

Strategic Research Plan Summary for the Canada Research Chairs Program

University of Lethbridge, October 2017

The University of Lethbridge is a public, board-governed university operating as a Comprehensive Academic and Research Institution under the authority of the Post-Secondary Learning Act of Alberta. In accordance with the University of Lethbridge's mandate¹, we develop individuals who are creative and innovative discoverers, leaders and independent learners, well-prepared to contribute significantly to their local, national and global communities. We care about what our students, staff, and researchers need to achieve this goal. We encourage a vibrant intellectual climate that supports inquiry at all levels and permeates all instructional programs.

We pride ourselves on our commitment to research that aims to better the lives of our neighbours, our province, our country, and indeed our world. As we look forward to our next 50 years we reaffirm our vision of a comprehensive university: a strong independent knowledge institution that seeks to understand the human and natural world and the universe beyond, with an aim to bringing knowledge and wisdom to bear on sustaining and improving our quality of life, our society, and the natural environment.

MAJOR OBJECTIVES OF THE STRATEGIC RESEARCH PLAN

Our Strategic Research Plan intertwines the academic and research portfolios to more effectively support the quality, impact, and capacity of research and creative activity at the University of Lethbridge. It is transformative and outlines four commitments:

- We are committed to elevating research, scholarly inquiry, and creative activity. The University of Lethbridge is committed to expanding research capacity by recruiting and retaining outstanding scholars; fostering the scholarly development of our researchers, and providing our students and postdoctoral fellows with an educational experience that is enhanced by the research activity at our institution. Concurrently, we will invest strategically to build provincially-, nationally- and globally-recognized research portfolios, we will support emerging areas of research excellence and inter/multi/trans-disciplinary collaborations, and we will ensure that our research and creative activities are recognized and celebrated locally, regionally, provincially, nationally and internationally.
- We are committed to preparing the next generation. Our goal is to be a leader in the training and development of highly qualified researchers and practitioners who will contribute to a knowledge-driven future. We are unwavering in our commitment that students have the opportunity to gain competencies in the four principles of liberal education. These principles mean that we expose students to ways of looking at and studying the world beyond their own disciplinary boundaries, we foster their ability to connect and integrate knowledge across disciplines, we emphasize critical thinking and problem solving skills, and we encourage students to be contributing community members on all levels.
- We are committed to enhancing community outreach and engagement. There is a vibrancy to the research culture at the University of Lethbridge and we are proud to showcase the breadth and diversity of our work to the broader community. We seek to broaden the culture of community engagement. This will be facilitated by connecting researchers, scholars and artists and their world-class research and creative outputs with end users, be it community organizations,

¹ Approved by Deputy Premier and Minister of Advanced Education and Technology, June 24, 2010. The mandate may be read in its entirety at <http://www.uleth.ca/governance/mandate>

governmental agencies, non-governmental organizations, industry and the public. We will build on existing relationships and foster new collaborative opportunities to respond to the specific needs of the communities we serve.

- We are committed to supporting industry engagement, knowledge mobilization and translation. We support the translation of knowledge into new creative ventures, new applications and informed public discourse to bolster Alberta's social, cultural and economic prosperity and its civic integrity. We will build mutually supportive relationships and partnerships with all sectors to ensure translation through the pipeline from ideas, to creative and artistic expression, to innovation, or to commercialization.

PRIORITY AREAS FOR RESEARCH AND RESEARCH TRAINING

The University of Lethbridge deliberately focused development both in programs of instruction and in research, in order to develop excellence and depth of expertise in a rich and sustainable environment. Priority initiatives integrate long-standing areas of excellence with emerging areas of inquiry, and those of strategic importance to our community. They provide the framework for the knowledge investment, capacity building and innovative and creative outcomes that define our strategic direction and form our national and international impact. These initiatives transcend disciplinary boundaries and promote collaborative research across the Faculties of Arts & Science, Education, Fine Arts, Health Sciences and Management. They are:

