

## **Thompson Rivers University Strategic Research Plan, 2014-2019 — Summary**

Thompson Rivers University (TRU) has developed a vibrant and collaborative research and innovation culture, with a significant focus on applied research and knowledge translation. Institutional structure, new and enhanced research facilities, new research chairs, an increased focus on graduate and undergraduate research, and new graduate programs, are all contributing to the culture of research, inquiry and innovation at TRU.

### **Objectives of TRU's Strategic Research Plan:**

- Be inclusive of individual research programs, recognizing the importance of intellectual freedom for researchers to pursue their interests and passions without undue constraints and interference, and valuing the research results from individual endeavours, while providing an instrument for encouraging collaboration institutionally and externally.
- Support and build upon existing and emerging research strengths where TRU is well-positioned to develop national and international leadership, and make a real difference to the world, both in terms of providing excellent opportunities for attracting and training the best students, and through the application of research in ways that improve quality of life for all.
- Reinforce and facilitate TRU's role and leadership in the linking of research to community social, cultural, scientific, educational, technological and economic development.
- Facilitate the development of partnerships with communities, scholars, non-profits, cultural organizations, industries, institutions, government ministries and agencies for pursuing mutual objectives.
- Provide a map for establishing and supporting research centres, research leadership chairs, collaborative research facilities, and graduate programs of the highest caliber.
- Ensure effective knowledge mobilization, including support for faculty and student publication, dissemination, knowledge translation, technology transfer, commercialization, and application of research results.

Our process includes a commitment to understand and explain our enhanced research culture by establishing indicators of a successful culture, and determining measurements for these indicators.

### **Priority Areas for Research and Research Training**

While TRU encourages research in all disciplines, the university has identified "sustainable development" as its one, overarching theme. Five key areas of collaborative excellence or emerging strengths build upon that theme, and they include:

- **Education, Health and Diversity** — Challenges relating to health and wellness of communities are being addressed by researchers from the schools of nursing, social work and human service, education, tourism, and the faculties of science and arts. Expertise includes work on early childhood education, educational leadership, early language and literacy development, and inclusive educational practices; and on socio-economic factors as determinants of health, bioinformatics and fuzzy logic for prediction of health, respiratory therapy and sleep disorder research, community-based additions research, maternal and child health, social justice and advocacy, aging research, community mapping and access to social services, food safety and security, health policy and management.
- **Community and Cultural Engagement** — Small cities and communities in the BC Interior region, and similar regions throughout Canada, are in transition, facing numerous challenges—including stagnant or declining economies and the requirement to develop sustainable solutions for multiple economic, social, cultural, and environmental issues. TRU has developed strong collaborative interdisciplinary and multidisciplinary research capacity focusing on sustainable community and cultural engagement. TRU's research strength involves ongoing work in the areas of anthropology, economics, education, English, geography, history, journalism, law, media studies, philosophy, psychology, political science, social work, sociology, tourism, and the visual and performing arts.
- **Sustainability, Environment and the Physical World** — Researchers in biology, chemistry, geography and physics have strong expertise and analytical facilities for the development of bio-products, pharmaceuticals and nutraceuticals, addressing issues relating to conservation ecology, grassland ecosystems, water quality and management, cattle industry sustainability, agriculture, and expertise with applications to bioproducts, bioremediation and food and beverage products.
- **Technology and Optimization** — Applications of advanced technologies profoundly influence the way people work, live, communicate, and access information. TRU has developed strong research expertise in soft computing, discrete mathematics and statistics, optimization and industrial automation. This research has wide applications in network liability, communication efficiency, quality control, and software designing—and includes developing mathematical programming models of natural systems and human impacts on natural systems.
- **Aboriginal Understanding** — Woven throughout TRU's strategic themes is an awareness of the importance of place, relationships and community and, in particular, a mandate for awareness, appreciation and cooperation with Aboriginal communities. While recognizing that research on and employing Aboriginal Understanding has implications for all areas of scholarship, TRU has made the strategic decision to identify it as a priority area for capacity building

and knowledge mobilization. TRU’s researchers are exploring questions of territorial authority, Aboriginal tourism, workforce mentoring, Aboriginal languages and literature, and culturally safe health.

