



**BRANDON  
UNIVERSITY**

# Strategic Research Plan

2021-2025





# STRATEGIC RESEARCH PLAN 2021-2025

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## LAND ACKNOWLEDGEMENT

A territorial or land acknowledgement is an act of reconciliation that involves recognizing the traditional territory of the Indigenous people who called the land home before the arrival of settlers.

Brandon University has campuses on both Treaty 1 and Treaty 2 territories signed in 1871. Our main campus is located in Brandon, Manitoba, on Treaty 2 territory. This is traditional shared land between the Dakota and Ojibway. The Turtle Mountains and Brandon Area were also home to the Métis Peoples. Brandon University's Winnipeg campus is located on Treaty 1 Territory, the original lands of Anishinabek, Cree, Oji-Cree, Dakota, and Dene Peoples, and on the homeland of the Métis Nation.

We at Brandon University acknowledge and respect the history, the people, and the traditional homelands of the Dakota, Anishinabek, Oji-Cree, Cree, Dene, and Métis Peoples.





## Message from the Associate Vice-President (Research)

SINCE EARLY 2021, CANADA'S UNIVERSITIES have been essential partners in combatting the COVID-19 pandemic. As we move toward recovery from the impacts of the COVID-19 pandemic, universities will play a key role not only in scientific investigation but also in sustainable economic and social recovery across our communities, province, nation, and beyond. Research at Brandon University has never been more important.

Over the past decade, Brandon University has made great strides in expanding our research enterprise. A plethora of high-quality research, innovation, and creative activity are integral to our practice. Our regularly published bulletin, *Research Connection*, initiated in 2017 aims to summarize the research of our leading scholars, scientists, artists, and students and to highlight to the broader community the research and creative works that are happening in the Faculties of Arts, Education, Health Studies, and Science, and the School of Music at our University. The 50th anniversary glossy magazine compilation of *Research Connection* was highly valued by faculty and community alike. The second compilation was published in October 2019. Our eighteen roundtable conversations across the University and beyond indicated promoting, communicating, and celebrating research happenings must be one of the main priorities of this Strategic Research Plan.

Reflecting the diversity of our University community and the populations we serve, including a 15% Indigenous student population, this Plan values the inclusion of Indigenous worldviews and methodologies in research, and affirms our commitment to building partnerships with Indigenous Elders, communities, and organizations. The SRP also values global perspectives and extends Brandon University's ongoing internationalization efforts. In recognition of its success in attracting Tri-Agency funding, in 2018 Brandon University was allocated an additional Canada Research Chair (CRC) bringing its complement to five Tier 2 Canada Research Chairs (CRCs). These include CRCs in Rural and Remote Mental Health, Quantum

Information Theory, and Men and Masculinities, and two more awaiting approval by the Tri-Agency. Brandon University is committed to inclusivity; the development of an Equity, Diversity, and Inclusion Action Plan in 2019 provided a foundation for equitable research practices.

Close connections with faculty and our rural Manitoba location help make the Brandon experience unique. Not only does research increase our knowledge and enhance our lives, but it also benefits our students. It informs our teaching as faculty members and involves many of our students, both graduate and undergraduate. The training of the next generation of researchers is an essential focus of the SRP. We take pride in engaging students in dynamic research opportunities from their first year as undergraduates through to graduate studies. Our smaller size is beneficial in that many undergraduate students work with faculty on research, opportunities that in larger institutions are often reserved for graduate students. By participating in research, students gain critical thinking, problem-solving, analytical, and importantly, leadership skills that are invaluable in their future careers.

It is stimulating to be a part of Brandon University as it continues to impact the lives of its students, the city, and the community. Research and the pursuit of creative activities are foundational to the existence of a university. The 2021-2025 Strategic Research Plan sets forth an ambitious and diverse research agenda that acknowledges our current strengths and sets direction for the future. I am confident that by working together, we will achieve the vision for research and innovation at Brandon University that is communicated in the SRP 2021-2025.

A handwritten signature in dark ink that reads "Heather E. Duncan". The signature is written in a cursive, flowing style.

