

Trent University - Strategic Research Plan (SRP) Summary

Planning Horizon 2014 - 2018

Trent University aims to be Canada's outstanding primarily liberal arts and sciences research-intensive university. Our goal is not only ambition; it is validated by surveys and outcomes measures performed by independent, external assessments. Trent is the fourth smallest university in Ontario, but has consistently received high scores on several "per faculty" research productivity and research impact key performance indicators. In the summer of 2013, the Higher Education Strategy Associates' (HESA's) national survey ranked Trent's research 12th among 55 Canadian universities in impact for Sciences, Social Sciences and Humanities, noting that we have "by far the best publication record of any small-ish school in the country across all disciplines." In this index Trent ranked higher than 8 members of the U-15 research universities in Canada. Other ranking systems confirm the same strong impact. In the Maclean's ratings of 19 Primarily Undergraduate Universities, Trent ranked #1 in Awards per full time faculty, #1 in Medical/Science grants and #5 in Social Science and Humanities grants. Likewise, Research InfoSource ranked 47 Universities of all sizes across Canada and Trent placed 15th in Publication impact, 21st in Publication Intensity and 17th in Total Research Impact. If an investor's perspective was applied to the knowledge mobilization of research investments, the ROI for our governments investment in Trent-based research is outstanding.

Trent has no desire to pursue a pathway to become a comprehensive university. Instead, our goal is to be a primarily liberal arts and sciences undergraduate institution which strategically selects a small number of research areas (supported by graduate programs) where we can build on our strengths, and reach national and international levels of recognized excellence.

Trent has built decade's long competencies in interdisciplinary and multi-organizational approaches to key research issues and needs. Trent was the first university in Canada (in 1971) to establish an Environmental Studies program, laying the foundation for the establishment of one of the leading national Environmental research programs (including a graduate program with over 150 students). In the past five years 56 Trent Faculty researchers have attracted over \$50 million in investments for environmental research projects. Three of our environment research areas – water quality analysis, biomaterials and wildlife biology/genetics/conservation are at world-class levels of excellence in research capabilities, publications, HQP training and infrastructure. Our past innovations as the first in Canada for academic programming in Indigenous Studies and in Canadian Studies, is also responsible for Trent building strong research programs in these specialty areas.

All research at Trent has value. Trent will be vigilant in promoting the benefits of integrating research and teaching. In the recent words of Trent founding President, Thomas H.B. Symons, "Trent needs to be sure that as it grows and its research strengthens and broadens, it doesn't lose sight of the fundamental mission of first-class teaching. Research isn't consummated until the results are taught."

Strategic Goals

The strength of a strategic research plan is that it provides direction for the institution; the challenge of a strategic research plan is that it requires that choices concerning strategic directions focus areas and future investment of resources and energy need to be made. A list of seven strategic goals was developed during the strategic planning process:

- Prioritise multiple-discipline collaborations in research
- Identify and then build on our strengths and uniqueness
- Encourage and enable new research group formation in areas that address critical unmet needs
- Support the development of external partnerships by our research groups and centres
- Strive for international excellence in our strategic research areas
- Collaborate with our academic partners to help our students widen their experiences and build their credentials
- Attract external investment to our research priority areas

At the core of our SRP, we have identified three integrated areas where Trent researchers have special expertise, often at a world-class level. The three interdisciplinary research themes, or “banner areas”, highlight Trent strengths and the strategic directions of our university’s research. The three themes are broad, and are supported by clusters of interdisciplinary research areas, research centres and research groups. As the thematic areas gain critical mass in interdisciplinary research activities and outcomes, the goal will be to formalize the theme areas into institutes that would be combination “think tanks” and umbrella organizations for specific research programs.

2013 Interdisciplinary Research Themes

Proposed 2030 Trent Research Institutes

1	Humanities & Culture	Institute for Humanities & Culture
2	Healthy & Sustainable Communities	Institute for Healthy & Sustainable Communities
3	The Environment	Institute for the Environment

In research it is important to anticipate the problem-solving and opportunity development needs of society and our economy. Our strategic research plan is integrated with our strategic mandate agreement and identifies five priorities:

1. **Build the credentials and competencies of our students.** Beyond our excellent offerings in education, we will continue to expand student experiential learning opportunities including high-level opportunities in research, laboratory instrumentation skills development, and internships with businesses. Trent is also interfacing with regional economic development groups to provide opportunities for students to learn about entrepreneurship and the startup of their own businesses.
2. **Continue to expand our world-class areas of excellence.** Special research and outreach opportunities abound in the interface between the resource sector and the environment, and the

broadened interface between resource development, ecosystems and local communities. This opportunity is heightened in northern areas and the ecosystems that are partnered with First Nations communities. Trent also has multiple opportunities in the development of new environmentally beneficial technologies.

