commitments to fund research projects, go through UPEI Deans Council, UPEI Executive and Research leadership.

UPEI Canada Research Chairs Equity, Diversity, and Inclusion (EDI) Action Plan outline the methodologies and targets that align with the Canada Research Chair Program. It establishes and defines the equity and diversity targets CRCs for members of the visible minority, Indigenous Peoples, persons with disabilities, and women for 2021 to 2029. These updated equity targets for representation for Canada Research Chairs were defined effective June 1, 2021, and are updated on UPEI's website. UPEI remains committed to the equity targets set through this process.

Interdisciplinary search committees are carefully constructed to be inclusive, and recruitment efforts target under-represented and mainstream populations. All search committee members complete EDI training. Nominees for CRC positions are communicated through national and international advertisements and postings and proactive networking to identify potential nominees from under-represented populations and build our current success in this area.

### **Measures of Success**

UPEI reports annually on approximately 20 performance indicators through *UPEI by the Numbers*. This update to the UPEI community and public stakeholders provides comparative data on a range of priority measures directly linked to the UPEI Strategic Plan.

In addition to CRC targets and goals identified within the CRC EDI Action Plan, UPEI measures research intensity, research funding, growth in graduate student enrolment and programming developments, and

research chair allocation annually. In addition, the University actively works toward approximately 20 performance targets outlined in its annual Research Support Fund plan to maintain research infrastructure, support the research enterprise at UPEI, and invest in technology transfer.