**Dr. Heather Duncan**  
**Associate Vice-President (Research)**



A large white teepee stands on a green lawn. In the background, a multi-story historic building with arched windows and a clock tower is visible. Tall evergreen trees are to the left of the teepee. The sky is clear and blue.

research increases our

knowledge and enhances our lives,  
but it also benefits our students

Both graduate and  
undergraduate.


# INTRODUCTION

BRANDON UNIVERSITY IS THE THIRD LARGEST UNIVERSITY in Manitoba serving a population of approximately 3,500 students. Brandon University's strengths are grounded in its commitment to student success and the student experience, faculty innovative research, scholarly and creative activities that engage its students and contribute to society, and its commitment to partnering in the growth and vitality of the communities it serves. Brandon University is recognized as an important asset, catalyst, and partner for economic and community growth within rural, northern, and southwestern Manitoba and beyond. The 2014-2015 Economic Impact Report ([BrandonU.ca/economic-impact/files/Brandon-University-Economic-Impact.pdf](http://BrandonU.ca/economic-impact/files/Brandon-University-Economic-Impact.pdf)) indicated a contribution of \$417 million to the region, \$87 million of which were attributed to research.

On expiry of the previous Brandon University Strategic Research Plan (SRP 2014-2017), the Senate Research Committee established a sub-committee to solicit feedback on the accomplishments of the previous Plan and to develop a new Strategic Research Plan that articulates the University's key research themes and reflects the diverse scholarly, research, and creative activity that is taking place across the institution. The Strategic Research Plan (SRP 2021-2025) is the culmination of an 18-month process that began in spring 2018. It involved a series of 18 roundtable discussions across the entire University community, including students, staff, faculty, and board members to ascertain a broad spectrum of perspectives on the current strengths, challenges, and future directions of research at Brandon University. Interested parties also had the opportunity for input by email. In addition, faculty were asked to provide keywords describing their research areas. This valuable input informed the key themes, priorities, related strategies, and metrics in this Plan.

The 2021-2025 Strategic Research Plan acknowledges the gains Brandon University has made in research and scholarship excellence over the last decade and continues to identify research excellence as a priority in the future.