3. **Leverage our existing strengths to expedite development of new opportunities which address unmet needs in our society and our economy.** As examples, Trent has identified two areas of existing Faculty research expertise, to launch new research initiatives in Sustainable Agriculture and Aging in Society.
4. **Prioritize multiple discipline collaborations in research.** Most of the issues being addressed in our world are complex and beyond the realm of single discipline approaches. Trent will be prioritizing support to enable research centres which integrate sciences, humanities and social sciences.
5. **Attract new research investment from non-government investors.** Knowledge mobilization and outreach programs will be emphasized, as will the continued expansion of partnerships with businesses, industry associations and international organizations.

THREE INTERDISCIPLINARY RESEARCH THEMES



The model illustrates that we have research focus areas AND an integrated, interdisciplinary approach to research

RESEARCH THEMES AND STRATEGY

Humanities & Culture

This theme is characterized by an interdisciplinary overview of the human condition. Trent has distinctive strengths in the following strategic research areas affiliated with this research theme:

- Archaeology
- The study of Canada and Canadians – Canadian history, Canadian geography, Canadian literature and Canadian studies
- Cultural studies
- Ethics, citizenship, social and ecological justice
- Feminist and gender studies
- Indigenous performance and Indigenous languages preservation

Trent has five Canada Research Chairs (CRCs) in this research theme, in addition to the university's very first endowed Chair (in Ethics).

Strategy

- Facilitate the interdisciplinary engagement of Faculty in this theme area with the other two theme areas. As an example, researchers in this theme area bring special competencies to their science and social science colleagues in the critical analysis of large data and information sets helping research groups to distil factors that determine research relevancy, requisites for societal change and the development of innovative mechanisms to communicate research outcomes to external stakeholders

Healthy & Sustainable Communities

A research theme that has global impact, which includes collaborative and community-based research in Psychology, Nursing, Education and Business. Also, and specific to Trent, a critical mass of research and community building knowledge is found in faculty's research within Indigenous Studies.

- Aging and society
- Community health
- Human behaviour and learning
- Indigenous environmental studies and Indigenous community development
- Sustainability studies
- Sustainable agriculture and food systems

This research theme has two CRCs, including one new one. All three Trent professional schools/departments (Nursing, Education and Business) are linked to this theme.

Strategies

- Facilitate the development or reorganization of research centres to support all six research strength areas
- Further develop our multidisciplinary research capabilities in the “social determinants of health” area and invest in our outreach capacity
- Engage regional community stakeholders and develop strategic partnerships in all six research strength areas

The Environment

Trent has decades of research expertise in this theme area. Trent has achieved international levels of excellence in this theme area. Strategic research areas include:

- Aquatic sciences and water quality
- Biomaterials
- Environmental modelling
- Genetics and molecular biology
- Wildlife conservation

Five CRC's, two sponsored Chairs, a Senior Industrial Research Chair, and one endowed Professorship conduct research in these strategic research areas.

Strategies

- Facilitate the development or reorganization of research centres to support all five research strength areas.
- Support research centre membership transition to a multidisciplinary research focus using the Trent Centre for Biomaterials Research (TCBR) model. The TCBR has ten faculty researchers from six different departments across Sciences, Social Sciences and Humanities.
- Working with research centres, develop action plans to increase revenues from specialized laboratory analytical services, and commercialization (licenses, patents).

SRP IMPLEMENTATION

This SRP is a summary of a broader working plan developed in 2013. The working document will be maintained and updated by the Office of Research.

- Establishment of four task forces (working groups) – new research centre development, research centre re-organization/administration and governance, external partnership development and “Trent Research Matters” promotion and outreach
- There is a recognition that there will be opportunities to develop new areas of research strength during the time horizon of this plan (as examples, initial concepts have been forwarded on Big Data, International Development, Ecosystem Monitoring, Media Studies, Global Politics, Health Sciences). One of the four working groups (for new research centre development) will undertake the responsibility of working with Faculty champions on assessing potentials for new research strength area development, and implementing development plans for accepted new initiatives.