

UNIVERSITY OF SASKATCHEWAN

Strategic Research Plan Summary

Canada Research Chairs Program, Canada Excellence Research Chairs Program, and Canada Foundation for Innovation Program

Introduction

The University of Saskatchewan continues to embrace ongoing strategic renewal in its commitment to the people of the province of Saskatchewan, in its academic programs and the quality of the learning environment, and in the pursuit of research excellence. In the context of an extraordinary academic breadth, the University of Saskatchewan has established an international reputation for achievement in a diversity of disciplines. The University's "*Strategic Directions*"¹, first articulated a vision for achieving the goals of enhancing academic pre-eminence in scholarship and program creativity with adherence to international standards.

In the spirit of this vision, the "*Second Integrated Plan: Toward an Engaged University (2008/09 – 2011/12)*"² articulated the commitment to select a definitive set of existing foci of exceptional research and scholarship that have achieved pre-eminence regionally, nationally, or internationally, or are on the cusp of doing so, and promote these widely as the University's areas of pre-eminence or '*signature areas*'. This commitment follows upon the earlier investment in identifying broad areas of strength and promise, or research themes as expressed in the document *Extending Horizons: University of Saskatchewan Research, Scholarly and Artistic Landscape (2006)*.

The *research themes* within the University's Canada Research Chairs Strategic Research Plan arise from the *Extending Horizons* document and represent areas of strength in the University's collective research and scholarly activity. The '*signature areas*,' enabled by the university's capacity, investments, history, and sense of place, distinguish the University as leaders in Canada and internationally, with recognition based on output and achievement. Importantly, the University's signature areas also reflect relevance to issues of national and international priority, contributions to innovation, and broad and inclusive collaboration and engagement. The significance of the signature areas and their ability to define the U of S in conjunction with these areas of exceptional research and scholarship will become apparent as the signature areas are promoted widely over time.

The Canada Research Chairs Program and the Canada Foundation for Innovation have provided opportunities for enhancement of research and training capacity in key areas of institutional priority, which will contribute substantively to achievement of our institutional goals. The Strategic Research Plan provides the framework within which these resources may be allocated, in order that the University may build on its strengths, and pursue its initiatives as expressed in the *research themes* and *signature areas* described in the plan.

¹ http://www.usask.ca/ip/inst_planning/strategic_directions/index.php

² http://www.usask.ca/ip/inst_planning/second_intplan/index.php

Objectives of the CRC and CFI Programs

The University of Saskatchewan Strategic Research Plan identifies objectives that will serve the national agenda for increased competitiveness in research and development and for improving the lives of Canadians. Key objectives of the Strategic Research Plan are:

- Build on areas of existing research pre-eminence, including signature areas.
- Enhance emerging areas of research excellence.
- Create opportunities to pursue new initiatives identified as of strategic importance to the University, Saskatchewan, and Canada
- Expand opportunities for partnerships and interdisciplinary research.
- Attract and retain outstanding faculty by providing an environment in which chairs can be successful.
- Build the infrastructure to support leading-edge research.
- Train highly qualified personnel.
- Enhance opportunities for external funding and establishment of outstanding research infrastructure.

The University's CFI and CRC Programs

The U of S CRC and CFI Programs are intended to enhance Canada's research capacity and training of highly qualified personnel through the attraction and retention of researchers who are recognized as international leaders, and the provision of a research infrastructure to support chairs' endeavours. The University's CRC Chairs and CFI allocations are deployed within areas of thematic strength intended to build the University's international reputation and develop its research enterprise. The leadership and productive synergies demonstrated by the Chairs, coupled with strategic investments in research infrastructure, creates a research environment conducive to growth in the pursuit of research excellence.