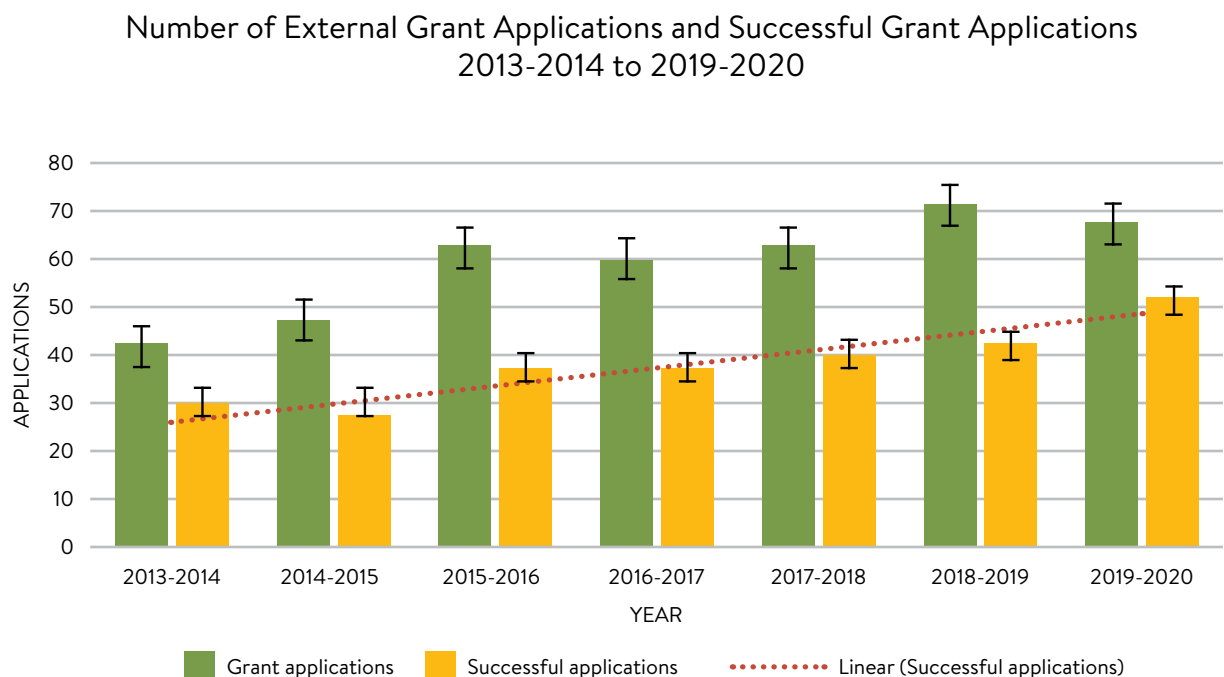
# SUMMARY OF ACHIEVEMENTS

from the 2014-2017  
SRP Objectives and  
Recommendations

THE 2014-2017 STRATEGIC RESEARCH PLAN OUTLINED SEVERAL objectives and recommendations. The objectives included continuing to produce high quality research and creative activity, increasing research capacity, expanding partnerships and collaboration, maintaining and developing research that engages local, national, and international communities, engaging undergraduate and graduate students in research, promoting interdisciplinary research collaboration, and increasing pathways to knowledge mobilization. The SRP Committee's wide consultation across stakeholders and its review of existing data revealed successes as well as areas that required continued focus.

### High Quality Research and Creative Activity

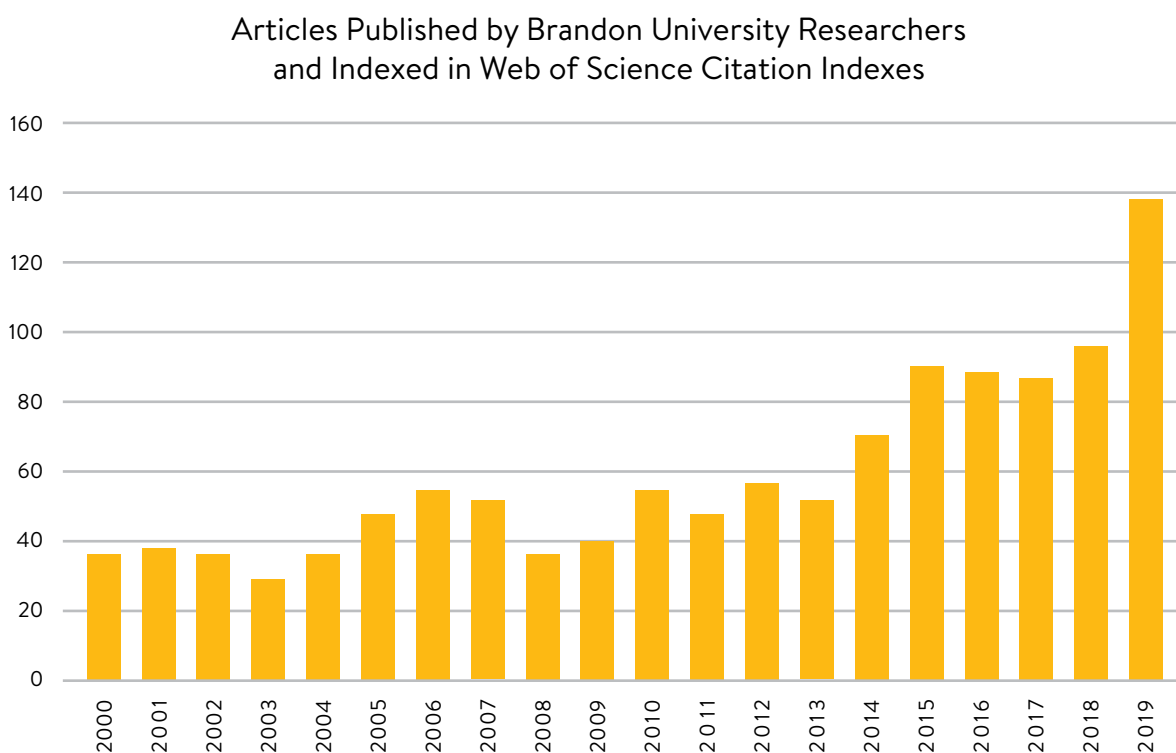
BU faculty and students continue to produce high quality research and creative activity and to create new as well as build on existing partnerships. This is evidenced by a steady increase in both number and success rate of applications to external funding agencies and in many high quality performances, creative activities, and exhibitions by faculty and students. Since 2013-2014, the number of ethics applications reviewed by the Brandon University Research Ethics Committee has increased by 45%. Brandon University has doubled the number of grant applications to the Tri-Agency, resulting in an increased Canada Research Chair allocation from four to five in 2018. Overall, external funding applications have increased by 63% with a corresponding success rate increase of 73% (see Figure 1) both of which exceed the targets of the 2014-2017 SRP. It should be noted that these numbers are limited to applications in which Brandon University researchers are the principal investigators and do not capture the increasing number of collaborations and partnerships of BU investigators with researchers from other institutes and organizations for which metrics are unavailable.