### Gender Representation at TRU — Canada Research Chair Program

TRU has made gender equity a priority, with the issue discussed in depth by the Senate Research Committee, at Provost’s Council, and by the various search committees. Female candidates were shortlisted in all four of TRU’s vacant CRC positions. We will continue this process when considering future CRC nominations.

### Allocation of Research Chairs at TRU

TRU has a clearly defined process to deploy CRCs to further support its five priority areas for research and research training:

Research Theme	CRC NSERC	CRC SSHRC	CRC Open	Other
Education, Health & Diversity		■ Tier II Chair		■ BC Innovation Chair in Maternal and Child Aboriginal Health
Community & Cultural Engagement		■ Tier II Chair	■ Tier II Chair	
Sustainability, Environment & the Physical World				■ BC Innovation Chair in Cattle Industry Sustainability ■ Northcote and Brink Professorship
Technology & Optimization	■ Tier II Chair			
Aboriginal Understanding				■ BC Innovation Chair in Maternal and Child Aboriginal Health

### Supporting Research & Research Training

TRU is committed to research, providing faculty and students with the infrastructure and administrative systems to undertake competitive research programs. Institutional support includes:

- Facilitating funding for major equipment purchases and infrastructure, institutional research grants, endowment funds and internal funds for research leadership chairs;
- Securing matching funds for major infrastructure projects and grants;
- Increasing allocation of new research space and graduate student meeting space;
- Providing professional development funds, internal seed funds and faculty release time for research and enhanced student research training;

- Providing undergraduate research scholarships and assistantships;
- Providing support for conferences and conference travel, for research workshops, for grant facilitation, and for current and emerging research centres, and;
- Investing in the university's research infrastructure

TRU is committed to increasing research capacity, to promoting research, and to providing access to research resources. We do this by enhancing start up funds for new faculty, by increasing undergraduate research scholarships, by establishing integrated interdisciplinary graduate programs, and by developing national and international collaborations for research and graduate studies.

### **Inter-institutional and Inter-sectoral collaborations at TRU**

With the aid of industry and provincial funding, TRU recruits and retains research leaders and has built significant research infrastructure. In addition, TRU has made strategic appointments of key experts as adjunct faculty in areas that expand the research capacity of the university, including the BC Regional Innovation Chair in Rural Economic Development at Selkirk College, and many professionals in government ministries, health agencies and practices, and the private sector.

A partnership with the Kamloops Innovation Centre fosters opportunities for TRU faculty and students to engage in applied research. Partnerships with New Gold Mine, Kinder Morgan, Interior Health, Highland Valley Copper Mine, and other industrial groups reflect heightened connections with industry in our region, while TRU's strength in community-engaged research is seen in partnerships with the City of Kamloops, the Kamloops Art Gallery, the United Way and other non-profit organizations.

### **Measuring our success**

Key measurements of success include increases or expansion of activities in:

- Number and percentage of active faculty holding external funding (contract and grant)
- Total dollar amount of Tri-Agency grants and external contracts
- Total dollar amount of external grants and contracts supporting student research training
- Number of students involved in supervised research projects
- Number of students enrolled in research-based graduate programs
- Research space as a percentage of total available university academic space

- Number of internal research workshops, presentations and dialogues designed to support development of research capacity annually
- Dollars committed to internal grant awards to support faculty
- Number of peer-reviewed publications, scholarly works and exhibitions as a percentage of total research-focused faculty
- Number of TRU-hosted, peer-reviewed journals
- Number of papers presented at regional, national and international conferences by research-focused faculty and students
- Number of completed student undergraduate research experience projects
- Dollars leveraged from collaborative partnerships with industry, business and community groups

### **Planning our success**

The current Strategic Research Plan (SRP) was developed in consultation with TRU's Senate Research Committee and a Community Consultation Committee made up of representatives from faculty, staff, administration, and the general public. This revised SRP, the result of a two-year consultation process — which included faculty and student surveys, departmental consultations, faculty and community meetings, a series of focus group meetings with research stakeholder groups, three town halls, and a review of the research themes by the Academic Planning and Priorities Committee of Senate and Provost's Council — is the second to be approved by Senate as a recommendation to the Board. The Senate Research Committee and the Associate Vice-President, Research and Graduate Studies oversee the implementation of the plan.