

Thompson Rivers University

Strategic Research Plan Summary

Institutional Context

Thompson Rivers University (TRU) has developed and continues to develop research programs that are recognized regionally, nationally, and internationally, in addition to its mandate for delivering a full range of baccalaureate degree, certificate and diploma programs. Established in 1970 as Cariboo College, the institution was granted university college status in 1989, becoming the University College of the Cariboo (UCC), and implementing degree-granting programs in conjunction with the University of British Columbia (UBC), University of Victoria (UVic) and Simon Fraser University (SFU). In 1995, UCC was granted independent degree-granting status and became AUCC accredited in 1996. In 2003 UCC began to offer shared Masters degrees, and in 2004 UCC became Thompson Rivers University (TRU), providing for the implementation of independent graduate degree programs. TRU will be incorporating BC Open University over the 2004-06 period, thereby increasing undergraduate spaces by 40% and substantially increasing computer support staff and facilities. TRU has been progressive in establishing a presence in national and international scholarly communities, creating a Research Office and a technology-transfer office (the Advanced Technology and Innovation Centre) in 1992, as well as introducing formal academic rank (1999).

TRU aims to attract faculty who will build on the existing strengths of the institution, and to attract external funding for research.

Major objectives of TRU's Strategic Research Plan

Thompson Rivers University's Strategic Research Plan addresses the following objectives:

- to support and build upon existing and emerging research strengths and areas of excellence where TRU is becoming a regional, provincial or national leader;
- to attract and provide increased financial resources and infrastructure to foster research excellence and innovation among its faculty;
- to encourage and foster interdisciplinary and multidisciplinary initiatives;
- to reinforce TRU's role as a leader in the linking of research to our community's social, cultural, scientific, educational, technological and economic development;
- to develop partnerships with communities, scholars, industries, institutions, government ministries and agencies for the purpose of identifying and pursuing common objectives;
- to enhance the research training of students; and
- to ensure effective dissemination and application of research results.

To maximize the benefits from the Canada Research Chairs Program, TRU will seek additional support from other funding sources including operating and infrastructure funds from federal granting agencies, provincial agencies and the private sector, as well as committing institutional resources.

Strategic Research Themes

While it encourages research in all disciplines, TRU has identified six key areas in which to promote growth in research and research training. It is expected that as research groups develop at TRU, other themes will develop and appear in the Strategic Research Plan; as well, TRU recognizes and supports individual researchers whose work does not necessarily fit within the theme areas. The themes listed below are research efforts that a) have the potential to grow and become areas of excellence; b) encompass the work of researchers from more than one discipline, and in many cases, involve collaborators from outside TRU; and c) are of strategic importance to the province or region in some way, be it social, cultural, scientific, educational, technological or economic. The five key areas are as follows:

1. Ecosystems and Environmental Resources
2. Health, Community and Human Development
3. Visual and Verbal Literacy Studies
4. Culture and Creative Arts
5. Advanced Technologies and Applications
6. E-Learning

Theme 1: Ecosystems and Environmental Resources

TRU is strategically located in a region dominated by montane forest and grassland ecosystems, potentially important reservoirs of biodiversity that are under considerable pressure to be developed for resources, agriculture and recreational use. TRU is capitalizing on its location through the establishment of strong research programs focusing on biodiversity, community structure, conservation ecology and environmental monitoring of these ecosystems. An understanding of ecosystem function and interdependence is enhanced through research by TRU faculty on other major BC ecosystems, including freshwater and marine systems. Ecosystems and environmental resources research at TRU benefits from a multidisciplinary approach involving faculty from Natural Resource Sciences, Biological Sciences, Chemistry, Geography, Economics, Sociology, History, and Mathematics and Statistics, as well as collaborations with private, community, First Nations and government organizations.

A key institutional goal is to foster integrated research through the development of facilities and hiring of researchers that can act as collaborative catalysts among TRU faculty and the wide range of available external partners. In particular, we seek to develop research programs, such as Community and Ecosystem Ecology, that are capable of integrating a broad range of existing or future long-term ecosystem component studies. The purpose is to increase the volume of 'applied' results, such as decision support tools that foster better practises in sustainable resource management.

To further this goal TRU has developed a Centre for Ecology Research, incorporating personnel and facilities that can fulfill this integrative role. In this centre bring together offices, labs and equipment for graduate and postdoctoral research in a range of ecological sub-disciplines, as well as house the labs for the Canada Research Chair in Community and Ecosystem Ecology. Additional specific goals include an integrated research computer lab with an extensive regional spatial database and the ability to analyze and manipulate data across a range of scales and for an array of environmental-related disciplines using both GIS and satellite remote sensing.

Theme 2: Health, Community and Human Development

Health, community and human development research at TRU spans the Schools of Nursing, Social Work and Human Service, Education, and Tourism as well as the Faculties of Science and Arts. Strong collaborations exist with First Nations partners, community partners, government ministries, school districts and private industry. Researchers at TRU have the opportunity to engage in studies in both rural and urban settings due to the unique geographic and demographic makeup of the Thompson Health Region. Research programs address areas such as determinants of health, outcomes of health-related programs, policy, nursing, poverty, aboriginal child welfare issues, sleep disorder breathing and respiratory therapy, community-based planning and social development, and early intervention. A Canada Research Chair in the areas of health, community and human development will provide additional research expertise to TRU, and provide the leadership required to enhance and further develop collaborative research.