**Figure 1.** External grant applications and awards 2013-2014 to 2018-2019.



In the 2018 *Maclean's* ranking of primarily undergraduate Canadian Universities, across the country Brandon University was ranked 6<sup>th</sup> in terms of Social Sciences and Humanities Grants, 7<sup>th</sup> for citations, and 5<sup>th</sup> in field-weighted impact. Article citations, as counted by the Web of Science, at Brandon University have increased from 52 citations in 2013, to 94 in 2017, and to 139 in 2019 representing an overall growth of 169% (Figure 2).



**Figure 2.** Articles published by Brandon University researchers and indexed in Web of Science citation indexes.

## Expanding Community Partnerships, Collaborations, and Interdisciplinary Research

BU now houses five research centres and institutes that contribute to community partnerships, collaborations, and interdisciplinary research; provide unique training opportunities for students; and serve as a valuable source of information for the community at-large. These are the Centre for Aboriginal and Rural Education Studies; Centre for Critical Studies of Rural Mental Health; Institute for Research in Music and Community; Rural Development Institute; and the Tourism Research Centre.

## Engaging Graduate and Undergraduate Students in Research

The small class size and the ability to interact with the professors is invaluable for students at BU. Faculty teach all levels on campus, for example, not just upper levels. Undergraduate students have access to faculty – highly qualified individuals – from year one of their academic career. Because faculty place high importance on research, undergraduates at BU have research opportunities afforded only to master and doctoral level students at larger institutes. Several undergraduate and graduate students not only participate in research but also co-author publications, present at conferences, receive awards and recognition across the country, and are highly prepared for further study in the professions and for graduate work.



## Knowledge Mobilization

A key finding from the stakeholder consultations was the success of the regularly published Research Connection pamphlet, focusing in brief on research across all disciplines at BU. However, it was also emphasized that BU can and should do more to acknowledge and honour substantive research accomplishments and that many faculty members and students are still largely unaware of their colleagues' research, whether within their own faculty or across the campus. Although detailed metrics are available for external funding, going forward we need to record existing and new partnerships, graduate and undergraduate research activities, and identify explicitly the strengths inherent in our research community.

In addition to the objectives, the 2014-2017 SRP made several recommendations. The first was in regard to Research Office staffing, noting that currently the Research Office is staffed by a single full-time person, the Research Manager. Some progress has been made on that front with a search currently underway for a second full-time research officer. While a step in the right direction, the volume of work that this office handles requires additional staff. The second recommendation was to hire an AVP Research and Dean of Graduate Studies. From 2014-2018, these duties have been undertaken by two deans as an add-on to their regular decanal duties. In the provincially-mandated administration cuts of 2018, the Dean of Graduate Studies duties were transferred to the VP (Academic and Provost), with the AVP (Research) remaining as additional duties for one dean. As BU's research profile becomes nationally recognized, hiring a VP Research and Graduate Studies is an imperative. A third recommendation to balance high teaching workloads with research output has been addressed in workload reduction in the 2019-2023 Brandon University Administration and Brandon University Faculty Association Collective Agreement. A fourth recommendation to promote collaboration through establishing more research centres has resulted in two additional research centres at BU, the Centre for Critical Studies of Rural Mental Health (CCSRMH) and the Institute for Research in Music and Community (IRMC). Promoting research and creative activity, training highly qualified personnel (HQP), and providing start-up funds for new faculty were also recommendations that, although partially addressed, remain a part of the 2021-2025 SRP.