- Aging and Chronic Disease. The prevalence of chronic and neurodegenerative diseases, as well as mental health issues such as dementia and depression, has significant social and economic costs. The complexity of these diseases are such that an integrated, collaborative and multidisciplinary approach is needed to find the causes and cures. Research conducted at the University of Lethbridge brings together scientists and clinicians from diverse backgrounds and perspectives to collaborate and study the mechanisms, treatment, management, and prevention of these conditions.
- Applied Life Sciences. Knowledge of the human genome, other mammals, microorganisms and plants unlocks the door to major discoveries that can be shared across scientific disciplines. Genomics discoveries create unique research projects leading to opportunities in business and in transforming existing sectors of the economy. The ultimate success of the "Life Sciences" business sector will depend heavily on scientific innovation and the ability to link research with commercialization
- Family and Social Health. The rapid growth of urban centers is the subject of work by scholars at the University, as are the challenges faced by rural communities undergoing change due to population shifts, resource constraints, and economic pressures. The University is uniquely placed to consider the changing divide between the urban and rural landscape and its impact on family and social health. University of Lethbridge researchers are considering the role of schooling, health care, work, industry and social capital in both rural and urban communities. The care of the elderly, the disabled, and the addicted within families and communities represent an area of research that cuts across disciplines and faculties.
- Earth-Space Exploration. Through the use of advanced imaging and computational technologies researchers are able to better understand space and fundamental physics. It is through these studies that researchers are exploring our relationship with our planet and well as our place in the Universe. Through innovative uses of space imaging technology, university researchers are able to see space and the cosmos in new ways, and discover answers to questions that push the boundaries of human understanding.

- **Sustainable Development.** The development of Canada’s resources is dependent upon sustainable land and water management practices. Through efforts to observe, monitor, and forecast land and natural resources, university research contributes to a situation where societal benefits are maximized while minimizing current and future environmental impacts. Using an integrated approach, university research informs policy so that the interrelated and increasingly complex economic, community and environmental issues confronting the key sectors of energy, forestry, agriculture and the environment are not sacrificed for strong, sustained economic growth.

INSTITUTIONAL SUPPORT FOR PRIORITY AREAS

The University of Lethbridge has built and continues to build an outstanding record of research performance that has consistently placed us among the top ranks of competition amongst our peers. In fact, recent publications of Re\$earch Infosource ranked the University of Lethbridge fourth for gains in research income growth² and number of publications³ among Canadian undergraduate universities over the past decade. This accomplishment substantiates the foundation of research that will continue to provide our students with a unique educational experience and mobilize our journey to confirming our place as a comprehensive university.

The University of Lethbridge is committed to research program growth. We have made, and will continue to make, strategic investments, namely:

1. **The University of Lethbridge invested time and money to build strong research programs.** The University of Lethbridge dedicated its Canada Research Chair allocation to these priority areas and strategically recruited new minds to the University. Its internal research chair program – the Board of Governors Research Chairs– enabled the University to retain the bright minds already on campus. These positions, when combined with other faculty recruitments, have enabled the University of Lethbridge to boast a cadre of researchers, many of whom have garnered accolades for their work in the natural sciences, health and medical sciences, and social sciences and humanities. They have been awarded patents and licenses; won prestigious national and international awards, honours, prizes and fellowships; and have been elected to groups that recognize outstanding scholarship and achievement.
2. **The University of Lethbridge developed strong multi-disciplinary research programs.** The University of Lethbridge broke down discipline and organizational barriers and brought together researchers from across the province and government laboratories to address critical basic and applied questions.

The University of Lethbridge is home to a suite of specialized and renowned research centres and institutes. Not only are they a means of fostering and promoting research expertise and capability, but also serve as platforms for transdisciplinary research. These units of scholarly excellence have strengthened our identity and reputation, promoted community engagement, facilitated partnerships within and outside the university, and attracted alternative funding sources for research, teaching and student training.

3. **The University of Lethbridge developed the tools and infrastructure needed to conduct the research.** Our community of scholars enjoys access to exceptional research tools, facilities, and infrastructure that supports the breadth of scholarship that defines our institution. With the completion of the \$280M Science and Academic Building in 2019, Phase I of the Destination Project, our researchers, students, and community will have access to a spacious, state-of-the-art, flexible, and adaptable research facility.

