

#### Thompson Rivers University Strategic Research Plan, 2022-2027 – Summary

Thompson Rivers University (TRU) is entering a new phase where our research is advanced not only by individual scholars and projects, but also by strategic partnerships, collaborations and international networks.

Our Strategic Research Plan represents a road map to connecting research with community needs, engaging in global research challenges and ensuring the research enterprise contributes to the university's 10-year strategic change goals and lives it's values. The SRP was developed through a collaborative process and led by a university-wide committee over a three-year period. The plan was approved by Senate in 2022, and outlines several key objectives:

- Building partnerships and partnership development we understand that the principles of engagement involve direct impact and relevance to the community, a commitment to cocreation and a sharing of expertise, and a focus at the local level but with consideration of and/or action at regional, provincial and/or national levels.
- Engaging students in research (Discover, Connect, Engage, Become) we will advance the integration and scaling up of hands-on student experiences tied to community-engaged research opportunities and the principles of research-informed learning.
- Contributing to TRU's change goals:
  - o Knúcwentem xwexwéyt es xpqenwéllens, Eliminate Achievement Gaps;
  - Nucwentéls te m-kelélnemetls le tsucwlém te swestélt, Honour truth, reconciliation and rights;
  - Kukwpi7stém k stselxmém ell melúkwctem te sqlew , Lead in community research and scholarship; and,
  - o Me7 tsqey' k tsúntem es ctswentém, me7 sten wel me7 yews, Design lifelong learning.
- Living our institutional values:
  - o Ta7 me7 t' ícwells k swetí7, Inclusion and Diversity;
  - o Knucwentwécw-kt e sle7s e stsyem-kt, CommunityMindedness:
  - o Qwenmíntem es tselxemstém xwexwéyt re stem, Curiosity; and,
  - Tknémentem te yucwmíntem re stem ntmicw, tsukw e stens wel me7 yews, Sustainability.
- Creating a research environment informed by equity, diversity, and inclusion we embrace diversity of thought and people. We recognize and embrace Indigenous and intercultural perspectives and experiences. We embody the principles of an EDI-informed university by creating a culture of inclusion that empowers all TRU faculty, staff, and

students to succeed and thrive in their research pursuits. We strive to provide equitable access to meaningful and culturally aware research experiences for all students by ensuring equitable access to research-informed, inquiry-based, and practice-led learning that prepares the next generation of researchers and citizens. TRU maintains a Canada Research Chair Action Plan, sets program targets, and reports progress annually to the Secretariat. This work has been accelerated through the resources provided in TRU's successful NSERC EDI Capacity Building Grant.

TRU's 2022-2027 Strategic Research Plan articulates five key challenge areas where TRU will strive to make significant contributions during the next five years:

#### Challenge Areas

TRU's Strategic Research Plan takes a mission-driven approach, with the following themes identifying major social, cultural, health, environmental, and economic areas where we see our research making a significant contribution toward developing and implementing solutions to societal challenges. These challenges reflect our areas of research strength, and emerge from TRU's Mission, Vision, Values and Change Goals. Within the next five years, TRU will tackle these challenges within an environment that supports Inclusive Excellence and builds a sense of commitment and belonging:

1. Understanding and responding to changing climate, its consequences for our environments (built, natural, social), and pursuing sustainable solutions.

TRU will develop new insights on the impacts of climate change to inform public policy and planning. We will help prepare our communities, our region, and the world become more climate resilient. Understanding and responding to climate change involves addressing complex issues involving ecological processes and earth science systems. It also involves addressing issues of economic and community development; hazard, risk and vulnerability analysis; gender, culture and vulnerability; risk and crisis communication; Indigenous land management and cultural sustainability; emergency preparedness, and the psychosocial dimensions of disaster response and recovery.

2. Contributing to greater social cohesion and sense of belonging through a commitment to social justice, equity, diversity, inclusion, and social responsibility.

This challenge area foregrounds research that seeks to deepen our collective understanding of, and engagement with, the communities we serve and the wider world. It invites continued and growing investigation into the meaning and practice of social justice and social responsibility in varied contexts, and urges us to strengthen our knowledge of, and commitment to, equity, diversity, and inclusion within all communities, local and global.

3. Strengthening health, quality of life, and cultural sustainability in our local and regional communities.

TRU will work to strengthen challenges relating to health equity, quality of life, and cultural and community sustainability. Expertise includes research on socio-economic factors as social determinants of health, bioinformatics and fuzzy logic for prediction of health, respiratory therapy and sleep disorders and associated medical technologies, early childhood education, housing and homelessness, community hospice, community based addictions research, Indigenous health, education and human rights, international social work, maternal and child health and related social and economic factors, aging research, recreational safety, community facilities that support health and wellness, improvements to outcomes of Indigenous health systems transformation, workforce training, correctional facilities, community and cultural mapping and access to health and social services, food safety and security, and optimization related to First Nations, Inuit and Metis populations, community services, early intervention studies, health policy and management, and best practices leading to the recruitment and retention of diverse health practitioners.

# 4. Advancing technological, social and economic development and innovation that improves people's lives.

TRU aspires to become a leader in the development of new technologies, and the adaptation of existing technologies, to engage in data-intensive discovery, delivering innovative solutions and inspired social innovations that can improve our world. TRU has expertise in soft computing, applied mathematics, discrete mathematics, statistics, optimization and industrial automation. This research—which has wide applications in network liability, communication efficiency, quality control, enterprise scheduling and software designing—includes developing mathematical models of natural systems and human impacts on natural systems, and bioinformatics.