# RESEARCH PRINCIPLES

The following five principles provide a foundation for research and creativity at Brandon University. These are Research Excellence; Indigenous Perspectives and Truth and Reconciliation; Equity, Diversity, and Inclusion; Responsible Conduct of Research; and Transparency and Impact.



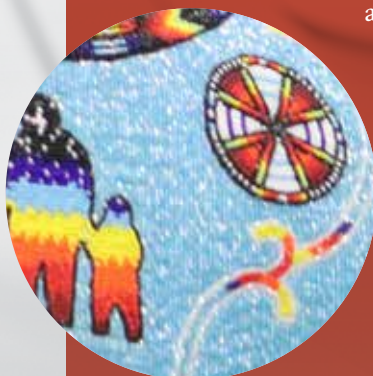


## Research Excellence

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 2021-2025 is relevant to the entire BU research community.

## Indigenous Perspectives and Truth and Reconciliation

Indigenous knowledge, perspectives, and ways of knowing have long been recognized as key sources of information and insight across the disciplines. Brandon University 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 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.



## Responsible Conduct of Research

Brandon University is committed to the highest standards when supporting and educating researchers. The Tri-Agency Framework: Responsible Conduct of Research 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 Policy on Academic Integrity and the Responsible Conduct of Research, Scholarship, and Creative Activities; Conflict of Interest in Research Policy; 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.



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.



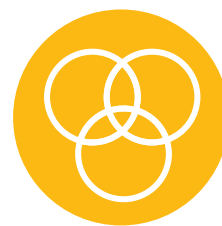
A female student with dark hair, wearing a white lab coat over a blue and white striped shirt, is focused on examining a small, detailed anatomical model of a heart. She is holding it with both hands. In the background, a classroom environment is visible with other students. One student in a white lab coat stands near a desk, and another student in a blue and green safety vest sits at a desk with a laptop. A larger anatomical model of a heart is mounted on a stand to the right. A semi-transparent green rectangular box is overlaid in the center of the image, containing the text 'RESEARCH THEMES' in white, bold, sans-serif capital letters.

# RESEARCH THEMES

THE ROUNDTABLE CONSULTATIONS HIGHLIGHTED THE NEED FOR every researcher at Brandon University to be able to see themselves within the Strategic Research Plan 2021-2025. Thus, while community connected research, collaboration, and interdisciplinary research remain major areas of study, the Plan also emphasizes the important contributions of disciplinary researchers to fundamental, methodological, and theoretical research in their fields. The Plan identifies seven primary research themes that highlight a broad spectrum of research and embrace both established and emerging strengths and priorities. The themes are: Rural, Indigenous, and Community Connected Engagement; Social Justice, Cultures, and Identities; Health and Wellness; Biotechnology, Genomics, and Life Sciences; Climate, Environment, and Natural Resources; Fundamental and Theoretical Research; and Creativity, Ideas, and Imagination.

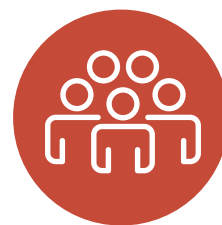
## Rural, Indigenous, and Community Connected Engagement

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 multi-faceted 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 inter-related 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.



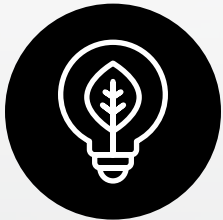
## Climate, Environment, and Natural Resources

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. Drawing upon the 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

Consultation with BU stakeholders identified seven research priorities. These include research leadership and administration, research funding, communicating research excellence, building a supportive research environment, catalyzing and stewarding research partnerships, data management and Open Access, and infrastructure.





