Brandon University (BU) Strategic Research Plan (SRP) 2020-2025

Research Principles

Research Excellence - Excellence is the foundational principle that underpins all initiatives at Brandon University. Brandon University acknowledges the broad spectrum of activities that encompass the term 'research' and values, supports, promotes, and celebrates all contributions to research, creative activities, and innovation, from basic and applied research to art creations and music composition. It is vital that the SRP 2020-2025 is relevant to the entire BU research community.

Indigenous Perspectives and Truth and Reconciliation - Brandon University acknowledges the importance of Indigenous perspectives and ways of knowing and embraces the opportunity for reconciliation with Indigenous Peoples and a renewed relationship built on mutual respect. Brandon University will ensure that all faculty, students, and staff who engage in research with Indigenous Peoples do so in a mutually respectful and collaborative manner. Brandon University acknowledges the unique status of Indigenous Peoples and their treaty rights; research with Indigenous Peoples will ensure that their diverse and distinct worldviews are represented in planning and decision-making, from the conception of a research project and design, through to the analysis and dissemination of research results. Respectful engagement with Indigenous Peoples and communities is an integral part of ethical research with Indigenous Peoples and lends to our firm commitment to *Truth and Reconciliation*.

Equity, Diversity, and Inclusion (EDI) - In 2019, Brandon University formally endorsed the Tri-Agency Equity, Diversity, and Inclusion Dimensions Charter to foster increased research excellence, innovation, and creativity within the post-secondary sector across all disciplines, through greater equity, diversity, and inclusion. Brandon University is committed to equity, diversity, and inclusion in the workplace and we regard individual merit as the prime criterion for the treatment of current faculty and staff and for the employment of new faculty and staff. By extension, this commitment encompasses the Canada Research Chairs (CRC) Program and the management of our institutional CRC allocation. The document, CRC Program Equity, Diversity, and Inclusion Requirements and Practices, outlines institutional requirements for improving the governance, transparency, and monitoring of equity and diversity within the program. These actions support institutions in making swift progress towards addressing the underrepresentation of the four designated groups (FDGs) - women, persons with disabilities, Indigenous Peoples, and members of racialized groups - within the program. The BU CRC Public Accountability and Transparency webpage outlines our current practices and includes the BU CRC EDI Action Plan. As we implement the Action Plan, we will include EDI practices in all research functions and encourage and promote EDI in all aspects of the institution. We recognize that a more inclusive definition of research excellence must be supported in evaluating research outcomes. Measurable outcomes will be identified and implemented to ensure that all researchers have equitable access and benefit from research opportunities.

Responsible Conduct of Research - BU is committed to the highest standards when supporting and educating researchers. The <u>Tri-Agency Framework: Responsible Conduct of Research</u> describes policies and requirements related to applying for and managing Tri-Agency funds, performing research, disseminating results, and the processes that institutions and Agencies follow in the event of an allegation of a breach of an Agency policy. The framework guides the creation of and ongoing adherence to institutional policies and procedures such as the <u>Policy on Academic Integrity and the Responsible Conduct of Research, Scholarship, and Creative Activities; Conflict of Interest in Research Policy</u>; and regulatory committee policies.

Transparency and Impact - Transparency is a fundamental element of research. Researchers at Brandon University are committed to the dissemination of the knowledge gained from their scholarly work to the general public and the academic community. Brandon University encourages the establishment and maintenance of open lines of communication in its research community. Brandon University is committed to open and transparent policies and procedures developed through collegial dialogue and consultations. Objectives included in the Plan will be measurable with annual progress reports provided by the Senate Research Committee.

Research Themes

Rural, Indigenous, and Community Connected Engagement - Brandon University serves rural and northern Manitoba and has a rich tradition and expertise in community-engaged research, including an extensive focus on Manitoba's Indigenous and rural communities. This theme aims to build intercultural understanding, partnerships, and respect through creative activities, community-engaged scholarship, and culturally-centred methodologies to address the challenges and opportunities that communities have identified in partnership with them.

Social Justice, Cultures, and Identities - Brandon University researchers undertake a variety of projects and creative activities that relate to social justice, cultures, and identities, with a strong focus on the multifaceted and intricate ways in which individuals, cultures, and societies organize themselves and develop identities. With an emphasis on social justice and a belief that our environment should promote equity, fairness, and dignity, researchers engage with historical, cultural, religious, philosophical, linguistic, literary, pedagogical, and creative contexts that reinforce our understanding of the human experience. Research not only helps us understand the diversity and complexity of cultures and identity, but it also empowers us to address inequities in areas such as race, gender, age, disability, income, sexuality, access to education, housing, health care, culture, language, and resources such as food and clean water.

