



## Strategic Research Plan 2018-2023

*Excellence in Research through Diversity of Thought and Understanding*

*Research brings Queen's to the World and the World to Queen's*

---

### Introduction

Queen's University has 175+ years of shaping Canada's future – through innovation and impact as a leader in higher education, research and knowledge mobilization. We are a leading research-focused academic institution with a profound sense of community and purpose. At the core of our success is a commitment to research excellence, and the inextricable link that binds teaching and research through a common fundamental thread of curiosity and understanding. Indeed, the [Academic Mission](#) highlights the academic heart of our institution as follows:

*We regard Queen's as a university that is both student-centred and research-intensive. Its mission is thus defined by two central activities: learning and discovery. To ensure that these two activities work together learning must proceed in the same way that research progresses: through the guided struggle with a question, a problem, a relationship, or a task.*

### Queen's Research Mission:

- Advance societal knowledge through discovery and discourse that is founded on equity and diversity,
- Enhance societal values, social mobility and inclusion through scholarship,
- Translate knowledge into practice and innovation, and
- Increase global engagement and presence.

### Truth and Reconciliation

Queen's University's Truth and Reconciliation Commission (TRC) Task Force report, coupled with faculty recruitment and support for Indigenous scholarship and cultures, has led to a positive growth in Indigenous research at Queen's. Accepting the legitimacy of oral traditions, along with the principles of Free, Prior and Informed consent and community engagement (Nothing about us without us), guide Indigenous research at Queen's and serve as a foundation for increased Indigenous research leadership and allied scholarship. Queen's Strategic Research Plan (SRP) commits to support the diversity of perspectives across First Nations, Métis and Inuit communities, while working with the Indigenous research community to examine how Indigenous ways of knowing impact research across the university.

## **Racism, Diversity and Inclusion**

The Principal's Implementation Committee on Racism, Diversity and Inclusion (PICRDI) highlighted a goal of sustainable institutional change that embraces the interconnected paths of research and learning and the relationship to race and diversity. The Queen's community is actively pursuing a path designed to achieve tangible and lasting change with respect to anti-racism, diversity and inclusion. Queen's faculty and students, many with racialized social identities and international origins, are committed to scholarly and practice-based inquiry on critical race, histories of anti-Black violence, and institutional inequities that perpetuate systemic racial discrimination. Scholarship that explores anti-oppression and social justice recognizes power imbalances; knowledge and skills are core to the elimination of racism. Queen's research growth embraces the principles and goals of the [PICRDI report](#) and is partnered with the broader interdisciplinary research community in dialogue and action.

## **Canada Research Chairs**

[The Queen's Canada Research Chairs Equity, Diversity and Inclusion Action Plan](#) is a blueprint for the recruitment, hiring and retention of CRCs. Importantly, issues of equity, diversity and inclusion are addressed in the plan, with the goal of ensuring and sustaining the participation of members of the four federally designated equity-seeking groups (women, indigenous peoples, persons with disabilities and visible minorities). On November 28, 2017, Queen's University Senate pledged its commitment to these goals through explicit advocacy for inclusive excellence in the CRC Program.

Queen's has adopted various strategies to reach the equity targets in the Canada Research Chairs allocation, as required by the Tri-agency Institutional Programs Secretariat (TIPS). Strategies include targeted hiring practices that facilitate the enhancement of equity to address the particular issue of gender representation, as well as other mechanisms to increase the opportunity to recruit a diverse cohort of excellent researchers in strategic areas. Regarding gender representation specifically, Queen's University Senate approved the following action:

## **Student Engagement and Trainees**

Graduate students and postdoctoral fellows are important research partners who thrive as a community of emerging interdisciplinary scholars; new interdisciplinary partnerships provide skills for the future that distinguish them as members of the Queen's community. Trainees engaged in research and innovation grow through experiential learning, embracing state-of-the-art-research opportunities, launching start-ups based on discoveries made at Queen's or engaging with community NGOs through the unique PhD-community Initiative program. Queen's will enhance its commitment to simplify the movement of graduate students and post doctoral fellows across borders to achieve dual-degree programs with academic exchange partners, to collaborate with international and multinational research networks, and to facilitate the recognition of education completed via international partners. The emergence of experiential learning through research or societal and business opportunities has become part of the undergraduate fabric of learning as capstone courses and internships continue to grow. Queen's is committed to enhancing the graduate and undergraduate student environment.

## **Research Centres and Institutes**

Outstanding [research centres and institutes](#) bring together scholars across disciplines to pursue fundamental and applied research that address grand challenges and societal issues of national and international scope. Queen's research strengths are also reflected in specialized, state-of-the-art facilities that provide the foundation for national and international research and scholarly investigation – including those related to studying aspects of the performing arts, digital humanities or the fundamental questions of solar particles.