# Research Leadership and Administration

THE BU STRATEGIC RESEARCH PLAN, BU ACADEMIC PLAN, AND BU Campus Master Plan recognize that research plays a significant role for continued growth and innovation. Research continues to gain momentum at Brandon University and permeates throughout the campus and our community. This is evidenced by increased funding from a variety of external agencies. These goals and plans cannot be maintained or realized without substantial investment in the research leadership and services that serve our faculty, students, stakeholders, and the community at-large. An increase in research capacity is an investment that will bring rewards such as additional grants, state-of-the art infrastructure, recruitment and retention of high calibre faculty, and opportunities for our faculty members, students, and campus.

## Full-Time Vice-President (Research & Graduate Studies)

As research at BU continues to expand in every faculty and unit, a strongly voiced top priority at each and every SRP consultation was the immediate and imperative need for a full-time Vice-President (Research and Graduate Studies) (VP (R&GS)). Such a position is required to drive the institutional research endeavour forward, build on our research strengths, increase the graduate student complement, support a growing focus on undergraduate student research, and plan for the future without the responsibilities and constraints of another full-time and demanding position. The VP (R&GS) should be a member of the President's Executive Council who will champion our accomplishments; give BU a voice at local, provincial, and federal meetings, and within the community; form collaborations and develop new and strengthen existing research partnerships; fundraise, seeking support for research projects, student awards, infrastructure, and other initiatives, such as endowed research chairs. It is recommended that the portfolio of the VP (R&GS) include Fund-raising, Community Engagement, and Innovation. Historically, requests for this position in the yearly staffing plans of the Vice-President (Academic & Provost) have been unsuccessful.

### ACTION ITEMS

Emphasize the importance to President's Executive Council of a full-time Vice-President (Research and Graduate Studies) position

- ▶ Include in 2021-2022 budget a full-time Vice-President (Research and Graduate Studies) position
- ▶ Develop a job description for a full-time Vice-President (Research and Graduate Studies) position
- ▶ Hire a full-time Vice-President (Research and Graduate Studies) position



## PRIORITY

# 1

### Continued Expansion of the Office of Research Services (ORS)

As Brandon University looks to the future and continues to increase and strengthen research for both faculty and students, a proportional increase in research services is required. The continued success of our research programs demands administration support for grants, contracts, awards, and intellectual property. This includes initiatives that we as an institution should be undertaking and making available to our researchers that depend directly on an increase in research services and resources, including Finance, Payroll, and IT Services. The ORS hired a new Research Officer in early 2020. This was a positive step for the institution and will allow the ORS to better serve the BU community and take on additional initiatives. 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.

#### ACTION ITEM

Continue to expand the capacity of the Office of Research Services

# Research Funding

BRANDON UNIVERSITY PROVIDES INTERNAL RESEARCH FUNDING for new and established faculty through the annual Brandon University Research Committee (BURC) competition. Start-up funding for new faculty is provided at the discretion of the faculty/school dean. Faculty are encouraged to use internal funding as seed money to apply for external funding. External funding applications have been increasingly successful; however, we recognize the need for ongoing expansion of internal and external funding for projects and creative activities.

## Increasing Internal Research Funding

Currently, BURC provides limited funding through an annual internal competition. Increasing additional internal funding is a priority for Brandon University and was acknowledged in the 2019-2023 Brandon University and Brandon University Faculty Association Collective Agreement (CA 2019-2023), Article 24.6. Money allocated to BURC funding historically has remained fairly static. We recommend the University focus on a gradual increase in funding annually. 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; this would be part of the remit of the new VP (R&GS). As defined in the BURC Policies and Procedures, it is recommended that BURC-funded researchers utilize funds received as seed funding to apply for external funding. Increasing external funding adds to the moneys available to support BURC applicants.

### ACTION ITEMS

Continue to support and expand research and research dissemination through BURC funding

Encourage BU faculty to use BURC funding as seed funding for external research grants and to apply as Principal Investigators to external granting agencies. Please see BURC Policies and Procedures: <https://www.brandonu.ca/research/funding/internal-funding-information/burc/>

Increase support for team or collaborative research projects, hosting conferences, and discretionary research costs

Identify steps to create research start-up funds for newly hired faculty

Increase support for student research and training of Highly Qualified Personnel (HQP)



## PRIORITY

# 2

### 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, Canada Graduate Scholarships-Master's Awards, NSERC Undergraduate Student Research Awards, and the institution's eligibility to apply for other Tri-Agency awards. The Office of Research Services supports researchers in applying for various external grants from sources such as industry, various levels of government (local, provincial, federal), and community agencies.