Health and Wellness - Brandon University researchers perform clinical, bio-medical, population, and Indigenous health research, using a variety of theories and methodologies. This theme addresses the interrelated constructs of health and wellness in the scientific, social, political, economic, cultural, and population domains. Researchers study health in aging populations, rural and remote mental health and wellness, athlete health and performance, disease and disease prevention, and death and dying. Integration of this broad-ranging theme promotes interactions among researchers, clinicians, policy makers, and the public and aims to enhance the lives of citizens and influence policy and protocol.

Biotechnology, Genomics, and Life Sciences - The world has witnessed extraordinary advances in science over the last few decades. Biotechnology, genomics, and life sciences present us with new knowledge, products and methods such as: new drugs to prevent and treat disease; genetically modified plants with resistance to pests; repair of damaged organs and tissues and improved detection of diseases; and biofuels. This theme focuses on developing innovative solutions to real world problems using cutting-edge techniques to address the significant challenges facing plant, animal, and human health. This domain emphasizes planning and implementation of innovative scientific projects, and promotes multi-disciplinary research and development in biotechnology and health. As with any new technologies, there are potential benefits and risks. Researchers at Brandon University are committed to exploring these new technologies ethically.

Climate, Environment, and Natural Resources - Research in this theme seeks to address the impacts of climate change, the environmental impact of humans, the increasing demands placed on our natural

resources and ecosystems, and the significant challenges facing ecosystems across the globe. Indigenous knowledge has been long recognized as a key source of information and insight in domains such as agroforestry, traditional medicine, biodiversity conservation, resource management, impact assessment, and natural disaster preparedness and response. Drawing upon Indigenous epistemologies and knowledge of several disciplines of climatology, geology, geography, archaeology, anthropology palaeontology, biology and chemistry, urgent attention must be given to research questions that seek to better understand natural processes of the Earth, the role of humans, and the better management of natural and human-made disasters.

Fundamental and Theoretical Research - Researchers at Brandon University are engaged in individual research as well as inter- and cross-disciplinary collaborations that explore and articulate fundamental relationships and engage in the essential questions about the complexity of human existence and the physical universe in which we exist. Researchers are challenging how we think about life, its interconnectedness, and the conditions under which it thrives; delving into the past to illuminate the diversity of the present; questioning assumptions and broadening boundaries. Our scholars explore the principles underlying the universe in its complex physical, biological, and social systems, and the creative and cultural dimensions that are integral to the human experience.

Creativity, Ideas, and Imagination - Creativity, ideas, and imagination feed the human spirit and thus, all scholars at Brandon University can find themselves in this research theme. Through imaginative inquiry Brandon University scholars are opening new avenues of research, seeking out new directions, and challenging established thought. Researchers consider the importance of creative inquiry in accounting for global problems from poverty to climate change. Ideas require that we think imaginatively and creatively in pursuit of better understanding.

Research Priorities

1. Research Leadership and Administration

Full-Time Vice-President (Research and Graduate Studies) (VP (R&GS)) - The immediate and imperative need for a Vice-President (Research and Graduate Studies) was strongly voiced at each and every SRP consultation attended by researchers from faculties/school/units. A full-time, dedicated Vice-President (Research and Graduate Studies) will drive the institutional research endeavour forward, serving as a constant advocate for faculty members, students, and the institution.

Continued Expansion of the Office of Research Services (ORS) - Continued expansion to the ORS capacity is required to: build and maintain relationships with partners and the community; enable BU to respond and adapt to the ever-increasing external requirements and expectations made of universities by the Tri-Agency, government, and other key stakeholders; offer support and training to faculty members and students; expand equity, diversity, and inclusion initiatives; move towards a more globalized focus in research; and enable proactive measures to be taken.

2. Research Funding

Increasing Internal Research Funding - It is recommended that the Brandon University Research Committee (BURC)-funded researchers utilize funds received as seed funding to apply for external funding. An increase in internal funding will allow for start-up funds for new faculty, and the development of potential new grants, such as a discretionary fund, collaborative seed or team grants, open access, and support for hosting research conferences. Fundraising campaigns focusing on research is one option for increasing internal research funding.

Increasing External Research Funding - Researchers are encouraged to apply for various forms of Tri-Agency funding. The impact of successful Tri-Agency grants translates to an increase in CRC allocation, Research Support Funds, Scholarships and Awards, and the institution's eligibility to apply for other Tri-Agency awards. The ORS supports researchers in applying for various external grants from sources such as industry, various levels of government (local, provincial, federal), and community agencies.

Institutional Research Grants - Brandon University continues to have success with its institutional grants, specifically, the <u>Canada Research Chairs (CRC) Program</u> and the <u>Canada Foundation for Innovation (CFI)</u>. BU has an allocation of <u>five Tier 2 Canada Research Chairs</u>. Our Chairholders are stellar, world-class researchers who undertake innovative research programs and train the next generation of highly qualified personnel (HQP). The CFI strengthens our ability to carry out research and technology development that benefits Canadians through the support of research infrastructure. The CRC and CFI are invaluable resources for Brandon University's continued success in attracting and retaining stellar researchers, building and strengthening research capacity, training students, building an international research reputation, and creating and maintaining state-of-the-art research infrastructure.