### **Innovation and Entrepreneurship/Partnerships and Innovation**

Bringing fundamental knowledge to the point of translation involves a diversity of supports, including those of research partnerships (including industry), technology licensing, and start-up formation. Successful knowledge mobilization provides the university with many benefits, including the opportunity for Queen's students to be full partners in technology transfer-related commercialization or alternate sources of funding via research partnerships/contracts. The economic development that results from activity in the innovation and entrepreneurship space creates future employment and trains highly-qualified and gifted leaders, while generating important social impact. The Office of Partnerships and Innovation provides expertise related to intellectual property and commercial opportunity that are needed to advance discoveries and technologies to the marketplace, coupled with extensive networks to cultivate engagement with business, government and not-for-profits.

### **Global Reach**

Strong and positive relations with global partners are key to this strategy as Queen's continues to build its international presence and importance in research and education. Scholars expand academic networks, make connections with other specialists, and gain access to unique communities, equipment or facilities. Many of our faculty have international engagement through formal, as well as informal, research collaborations and partnerships. Several of our research centres and institutes are already world-renowned in the research they undertake nationally and internationally, and enjoy extensive collaborations with individuals and teams around the globe. Queen's faculty and graduates are part of an unrivalled network of international leaders who provide comprehensive knowledge from environmental humanities to economic analytics to the global resilience of Indigenous cultures.

### **Planning and Approval Process**

Queen's Senate approved the 2018-2023 Queen's Strategic Research Plan on April 17, 2018. The plan is a product of broad consultation with Faculties, Departments, Schools and individuals, student governance groups, library leadership, members of the Principal's Implementation Committee on Racism, Diversity and Inclusion (PICRDI) and the University Council on Anti-Racism and Equity (UCARE), and Indigenous Scholars and administrators. An early draft was reviewed and revised by a committee of scholars across disciplines. The SRP is intended to support and cultivate the research and academic environment and to provide a roadmap for maintaining and advancing Queen's research mission.

### **Queen's Research Excellence**

From the breadth and depth of research at Queen's, strengths and priorities emerge that reflect a composite of factors including: research leadership, international reputation, critical mass reflected by established research centres and institutes, specialized and unique research facilities, acclaimed galleries and performing arts venues. These are enabled by significant investment by national and international research agencies through research grants, awards and infrastructure support of facilities. Areas of priority are also influenced by recommendations from other important Queen's planning exercises. In addition to the standard publication metrics of chapters, books, citations, awards and funding, we value metrics not typically accounted for, like governance, impact on the economy, policy, health, art and performance. The narratives around impact from a variety of perspectives guide how we adjudicate *success*.

Queen's will continue to use the Canada Research Chairs (CRC), the Canada Foundation for Innovation (CFI) and the Ministry of Innovation, Science and Economic Development (ISED) programs to enhance areas of research strength and ensure that we have the critical mass of researchers and the associated infrastructure in the strategic areas outlined below.

- 1. Securing Successful and Just Societies through Scholarship, Governance and Policy**
  - Sub-Theme: *Equity, Anti-Racism and Inclusion*
  - Sub-Theme: *Democracy, Justice and Equality*
  - Sub-Theme: *Global Governance, Public Policy and Economic Analysis*
  
- 2. Fundamental Principles of Nature: from Discovery to Application and Innovation**
  - Sub-Theme: *Understanding the Universe, the Planet and our Place*
  - Sub-Theme: *Ecology, Biodiversity and the Natural Environment*
  
- 3. Mobilizing Creativity and Enabling Cultures**
  - Sub-Theme: *Creative Production and Expression*
  - Sub-Theme: *Society, Culture and Human Behaviour*
  - Sub-Theme: *Resurgent Indigenous Research in Local and Global Contexts*
  
- 4. Health, Wellness and the Determinants of Human Health**
  - Sub-Theme: *Patient-Oriented Research, Transformative Health Care and Health Promotion*
  - Sub-Theme: *Analytics, Healthcare and Promotion across Populations and Cultures*
  
- 5. Sustainability, Environment and Resources**
  - Sub-Theme: *Alternative Energy Solutions and Energy Policy*
  - Sub-Theme: *Cleantech*
  - Sub-Theme: *Protecting the Natural Environment*
  
- 6. Interdisciplinary research in materials, computational analytics and human-machine interactions**
  - Sub-Theme: *Materials Discovery and Molecular Design*
  - Sub-Theme: *Analytics and Digital Technologies*
  - Sub-Theme: *Human Machine Interactions, Machine Learning, Software Analytics and Smart Infrastructure*