#### ACTION ITEMS

Identify additional pools of funding opportunities outside of the major granting agencies

Work with Advancement to promote external awareness of BU research and establish research fundraising opportunities

Host workshops on how to source research funding opportunities

Explore ways to increase faculty awareness of external funding opportunities

# Communicating Research Excellence

BRANDON UNIVERSITY WILL INCREASE AWARENESS OF THE QUALITY, quantity, and impact of the many exciting and innovative research and creative projects happening at BU through expanding internal and external communication and celebrating success.

## Building Communication Networks

Given support for the weekly bulletin, Research Connection, Brandon University 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.

### ACTION ITEMS

Increase the profile of research and creative accomplishments at Brandon University

- ▶ Create and implement a media strategy to promote and celebrate research and creative accomplishments
- ▶ Develop an Experts List

Continue to bring BU research to the community

- ▶ Continue to publish Research Connection and the annual *Research Connection Magazine*

- ▶ Promote research and creative accomplishments in a variety of media
- ▶ Organize networking events to bring BU researchers, industry, and community together
- ▶ Sponsor library presentations, blogs, podcasts, speaker series, etc.
- ▶ Explore the feasibility of a database that lists all BU research publications annually
- ▶ Provide a welcoming environment to foster external dialogue through conference hosting

## 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.

### ACTION ITEM

Increase award nominations and special recognitions for research and creative activities



## Building a Supportive Research Environment

BRANDON UNIVERSITY IS SMALL, NIMBLE, AND WELL-POSITIONED to ensure supportive research environments for its faculty, graduate, and undergraduate students.

### Faculty Research Support

The reduction in teaching credits negotiated in the CA 2019-2023 has been supportive of creating more dedicated time for research. Brandon University does have an on-boarding process 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.

#### ACTION ITEMS

Create a mentoring infrastructure for researchers, students, and highly qualified personnel

- ▶ Provide workshops and training on how to be a mentor

Continue to provide workshops and information sessions on external grant applications

Explore mechanisms for internal peer review for grant applications

Provide professional development to meet objectives of Equity, Diversity, and Inclusion (EDI)

Support the hosting of conferences and workshops hosted at and by BU

- ▶ Develop a resource manual for hosting research conference/workshops at BU
- ▶ Create more opportunities for researchers to communicate with one another for the development of collaborations and new research and creative projects

### 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.

#### ACTION ITEMS

Increase opportunities for undergraduate and graduate student involvement in research and creative projects

Encourage students to apply for external research funding

- ▶ Continue to provide workshops and information sessions for students applying for funding

# Catalyzing and Stewarding Research Partnerships

PRIORITY

5

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. The aim is to promote a culture of innovation through practice, products and commercialization.

Research and graduate programs will build on existing capacity to generate solutions to areas of public concern while also driving Manitoba's economy. BU 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. 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.

## ACTION ITEMS

Support and encourage economic development and diversification, education, and knowledge generation

Increase partnerships to support and encourage social, cultural, and economic development

Partner with industry and external stakeholders to provide training opportunities for graduate and undergraduate students

Pursue avenues for support for research capital and research infrastructure

Host researchers and trainees from other institutions

Expand internship, co-op, and collaborative training opportunities for students

Host national and international research conferences and workshops



## Data Management and Open Access

GENERATING ACCURATE AND RETRIEVABLE DATA IS AN ESSENTIAL component of the research process. Research data are increasingly electronic, which facilitates data being shared, replicated or combined with other data. Universities have a responsibility to ensure proper management of data and information generated by their researchers. Effective data stewardship is essential to ensure valuable data are accessible now and in the future.

### 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 Research Data Management in Canadian Universities. The Brandon University 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.

