



Excellence, Innovation, Leadership

The University of Toronto
Strategic Research Plan
2012 – 2017

Summary for the Canada Research Chairs Program



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Please see the full SRP at:

<http://www.research.utoronto.ca/strategic-initiatives/strategic-research-plan/>

TWO CENTURIES OF RESEARCH IMPACT

For nearly two centuries, University of Toronto faculty, students, and staff have been extending the boundaries of knowledge and providing answers to some of the world's most important questions. Given the depth, breadth, and diversity of our institution, opportunities abound for excellence in research, learning, scholarship, collaboration, and teaching, making U of T one of the world's foremost research-intensive universities.

In 2027, the University of Toronto will celebrate two hundred years of achievement in research and education. U of T's institutional vision re-affirms that excellent disciplinary research will retain a central role within the University. Yet it also re-affirms the need to leverage those strengths to nurture successive generations of Canadian scholars, leaders, innovators, and citizens. This Strategic Research Plan will set the stage for how that will be accomplished over the next five years.

MEETING TODAY'S GLOBAL CHALLENGES: U OF T'S STRATEGY FOR EXCELLENCE, LEADERSHIP, INNOVATION

As at any university, much of the scholarship at U of T is undertaken by individual academics working in their disciplinary areas of interest or within department or Faculty-based groups, but with the technology and resources available to us today, scholarship is increasingly more collaborative, interactive, and dynamic. The complexity of today's research problems demands that we move beyond the confines of our own disciplines and seek out complementary expertise from scholars in other fields. The funding environment today is similarly much more competitive and complex than it was even ten years ago, and the resources to support research and innovation derive from a multitude of sources and programs, including those of various levels of government, private-sector partners, not-for-profit agencies, and other organizations in Canada and around the world. The intent of this Strategic Research Plan is not to plan research per se, but to ensure that we enable researchers to do outstanding work individually and in teams, in the best possible environment.

This Strategic Research Plan identifies seven thematic areas that engage the research community and our partners in some of the challenges that face humanity in the 21st century. By fortifying strategic clusters in key thematic areas, we can add value to our traditional strengths in disciplinary research and help create the novel approaches and breakthroughs that are needed to address issues of local, national, and global importance. The SRP and its strategic research themes have been designed to facilitate collaborations both within U of T across sectoral boundaries as well as outside of the University with partner institutions. The seven strategic research themes are:

EXPLORE: *Our Place in the Universe*

This theme involves the exploration of the profound, fundamentally human questions ranging from the origins of life, species, consciousness, and disease, to the beginnings of our planet and the universe in which it resides. Examples of sub-themes:

- Exploration of the Cosmos
- Planet Earth
- Origins and Diversity of Humanity, Society and Cultures

SUSTAIN: Humanity and the Environment

Human activity is a major cause of environmental change and the rate of that change has accelerated dramatically over the last century. This theme involves understanding the dynamics of both natural and anthropogenic environmental change, and how we may be able to transition to a more sustainable economy while examining the limits to growth. Examples of sub-themes:

- Sustainable Energy
- Global Climate Change
- Food, Air and Water

PROMOTE: Healthy People, Healthy Communities, Healthy World

Improving health and well-being has long been a human imperative, and there is still much to be done to alleviate suffering and improve quality of life for all. This theme involves research into all aspects of biomedical science, systems of health care and provision, improvements in clinical practice and methodologies, and preventative health measures—here at home and globally. Examples of sub-themes:

- Human Development and Health Through the Lifespan
- Molecular Medicine and the Biology of Disease
- Global Health, Public Health

ENGAGE: Mind, Language, Culture, Values

Language, culture, values—these are not merely aspects of how human beings express themselves or relate to each other; in a fundamental sense, they define us as human beings. This theme involves understanding how we engage our humanity in the face of great social, cultural, and technological change through our cognitive faculties, languages, literatures, cultures, art, and values. Examples of sub-themes:

- Language and Representation in the Era of ICT, Digital Media and Social Networking
- Values in Personal and Public Life
- Mind, Brain and the Human

ADVANCE: Institutions, Peace, and Prosperity

Effective governance is a prerequisite for human prosperity and well-being. This theme deals with the study of governance in its various forms and in different jurisdictions, types of organizations, and other times in history—questions that are central to numerous contemporary issues, including reform of public institutions and public law; the creation and establishment of procedures and rules that lead to greater efficiency, transparency, and accountability; and the challenge of making governance more inclusive and participatory through the strengthening of democracy and civil society. Examples of sub-themes:

- The Knowledge Economy, Development and Social Innovation
- Peace and Conflict
- Law, Ethics and the Public/Private Interface

ENABLE: Technologies for the 21st Century

This theme deals with new technologies, advanced materials, processes, and engineering techniques, as well as the design of technologies that fully consider human capacities and limitations, and human interactions with those technologies. Examples of sub-themes:

- Nanoscience and Nanotechnologies
- Simulation and Imaging
- Information and Computation

BUILD: Community and Liveable Societies

Liveability might be defined as the sum of the factors that contribute to a community's quality of life. But this theme is about more than one's local personal, social, and physical environments: it also concerns itself with global issues of security, the global environment, social inequalities, health, and justice. Examples of sub-themes:

- Liveable Cities
- Human Rights, Justice and Humanitarianism
- Immigration, Internationalization, Multiculturalism and Identity

STRATEGIC OBJECTIVES AND ENABLING ACTIONS

The following strategic research objectives and enabling actions address the realities of supporting excellence within the existing funding environment, as well as provide guideposts for the research plans of the divisions and centres.

Strategic Research Objectives

1. Strive for global leadership.
2. Address questions of local, provincial, national, and international importance.
3. Provide world-class training through the integration of research and teaching.
4. Maximize the application of research and the innovation of creative concepts.
5. Facilitate intra- and inter-divisional collaboration within U of T and across institutions, Canada-wide, and internationally.
6. Create a culture of scholarship where interaction, collaboration, and community are valued and facilitated.

Enabling Actions

1. Attract, fund, and retain the world's best talent¹.
2. Develop research leadership skills.
3. Encourage bold and innovative inquiry.
4. Advocate and communicate strengths and successes.
5. Contribute to economic, cultural, and social development.
6. Develop new integrated governance models for research across the university and with key partners.
7. Acquire and maintain state-of-the-art infrastructure.
8. Maintain a competitive and sustainable research funding base.
9. Develop performance indicators and benchmarks.

Institutional Planning and Approval Process

The University's existing planning process, [*Towards 2030*](#), takes account of federal and provincial institutional research and infrastructure programs, including the Canada Research Chairs (CRC) and the Canada Foundation for Innovation (CFI). The Academic Board and Governing Council have endorsed this planning framework.

The Office of the Vice President Research coordinates and facilitates the development of research strategy and institutional research proposals, including CRC nominations. Nominees, vetted first at the departmental, affiliated hospital (where applicable), and Faculty levels, are brought forward to the Provost's Office for approval, and then to the Vice President Research. The Vice President Research portfolio subsequently reviews all nomination submissions to ensure compliance with University and CRC requirements and alignment with the University's SRP.

The Strategic Research Plan and research planning process help guide the University's involvement in CRC, CERC, CFI and other programs that advance our research capacity and productivity by enabling U of T to attract and retain superb talent; to build strategic research programs and linkages of research, education, and training; and to leverage strategic partnerships and resources for the benefit of Canada.

¹ The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups and others who may contribute to the further diversification of ideas.