# 5. Seeking truth, reconciliation, and rights through Indigenous-led research and capacity building.

While recognizing that research in the service of truth, reconciliation, and rights has implications for all areas of scholarship, TRU has made the strategic decision to identify Indigenous-led research as a priority area for sustaining health human rights, capacity building, scholarly inquiry, and knowledge co-creation and mobilization. TRU's Indigenous faculty and students have received national and provincial recognition and funding for their work on the preservation and promotion of Indigenous languages, culture, health, and history; on reclaiming and mobilizing Indigenous traditional approaches to healing and wellness; on establishing protocols for the ownership of cultural knowledge; on Indigenous knowledge making and communities of practice; and on how traditional knowledge and practices have been found to enhance human health and wellness, biodiversity and ensure environmentally, socially, culturally, and economically sustainable development. TRU's researchers are exploring questions of territorial authority, Indigenous-led health equity, Indigenous-led tourism, workforce mentoring, Indigenous languages and literature, dementia care, Indigenous health policy, Indigenization, law, and culturally safe and humility embedded health and education practices, allyship, health equity and social justice, and antiracism. Such work in the service of communities advances Indigenous knowledge and engagement, in dialogue with knowledge keepers and a growing body of scholarship. This

work also directly aligns with three of the four TRU 10-year Strategic Change Goals: elimination of achievement gaps; honouring truth, reconciliation and rights; and leading in community-engaged research and scholarship.

### Allocation of Research Chairs

Challenge Area	Canada		Chairs	Federal Chairs	Provincial Chairs
	NSERC	SSHRC	CIHR		
1. Understanding and responding to changing climate, its consequences for our environments (built, natural, social), and pursuing sustainable solutions	Tier II			NSERC Industrial Research Chair	BC Innovation Research Chair in Predictive Services, Emergency Management and Fire Science  BC Regional Innovation Chair in Cattle Industry Sustainability
2. Contributing to greater social cohesion and sense of belonging through a commitment to social justice, equity, diversity, inclusion, and social responsibility		Tier II			
3. Strengthening health, quality of life, and cultural sustainability in our local and regional communities		Tier II	Tier II	CIHR Indigenous Research Chair in Nursing	BC Regional Innovation Chair in Indigenous Health
4. Advancing technological, social and economic development and innovation that improves people's lives	Tier II				
5. Seeking truth, reconciliation, and rights through Indigenous-led research and capacity building		Tier II			

## Assessing our Progress

TRU's strategic research plan includes a set of indicators to monitor progress towards achieving a number of institutional objectives.

Outcome	Indicator				
TRU supports all faculty	TRU faculty actively apply for external funding by preparing high quality funding				
members in knowledge	applications:				
seeking, knowledge	# of external applications submitted and # of successful applications				
creation, and creative	% of faculty applying				
inquiry.	% of faculty applying/total research faculty				
	\$/total faculty				
	External research grants and contracts contribute to student employment/student				
	training and regional economic growth:				
	\$ of external applications submitted and \$ of successful applications				
	\$ total external research expenditures and \$ expended to for student training				
	(assistants/associates and post-docs)				
	TRU faculty are creating and disseminating new knowledge:				
	# of peer-reviewed publications, scholarly works, exhibitions, performances, and				
	other creative works per faculty member as a percentage of total tri-partite faculty (3-				
	year rolling average)				
	TRU faculty and students are engaged in research innovation:				
	# of innovation and enterprise creation projects initiated				
	# of enterprises emerging from research activities				
	# of research partnerships actively developed				
	\$ income derived from contracts, patents, copyright, and consulting contracts				
TRU earns recognition	# of partnership-based grants submitted and value				
as the most committed	# of successful partnership-based grants and their value				
and innovative	# of collaborative research projects with partners				
university in Canada for	# of partner-led and co-designed research initiatives				
research and scholarship	# of research related community outreach events				
based on community	# of TRU faculty and students engaged in research with community organizations				
partnerships	# of faculty and students accessing and attending community-engaged research				
	training modules				
	# of TRU publications, presentations, juried exhibitions, performances, conferences,				
	workshops, and initiatives on public engagement and community-engaged research				
TRU earns recognition	# of students engaged in classroom-based and project-based research activities				
as the most committed	# of faculty mentors				
and innovative	# of graduate students engaged in community centred research				
university in Canada for	# of students and faculty accessing, attending, or leading Undergraduate Research				
involving graduate	Training modules				
students in community	# of students graduating with the Undergraduate Research Certificate				
centred research and for	# of users across Canada accessing TRU's Canadian Undergraduate Research				
undergraduate research	Network (CURN)				
training	# of TRU publications, presentations, conferences, and initiatives on undergraduate				
	research				
mpy 1 1	# of courses integrating research as a learning outcome				
TRU develops an equity	Progress toward CRC equity, diversity and inclusion goals, and establishment of				
minded research	University Office of EDI				
enterprise and fosters a	Ensure TRU meets or exceeds CRC transparency requirements, action plan				
culture of inclusivity	requirements, our institutional EDI Capacity Building Grant commitments, and				
	meets equity targets				