

The University of Regina  
2016-2021 Strategic Research Plan Summary for the Canada Research Chair (CRC) Program  
And the Canadian Foundation for Innovation (CFI) 2016

The University of Regina endeavours to develop and maintain a supportive and diverse research environment and a culture of excellence for all scholars. Specifically, we intend to be recognized as leaders nationally and internationally in our thematic areas of strength identified in our five research clusters.

## OBJECTIVES

The Strategic Research Plan 2016-21 provides the strategic research direction for the University of Regina for 2016 to 2021. The Strategic Research Plan (SRP) is intended to be aligned with and linked to the University of Regina's Strategic Plan 2015-2020: "*peyak aski kikawinaw Together We Are Stronger*". *Peyak aski kikawinaw* identifies and expands upon three key priorities – student success, research impact, and commitment to our communities – and two overarching areas of emphasis – Indigenization and sustainability – that thread throughout each priority upon which the University will continue to build to increase its impact, reputation and competitiveness.

Over the next five years, we are committed to the following strategic research objectives: (1) strengthen support required for students and researchers to deliver high impact outcomes; (2) advance the profile and awareness of research successes locally, provincially, nationally and internationally; (3) increase research partnerships and projects with First Nations and Métis people, communities and organizations; (4) increase research revenues; and, (5) facilitate and support high quality research and its dissemination. Select actions in support of these objectives include:

- Increase the research funding budget.
  - Increase resources to attract and retain high-caliber researchers and graduate students.
  - Prioritize research resources and develop new funding partnerships that align with the five strategic research clusters.
  - Create internal research chairs for Indigenous-centred research and strategic research clusters.
  - Stimulate new research partnerships and funding opportunities that are responsive to community and industry needs and build capacity with local communities, including First Nations and Métis communities.
  - Encourage and support awareness and recognition of Indigenous ways of knowing in research and graduate programs.
  - Encourage the development of interdisciplinary research and academic programming.
  - Increase support for research on topics with relevance to sustainability.
  - Create a program of research support and resources for new faculty.
  - Create a targeted communications strategy to keep University of Regina stakeholders, community members, and media updated on research developments.
  - Expand and maintain strategic research collaborations with other universities and colleges, both in Canada and internationally.
- Review and enhance mechanisms for high-quality open access publications.

## RESEARCH STRENGTHS

The University of Regina has emerged as a centre of excellence on a number of research fronts. Based upon an analysis of previous research impact, critical mass of highly qualified personnel, distinctiveness, and commitment to high impact research, the University has identified five thematic areas of research priority, which represent clusters of researchers: Anxiety, Stress & Pain; Digital Future; Integrated Human Health: Equity, Disease & Prevention; Social Justice & Community Safety; and Water, Environment & Clean Energy. These themes include research housed in research centres/institutes at the University as well as individual research endeavours. Similar to the strategic priorities from the University's strategic plan, Indigenization and sustainability thread throughout each thematic area of research strength.

The University's research is not limited solely to these areas of strategic priority, and they do not diminish the important contributions of individual researchers and creative practitioners. In fact, individual research strengths collectively formed the foundation of the University's strategic research directions and will continue to foster new opportunities (see 'Emerging thematic areas of research priority' section).

### *Anxiety, Stress & Pain*

Pain, anxiety, depression and stress can be understood as a vicious, self-perpetuating cycle. Understanding, evaluating and managing this cycle is the focus of this cluster. Researchers are tackling complex and costly human problems related to anxiety, stress and pain, their clinical evaluation, manifestation, causal factors and their management, with the goal of improving functional ability and quality of life for millions of people.

### *Digital Future*

Digital Future researchers are leading the way through innovation and creativity in computing and digital media. They are performing research in data mining, wise computing; artificial intelligence; visualization; data security & policy; design, creation and analysis of emerging technologies; and within the digital humanities. They are emphasizing effective, efficient and sensitive decision-making by working with new information accumulated from diverse sources, whether in scaled quantities of heterogeneous, electronic data or in areas where data may be scarce or expensive. The growth and continuous expansion of the data culture provides constant opportunities for our researchers to innovate, partner, develop and produce across fields such as commerce, science, education, healthcare, public administration, the arts and culture industries.