#### ACTION ITEMS

Develop a University policy to guide data management throughout all stages of the research project life cycle

Develop a researcher Data Management Plan Template

Assist researchers with the creation of Data Management Plans to meet Tri-Agency requirements

## 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. Dataverse, launched in 2020, serves as Brandon University's repository for research data generated by its researchers, allowing them to easily manage their data accordingly to data management plans and to meet further requirements. The Institutional Repository at Brandon University (IRBU), launched in January 2019, is part of the larger global system of repositories. Institutional repositories serve as digital archives of a university's intellectual output and institutional memory. IRBU not only allows Brandon University researchers to deposit their research documents, but it also houses important Brandon University institutional administrative and cultural documents from the Western Manitoba community.

## Open Access

Open Access (OA) is a mechanism by which research outputs are distributed online, free of cost or other access barriers. The objective of Open Access publication is to improve access to research, increase dissemination, and exchange research results. While Brandon University encourages Open Access publications, it recognizes that publication costs may be prohibitive and that researchers are free to choose the publication venue that allows the widest and most cost-effective discipline appropriate dissemination route. However, please note, the Tri-Agency Open Access Policy on Publications 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.

### ACTION ITEMS

Promote research data and document deposit through IRBU

Promote storage and provisions of access to numerical data generated by university researchers through Dataverse

Investigate research and data management infrastructure and software, such as ORCID that may aid collaboration and dissemination of research

Promote and facilitate the use of research publication and data deposit by researchers

### PRIORITY

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### ACTION ITEM

Investigate avenues of support for Open Access publishing



## Infrastructure

ACCESS TO STATE-OF-THE-ART INFRASTRUCTURE AND WORLD-class laboratories and facilities is vital to cutting-edge research and the training of students and highly qualified personnel. Infrastructure needs and technology advancements change rapidly and the University must continue to support these changes as well as the ongoing operations and maintenance of laboratories, facilities, and equipment and access to library resources and information technology support.

### Increase Capacity and Efficiency of Research Space Utilization

Over the past five years, Brandon University has received approximately \$1.2 million from the Canada Foundation for Innovation (CFI), and the associated matching funds from Research Manitoba and partners, to support the infrastructure needs of the institution and its researchers. 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.

Future infrastructure developments should align with already existing plans outlined in the Campus Master Plan. The John R. Brodie Science Centre was constructed in 1969 and consists of 137,000 square feet over approximately 5.5 floors. The existing building no longer meets the needs of the Faculty of Science, nor the broader BU community. While preliminary plans for a new building have been explored, funding remains the biggest obstacle. Infrastructure needs and technology advancements change rapidly and the University

### ACTION ITEMS

Support campus efforts in the pursuit of a new Science building

Create flexible and shared research spaces to promote efficient space utilization and equipment use

Provide training and support to technical staff in space management

Use CFI Research Facilities Navigator to publicize our CFI-funded infrastructure as an avenue for industry to connect with researchers

Develop infrastructure operations and maintenance plans for new infrastructure to ensure optimal functionality of research equipment, facilities, and laboratories

Promote membership in research consortia for researchers to take advantage of group resources, opportunities, and collaborations

must continue to support these changes as well as the ongoing operations and maintenance of laboratories, facilities, and equipment.

More and more, researchers across and between disciplines are working together on joint research projects sharing financial and infrastructure resources and collaborating with interdisciplinary research centres and institutes, partners in academia, the community, government, NGOs, and the private sector. In this vein, Brandon University 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.

### ACTION ITEMS

Expand library resources for computer networks, journals, software licenses, and data collection equipment

Provide workshops for use of qualitative and quantitative data analysis software

Expand the collaboration between Statistics Canada, SSHRC, CIHR, NSERC, CFI, and BU researchers





# MEASURING OUR PROGRESS

THE SCOPE AND IMPACT OF RESEARCH AT BRANDON UNIVERSITY has increased significantly in recent years. To guide our strategy for growth and improvement, the Action Plan that follows outlines a series of strategic actions, responsibilities, timelines, and measurable outcomes aimed at fostering and strengthening our research culture and communicating our success. Just as there are many forms of research and creative activity, there are many ways to measure them. No single measure or handful of measures can encompass the strength of Brandon University's research endeavours, yet a research plan must have some measurable goals. Brandon University 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 annually by the Senate Research Committee to monitor progress. Growth brings with it challenges as well as opportunities. It is vital that thinking and acting strategically about research is an integral part of our culture at BU.

## Acknowledgments

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