The University of Saskatchewan continues to benefit significantly from resources allocated from the Canada Foundation for Innovation, most notably through the creation of major new facilities. These have included, but are not limited to the Canadian Light Source, the Saskatchewan Structural Sciences Centre, the Ag-Bioprocess Engineering Research Laboratory, the Infrastructure for Applied Biotechnology in Agriculture, and InterVac (International Vaccine Centre), the first Containment Level 3 facility in Western Canada for human and large animal diseases. CFI support has allowed the U of S to strategically align world-class research facilities with areas of research strength. Further, CFI funding has broadened the scope of existing research, and made possible the exploration of new and emerging areas of research. The University has recognized the relevance of these major facilities to the recruitment of outstanding faculty and the attraction of Chairs, and will continue to capitalize on these investments in the strategic deployment of Chairs.

The University also recognizes that the Canada Foundation for Innovation is a key source of funding required to establish the necessary infrastructure essential to the success of our Chairs. Thus, the objectives for the CFI and CRC programs are consistent. The University has been successful in seeking to optimize the funding available through matching funds, in particular the Saskatchewan Innovation and Science Fund, Western Economic Diversification, and from a variety of other local, provincial, and national sources, both private and public.

Allocation of Canada Research Chairs at the University of Saskatchewan as of 2010

Table 1 provides an overview of the distribution of Chairs across the three Councils as initially awarded to the University and as subsequently allocated. Those chairs appointed as of 2009-10 and nominations in progress as of April, 2010 are also identified.

Table 1. Allocation of Chairs, as of 2010

	SSHRC	CIHR	NSERC
Total Chairs initially allocated	3 – T1	4 – T1	11 – T1
	3 – T2	5 – T2	10 – T2
Chairs appointed as of 2009-10	2 – T1	2 – T1	10 – T1
	3 – T2	2 – T2	6 – T2
Nominations in progress as of April 2010			1 – T1
		1 – T2	

Research Themes

As outlined earlier, in 2006 the University of Saskatchewan reviewed its research landscape in order to begin to identify areas of pre-eminence, areas of emerging pre-eminence, and areas of strategic importance to the University, the Province, and the Nation. This exercise resulted in adoption of the major research themes, which capture the areas identified as areas of research strength and priority at the University of Saskatchewan and represent the framework within which Canada Research Chairs will be allocated. As the University evolves and its scholarly activities reflect new synergies, these themes have been recast as appropriate, with the previous theme for *Materials Science* folded into the theme for *Technology and Science*. The university's *research themes* are: *Culture and Society; Aboriginal Peoples; Environment, Natural Resources and Sustainability; Technology and Science; and Human and Animal Health*.

Within the framework provided by the research themes, the areas of pre-eminence or signature areas augment these major themes and represent areas of depth and focus which distinguish the University's collective research and scholarship. Broadly defined, the University's *signature areas* are:

Aboriginal Peoples: Engagement and Scholarship;
Agriculture: Food and Bioproducts for a Sustainable Future;
Energy and Mineral Resources: Technology and Public Policy for a Sustainable Environment;
One Health: Solutions at the Animal-Human-Environment Interface;
Synchrotron Sciences: Innovation in Health, Environment and Advanced Technologies;
Water Security: Stewardship of the World's Freshwater Resources.

Allocation of Chairs Planned for 2010-2014

The University of Saskatchewan anticipates modest turnover in Canada Research Chairs over the period of this Strategic Research Plan. Resignations, retirements, and unsuccessful renewal may release Chairs for reallocation. Nationally, institutions are subject to reallocation, as changes in relative success in competition for Tri-Council funding bears on entitlement. The University of

Saskatchewan anticipates that a total of 7 Canada Research Chairs (1-T1, 6-T2) may be available for allocation in the period 2010-14.

Within the last cycle of Chair allocations, targeted investment was deemed essential to take advantage of provincial funding opportunities and to build research leadership and focus within the SSHRC community. As a result, the CRC Oversight Committee elected to increase the University's complement of SSHRC CRCs from five to six. At the present time, further deviation from the current allocation of chairs amongst the council pools is not anticipated, and it is expected that Chairs becoming available through resignation, retirement, or increase in the University's allotment will remain within the pool of origin. Nevertheless, in order to take advantage of strategic opportunities, it is essential that the University retain a degree of flexibility in the allocation of available Chairs.