### *Integrated Human Health: Equity, Disease & Prevention*

The central tenet of this cluster is to develop and disseminate research knowledge to improve the health of Canadians. Researchers in this cluster perform clinical, bio-medical, population and Indigenous health research, using methodologies from the natural, clinical and social sciences. This integrated health approach focuses not only on traditional biochemical/biomedical research, but also investigates social, political, economic, cultural and population aspects of health. This cluster serves as a focal point for promoting interactions between researchers, clinicians, policy makers and the public. It provides a resource for local community interactions and information on health research.

### *Social Justice & Community Safety*

This cluster involves research and practice focused on equity and fairness at both individual and systemic levels. It considers inequities in social, political, and economic power, equitable access to

opportunities and resources, as well as scholarship that involves reciprocal University-community engagement. It also includes research that deals with prevention and protection of communities from circumstances or events that could place in jeopardy the safety of individuals or groups. Researchers in this cluster study a diverse array of topics such as critical theory, labour studies, human rights, Indigenization, post/anti-colonialism, social services, worker safety and worker rights, bullying, community engagement, corrections, genocide, law and law enforcement, emergency preparedness, and victimization.

#### *Water, Environment & Clean Energy*

The focus of this cluster is identifying the most serious threats to environments in semi-arid regions in Saskatchewan and elsewhere, providing information to decision makers on how to alleviate negative impacts of climate, land-use and pollution on hydrology, water quality and food-web integrity, and developing adaptive management strategies and policies for the impacts of anticipated climate change, population growth and increased development of natural resources. Researchers in this cluster evaluate the impacts of natural and anthropogenic effects on grassland, forest and aquatic habitats, develop environmental low carbon technologies to mitigate carbon dioxide emissions associated with climate change, and study other aspects of clean energy such as smart grids, intelligent transportation systems, and lean and agile manufacturing.

#### *Emerging Thematic Areas of Research Priority*

Over the time period of the University's SRP, new concentrations of research excellence may emerge and show potential to become recognized as a strategic research cluster. As outlined in the guidelines for strategic research clusters, the Office of Vice-President (Research) will work with the associated faculty and researchers to determine if these new concentrations meet the criteria for a strategic research cluster. These candidates will be deemed "emerging clusters" over the period of the current plan and may be promoted to the status of strategic research cluster for the next incarnation of the SRP. The guidelines also include processes for review of strategic research clusters and de-listing a cluster if it no longer satisfies the qualifying criteria.

## **CANADA RESEARCH CHAIRS**

#### *The University of Regina's Vision for Canada Research Chairs*

Chairholders are expected to: demonstrate strength in an established or emerging area of research strength; enhance the institution's national and international reputation and leverage additional resources; and, contribute to the creation and mobilization of knowledge through training of graduate students and highly qualified personnel, outreach activities and interdisciplinary collaboration.

#### *Allocation of Chairs*

Canada Research Chairs are an important part of the University's ability to attract and retain high calibre researchers. They complement existing and planned research chairs like endowed or industrial chairs. The following is a breakdown of the University's current allocation of Canada Research Chairs. It is important to note that the University must maintain flexibility in its allocation of Canada Research Chairs among the five research clusters as well as the emerging areas to ensure we can take full advantage of opportunities as they develop. The University will prioritize research resources and develop new funding partnerships that align with the five strategic research clusters.

The University's policy on Research Chairs outlines the process by which vacant chairs are allocated. The Vice-President (Research), the Provost and Vice President (Academic), and the Associate Vice President

(Academic and Research), and the relevant Dean(s) will determine the general research area of the chair. Faculties and Academic Units are invited to submit letters of intent (LOIs) demonstrating the strategic impact of allocating a research chair in a given area. Proposals are reviewed against criteria such as fit with the strategic plan, and faculties with successful proposals are invited to begin the recruitment process for the vacant chair and submission of a nomination to the CRC.