Theme 3: Visual and Verbal Literacy Studies

The field of visual and verbal literacy studies examines how we “read” and create image/text compositions, including mass media publications, documentation panels, Web pages, art installations, private diaries and journals, and the language of public spaces. Studies at TRU focus on models of literacy instruction and documentation, incorporating a strong cultural expression and representation aspect, a unique developmental area of visual art as a mode of research inquiry, and community and social development. Researchers have worked closely with schools and the National Heritage Fair; in addition, they have established research ties with a small city in Italy where a commitment to visual art and visual literacy instruction has made its schools among the most successful in the world. Other researchers working in literacy-related areas are involved with cultural community-based studies. TRU plans to further develop this program to a national and international level of excellence, with the aid of a Canada Research Chair. The Chair would develop inter-institutional links, interdisciplinary collaborative work and university-community links, and would aid in the development of the research programs.

Theme 4: Culture and Creative Arts

Studies in Culture and Creative Arts incorporate a wide range of critical initiatives and methodologies, often with an interdisciplinary focus, to bring meaning to a great diversity of activities in society. TRU’s strength in Culture and Creative Arts involves ongoing research in the areas of English, History, Philosophy, Visual and Performing Arts, Journalism, Film Studies, and others, resulting in a number of major publications,

numerous articles and papers, as well as exhibitions and performances, many with national and international exposure. TRU is currently partnered with the Kamloops Art Gallery on a SSHRC CURA research program focusing on the cultural aspects of small cities. This partnership has yielded a rich array of research projects, substantial amounts of student research experience, and a broad array of research output. The CURA involves most of the departments and researchers noted above, and has extended TRU's connections with local and regional community and arts groups. In addition, the CURA has both increased the university's research profile in the community and broadened perceptions of what university research entails.

TRU has appointed a Canada Research Chair in "Cultural and Artistic Inquiry", with the ability to consolidate, focus and extend existing research within appropriately wide-ranging, workable parameters. The Chair assists in developing links between researchers at TRU and other institutions, suggests further sources of research and critical methodologies, and explores innovative models for research appropriate to TRU.

Theme 5: Advanced Technologies and Applications

Applications of advanced technologies profoundly influence the way people work, live, communicate and access information. TRU has developed expertise in areas of advanced technologies and applications, and active research programs involve faculty from Computing Science, Mathematics and Statistics, and Trades and Technology, and collaborations exist with other disciplines at TRU as well as industry. Research strengths include computing areas such as evolutionary computing, neural networks, advanced networks, and speech processing; as well as discrete mathematics and statistics, in particular combinatorics and optimizations, with applications in network liability, communication efficiency, quality control, and enterprise scheduling. TRU also has research strength in industrial automation, addressing areas such as robotics, process control, and value-added wood processing. A Canada Research Chair in the Advanced Technologies and Applications theme would coordinate the efforts of different disciplines and increase the research capacity immensely. The success of the proposed projects will not only have academic value, but will also generate substantial economic impact in regional industries as well as communication industries.

Theme 6: E-Learning

With the acquisition of the BC Open Learning Agency in 2005, TRU created a new Division of Open Learning (TRU-OL), tasked with merging and extending the mandates of both institutions. A fundamental part of TRU-OL is the Instructional Design and Research Group, a team of researchers focused on the critical design and management challenges facing education and training organizations as they begin to exploit new information technologies.

TRU plans significant expansion in the academic aspects of this research area. We plan to recruit a researcher to function in a leadership role for this team – taking the reigns and helping direct the research of a team of 10 junior faculty/staff designers and researchers. Ideally, we will recruit a Canada Research Chair with the aptitude and experience to understand the technologies but focus on the underlying pedagogical theory and practises.

This individual (or later, team) will serve as a conduit to join TRU-OL with the substantial international network of similar research bodies, as well as with related TRU academic departments. The IDRG has received national acclaim for its work in the past; this will provide an opportunity to capitalize on and extend this reputation to the international arena, with an increased focus on research methodology.

Institutional Support

TRU has a strong commitment to research and is working to provide faculty with the means to undertake and develop research projects. Institutional funds in support of research take the form of Scholarly Activity Committee grants, assisted leave funds, professional development funds and sabbatical funds. Development of research initiatives at the institution is facilitated by the recently developed Office of the Associate Vice-President, Research, the Coordinator of Research Services, and the Scholarly Activity Committee. The institution plans to expand research facilities, is developing international research contacts with universities and research centers, hosts research conferences, and is starting to offer graduate programs in conjunction with other universities, as well as several of its own.

Outcomes and Assessment Strategy

TRU will employ various measures to evaluate success in meeting the objectives of its strategic research plan. Key measures of success will include:

- increased rates of publications and other scholarly outputs;
- increased success with research funding programs;
- recruitment and retention of researchers and growth of research infrastructure;
- the extension of research methods and results into teaching;
- increased research collaborations;
- growth in student achievements;
- growth in benefits to the community; and
- growth in development, protection, and commercialization of intellectual property.

A further key issue is gender balance. TRU will endeavour to maintain an equal gender balance in all Chair nominations by addressing gender issues in all nomination processes, and by encouraging the hiring of under-represented groups. TRU will monitor the success of this process through periodic review of procedures and outcomes.

Planning and Approval Process

The planning and approval process for research goals and initiatives involves TRU faculty as well as input from external institutions and agencies. The Strategic Research Plan is developed by the Office of the Associate Vice-President, Research, and the Scholarly Activity Committee (SAC), a campus-wide multi-disciplinary committee, ensuring full consultation. An institution-wide bottom-up consultative process is used, where input is sought directly from researchers; the strategic plan is then brought to Education Council for approval. Following the Board of Governor's input, the Strategic Research Plan is implemented, and further planning and approval is done by the internal governance process, with SAC overseeing the process.