3. Communicating Research Excellence

Building Communication Networks - Given support for the weekly bulletin, *Research Connection*, BU affirms its commitment to publishing this important newsletter and disseminating it more broadly. Communicating faculty expertise locally, nationally and internationally remains an area for growth. Establishing and publishing an Experts List and using the press and BU's growing presence on social media to celebrate faculty, graduate, and undergraduate student research and awards are ways to increase BU's research profile. In addition, in recent years, Brandon University has hosted a range of research conferences. This provides academic communities with exposure and access to an intimate campus that lends itself well to the collegial nature of conferences and, as such, we will continue to welcome external associations to our campus.

Celebrating Success - Brandon University faculty members and students have had increasing successes in research and creative and performance arts. As well as increasing external awareness of these achievements, it is important that Brandon University fosters a culture of success and focusses on its accomplishments by acknowledging, promoting, and celebrating achievements of its faculty and students.

4. Building a Supportive Research Environment

Faculty Research Support - The reduction in teaching credits negotiated in the CA 2019-2023 has been supportive of creating more dedicated time for research. BU does have an <u>on-boarding process</u> for new faculty. However, additional ways to support research are to prioritize mentoring for new faculty and graduate students, and to provide opportunities for collaboration, networking, professional development, and peer-review.

Graduate and Undergraduate Research Support - Brandon University provides a unique experience to its students to play an active and hands on role in research. Not only are graduate students at Brandon University assisting in research, but undergraduate students also have such opportunities. Brandon University will continue to provide opportunities for research scholarships, research assistantships, and additional training and mentoring.

5. Catalyzing and Stewarding Research Partnerships

Brandon University will continue to align community outreach efforts with priority issues in Brandon, the Province, and beyond, to increase awareness of the outcomes of our research endeavours. Our aim is to promote a culture of innovation through practice, products and commercialization. Our research and graduate programs will build on existing capacity to generate solutions to areas of public concern while

also driving Manitoba's economy. We will work to enhance partnerships with First Nations, Inuit, and Métis Peoples, industry and non-profits, communities, other educational and research institutions, hospitals and government, and stakeholders. Our research and co-operative programs will continue to seek opportunities to collaborate and strengthen the post-secondary education system for the benefit of students and citizens of Manitoba.

6. Data Management and Open Access

Institutional and Researcher Data Management Policy - Brandon University will develop a strategy to guide data management through all stages of the research project life cycle that will align with the principles stated by Research Data Canada's task group and presented in the document <u>Research Data Management in Canadian Universities</u>. The BU Library will assist researchers with the creation of Data Management Plans to meet Tri-Agency requirements. These Plans allow researchers to store and, if possible, allow access to the data.

Research Data Deposit and Data Management Infrastructure - Researchers and institutions must actively manage data throughout its life cycle, from design through to collection, analysis, storage, and long-term preservation. The Institutional Repository at Brandon University (IRBU), launched in January 2019, is part of the larger global system of repositories.

Open Access - The objective of open access publication is to improve access to research, increase dissemination, and exchange research results. The <u>Tri-Agency Open Access Policy on Publications</u> requires that peer-reviewed journal publications arising from Tri-Agency supported research are freely available within 12 months of publication by depositing manuscripts in an institutional or disciplinary repository and/or publishing in an Open Access journal. Publication in open access journals can be costly and avenues for funding are needed.

7. Infrastructure

Increase Capacity and Efficiency of Research Space Utilization - Space and infrastructure are finite resources and it is essential that they are allocated in ways that maximize impact and align with the institution's strategic research priorities. The real costs of research far exceed operational funding, and so careful attention must be paid to ensure that Research Support Funds and indirect costs of research are utilized for greatest benefits. While Brandon University relies heavily on the CFI for equipment, it also recognizes that other support such as BURC, operating grants, and internal contributions, play an active role in acquisitions. Alternate funding and fundraising need to be sourced through federal and provincial government funding and private sector donations. BU will explore and encourage shared research spaces and infrastructure that are multi-functional and can serve many researchers and initiatives, and target operational and equipment upgrade support in ways that encourage collaborative research infrastructures. Expand Research and Data Analysis Capacity - The Library continues to serve as a main hub for research and as a primary entry point for access and analyses of data. However, technology advances rapidly, so we need to ensure BU researchers continue to have access to up-to-date resources for research.

Measuring Our Progress

The Brandon University SRP includes an Action Plan that outlines a series of strategic actions, responsibilities, timelines, and measurable outcomes aimed at fostering and strengthening our research culture and communicating our success. BU will measure the success of this research Plan by the increased research activity, the expansion of the research capacity, and the enhancement of the research culture. The Action Plan will be reviewed by the Senate Research Committee annually to monitor progress.