Major research theme of occupied and planned CRCs as of 2016:

Area of Institutional Strength	CIHR		SSHRC		NSERC	
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
Anxiety, Stress & Pain						
Digital Future				1	1	1
Integrated Human Health						
Social Justice and Community Safety				2 <sup>1</sup>		
Water, Environment & Clean Energy			1		2	2
Unallocated <sup>2</sup>		1				

<sup>1</sup>These Tier 2 Chairs will focus on Indigenous research.

<sup>2</sup>This Tier 2 Chair will be either in the Anxiety, Stress & Pain cluster or the Integrated Human Health cluster depending on the institutional selection process.

Currently, 30% of occupied chairs at the University of Regina are held by females. The University remains committed to equity practices consistent with the guidelines established by the Canada Research Chairs Program.

#### **CANADA FOUNDATION FOR INNOVATION**

Funds available through the Canada Foundation for Innovation (CFI) are allocated according to various criteria. The University has a criteria document related to the John Evans Leadership Fund (JELF) that is reviewed with every notification of the University's allocation. It currently provides set-aside allocations for CRCs, established researchers, and junior faculty. Guidelines prioritize fit with strategic research plan while maintaining adherence to standards of excellence used by the CFI.

For larger competitions such as the Innovation Fund, the University issues internal calls for proposals, with criteria such as fit with strategic research plan, prior investments, collaboration and partnership, and an overarching emphasis on excellence of the researchers and proposed research.

#### **EVALUATION OF SUCCESS**

Vice-President (Research) provides a report on research to the University of Regina's Board of Governors at each meeting of the Board. This report includes research highlights and significant events since the last report, including but not limited to:

- Significant funding grants awarded and contracts initiated;
- Significant recognitions;
- Major publications, presentations, journal articles, books, monographs, performances as well as other research artifacts of note;
- Relevant narrative-based indicators of significant research impact;

- New partnership agreements;
- Results of reviews of Centres and Institutes;
- Commercialization and patent milestones;
- Audit and other evaluation outcomes including any compliance issues;
- Reports on Faculty-based Centres and Institutes; and
- Milestone events for major research agreements (achieved or missed).

Highlights of progress and results will be reported to other stakeholders including the broader University and external community as appropriate through communication channels such as the University of Regina's research magazine and the web site.

In addition, the Research Office tracks statistics for all grants and contracts held at the University and can assess trends from individual to university levels. Information related to the success of individual projects is reviewed through the annual reports of grant holders to the CRC and CFI.

### **INSTITUTIONAL SUPPORT**

The University of Regina uses its Canada Research Chairs and CFI funding to advance research excellence in strategic areas and to advance the objectives of the Strategic Research Plan. Support for each chair is negotiated by the hiring Dean and is tailored to suit the needs of prospective chairholders. In general, support to research services, infrastructure, and to the graduate students who are an essential component of many research projects has increased by 29% from the years 2010-15. From 2011-2016, support to graduate students increased by 80%.

The Research Office at the University of Regina provides a comprehensive set of services to assist researchers in the innovation, support and commercialization of research, and to support the dissemination efforts resulting from CRC/CFI support.

### **PLANNING AND APPROVAL PROCESS**

The areas of strategic emphasis were developed in consultation with the broader academic community including the University Council, Senate and Board of Governors and adopted in the University of Regina's Strategic Plan 2015-2020: "*peyak aski kikawinaw Together We Are Stronger*". The University's Strategic Research Plan was developed by a Working Group comprising senior researchers, special advisors to the Vice-President (Research) and senior staff reporting to the Vice-President (Research). Draft versions of the SRP were shared broadly across the university community for feedback. The final version was approved at the Council Committee on Research and Executive of Council.