² Spotlights on 15 Years Research Income Growth, 2001-2015

³ Spotlights on Research Publications, 2000-2014

4. The University of Lethbridge fostered partnerships. Research at the University of Lethbridge is firmly connected to the local community, the local geography, our national landscape, and further afield, to a broad range of international settings and partners. Our researchers thrive within established and budding local, national and global networks, which strengthens the many communities served through our research. We are a founding member of many provincial and national organizations and partnerships, and we are key players in provincial research programs and priorities. We have benefitted from a multiplicity of investors who believe we are best positioned to take the lead on solving issues of regional, provincial, national, and international concern.

These investments enabled the University of Lethbridge to witness unprecedented growth within these priority areas over the past decade – the number of faculty and students working in these areas are greater, research funding is significantly higher, and the available research infrastructure is cutting-edge. These investments promise to reap future rewards.

GENDER REPRESENTATION IN CANADA RESEARCH CHAIR NOMINATIONS

The University of Lethbridge is pleased to meet and exceed the targets set for our institution by the CRC relative to under-representation of the four designated groups (women, persons with disabilities, Aboriginal Peoples and visible minorities). Women scholars hold three of our seven currently filled CRC positions and two of the University’s three pending Tier 2 nominees are also women.

The CRC recruitment process adheres to the University of Lethbridge’s [*Best Practices for Hiring with a Focus on Diversity and Equity*](#). This includes:

- Ensuring search committees include a broad representation of individuals from the designated groups.
- Making available training on the importance of equity, diversity and inclusion.
- Providing a toolkit for the committee members that includes advise on how to evaluate applications that include non-traditional components (e.g., community-focused research); the institution’s CRC equity targets, current representation, equity commitment and action plan; a list of suggested effective interview questions (as well as impermissible questions); and key steps for making the decision-making process open and transparent.
- Conducting interviews in the same format for each candidate.

CRCs AND CANADA FOUNDATION FOR INNOVATION SUPPORT BY RESEARCH PRIORITY

In filling CRC positions, the University looked beyond its walls and sought out the best researchers. All but one of the University’s CRCs are external to the university and are recruited based on the research priorities identified above. Table 1 outlines the allocation of existing CRCs and future CRCs.

Table 1. University of Lethbridge CRC Allocations

Research Priority	CIHR		NSERC		SSHRC		Future*
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	
Aging and Chronic Disease				2			
Applied Life Sciences			1	1			CIHR Tier 2 (1 position)
Family and Social Health						1	SSHRC Tier 2 (2 positions)
Earth-Space Exploration				1			
Sustainable Development				1			NSERC Tier 2 (1 position)

*All but one of the SSHRC Tier 2 CRC positions have a corresponding CFI allocation.

ASSESSMENT OF OBJECTIVES

Under each research direction we have identified a range of indicators to help map our success. We acknowledge that there is no universal approach to understanding research achievement given the diverse individual and interdisciplinary research and creative activities that define our academy. Demonstrable outcomes will include:

- Value of external research grants and awards, and diversity of funding sources
- Number of research chairs
- Undergraduate and graduate students involved in research as part of their academic studies
- Industry engagement and new partnerships
- Continue to meet or exceed our equity and diversity targets.

PLANNING AND APPROVAL PROCESS

The development of the *Strategic Research Plan, 2017-18 to 2019-20* began with extensive consultations over the course of 2016 with researchers, department chairs, Faculty Deans, directors of research centres and institutes, and with the University Library. These consultations informed the structure, the strategies and initiatives for the current plan. The University conducted consultations with industry partners relative to specific research priorities. Faculty Councils vetted a draft plan and provided individual Faculty feedback. President's Executive, Provost's Committee, and Statutory Deans' Council reviewed and provided feedback on drafts. General Faculties Council gave final approval in May 2017. The plan is effective from July 1, 2017 to June 30, 2020.