The University is cognizant of the potential difficulty in retention of its most successful Tier 2 Chairs. The University must also judiciously balance the desirability of recruitment of outstanding young scholars into Chairs in order to provide them with the means to achieve their full potential, against the advantages inherent in appointment of established, senior scholars with a proven record of achievement. The latter may contribute to a more immediate realization of institutional goals.

Table 2. Anticipated Allocation of Chairs by Research Area, Strategic Research Plan 2010-14

	SSHRC	CIHR	NSERC
Culture & Society	1 – T1 1 – T2		
Aboriginal Peoples		2 – T2	
Technology & Science		1 – T1 1 – T2	1 – T1 2 – T2
Human & Animal Health		1 – T1 2 – T2	1 – T2
Environment, Resources & Sustainability			1 – T1 4 – T2

Gender Representation

The University of Saskatchewan has been very successful in attracting outstanding female candidates, and has steadily increased the percentage of female Chair holders since the inception of the program. The proportion of women holding Chairs now stands at approximately 30%, which is on par with that of the full-time faculty at the University. The goal is to sustain or increase this proportion of female Chairs through continuation of our efforts to recruit highly qualified female candidates. The appointment of female Chairs as positive and influential role models within the University community expands upon our commitment to both equity and excellence. Providing networking opportunities, creating a culture of equality, and celebrating achievements are critical to attracting and retaining high-caliber female faculty and encouraging women to pursue post-graduate research and academic careers.

Allocation of Chairs to Internal, External Candidates

In accordance with the intent of the CRC Program to increase the number of outstanding scholars at Canadian universities, our intent is to place an emphasis on international searches, and it is expected that the majority of appointments will be to candidates external to the University and from outside Canada. Although there will be Tier 2 chairs available for allocation, the ratio of Tier 1 to Tier 2 chairs presents limited opportunity for promotion of Tier 2 chairs to Tier 1 chairs.

Assessment of Progress

Contributions made by Chairs will be assessed by a number of indicators to determine their success in meeting the objectives of the CRC Program. Specific expectations for Chairs may vary considerably across disciplines, so that indicators will not apply equally to all Chairs. Nevertheless, significant activity is expected to occur within each of the following five categories, and the progress of each Chair will be assessed against appropriate indicators within each category.

- High Quality People
- Significant Regional, National, and International Impact
- Ability to Attract Resources
- Significant Collaborative Activity
- Significant Activity Output

A comprehensive review of the accomplishments of the Chair, undertaken during the final year of the term, will inform the process for recommendation on renewal or reallocation of the Chair. A Chair Review Committee, a body of senior academics appointed by the CRC Oversight Committee, is assigned the task of review of the renewal documentation, and provides feedback to the Chairs and advice to the Oversight Committee.

Planning and Approval Process

The University of Saskatchewan has built an Integrated Planning Initiative founded upon a collegial and collaborative process that has identified four major planning foci: 1) attracting and retaining outstanding faculty; 2) increasing campus-wide commitment to research, scholarly and artistic work; 3) establishing the University of Saskatchewan as a major presence in graduate education; and 4) recruiting and retaining a diverse and academically promising body of students, and preparing them for success in the knowledge age. The Integrated Planning process is informed by a series of foundational documents that guide the University in its identification of areas and activities of strategic importance to the institution and society.

Final authority and responsibility for the Research Plan, the allocation and nomination of Chairs, and the allocation of internal resources rests with the University President. The President is advised by an Oversight Committee, consisting of the Provost and Vice-President Academic and the Vice-President Research; the Vice-Provost Faculty Relations and Associate Vice-President Research attend all meetings as resource personnel. A CRC Advisory Committee provides a forum for collegial consideration and serves in an advisory capacity to the Oversight Committee. This committee consults widely with members of the University community in terms of allocations to the research themes and signature areas and the selection of appropriate candidates.

The Strategic Research Plan has been developed through an iterative and collaborative planning process undertaken through University Council and committees of Council. CFI applications are developed under the guidance of a CFI Advisory Committee, chaired by the Vice-President Research, who is then responsible for communication of advice to the President.