

Research Strategy

2023-2028

Approved by Memorial University's Senate on Sept. 12, 2023

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We acknowledge that the lands on which Memorial University's campuses are situated are in the traditional territories of diverse Indigenous groups, and we acknowledge with respect the histories and cultures of the Beothuk, Mi'kmaq, Innu and Inuit of this province.

Vision

To improve and advance our understanding of our place in the world.

Mission

We use curiosity, creativity and critical inquiry to develop and apply expertise for the betterment of people, place and economy.

Introduction

Memorial University has matured into a research-intensive, multi-campus, post-secondary institution over the past decade guided by our *Research Strategy Framework* (2011-2021). Research includes all aspects of scholarship and creative activities, as well as the dissemination of results and the sharing of knowledge in forms that are appropriate for each discipline. The creation of research includes exploring diverse perspectives, methodologies, academic practices and other forms of inquiry. It also involves working with individuals inside Memorial and outside the university such as in communities, in industry and other stakeholders. Research activities may result in the translation of knowledge into products, practices, performances, policies, community engagement and other forms of innovation. More than ever before, research activities highlight Memorial's important contributions to a socially resilient, economically prosperous, culturally vibrant, inclusive, innovative, healthy and sustainable Newfoundland and Labrador.

This renewed *Research Strategy* reflects the dynamic environment in which research activities occur at Memorial. Our **Core Principles** guide us in everything we do as we look towards new goals for the future. We have redefined **Goals and Objectives**, and refined our **Strategic Research Themes**. The *Research Strategy* aligns with Memorial's 2021 strategic plan *Transforming Our Horizons*, which emphasizes the theme of "Dynamic Research – Global Reach and Local Relevance." Significantly, we are committed to the [Truth and Reconciliation Commission of Canada: Calls to Action](#); increased emphasis on Equity, Diversity, Inclusion and Anti-Racism (EDI-AR) and Indigenization; greater expectations for Memorial to actively participate in the economic recovery of the province; and mounting pressures for a move to a carbon neutral economy to combat climate change. Memorial is also committed to adoption of the seventeen [United Nations' Sustainable Development Goals](#): no poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice and strong institutions; and partnerships for the goals.

The renewed *Research Strategy* is founded on a commitment to engage with researchers, communities, partners including industry connections and to recognize the ongoing intensification of research activities at Memorial. This is evident in several concrete actions and outcomes. First, Memorial put in place its ground-breaking policy [Research Impacting Indigenous Groups](#) (RIIG) in 2020. Due to its importance and challenges launching during the pandemic, we are currently involved in extensive consultation to revise the policy to ensure continuous collaboration and improvement. Second, in order to strengthen diverse dissemination paths for research outcomes and to encourage greater economic impact, Memorial revised its [Intellectual Property Policy](#). Third, Memorial has seen approximately 50 per cent growth in research funding since the implementation of the 2014 [Strategic Research Intensity Plan](#). Fourth, the experience of the COVID-19 pandemic provided greater awareness of the need for increased flexibility and structure changes that are designed to enhance research outcomes.

Memorial experienced significant growth over the past decade in national and international rankings. According to [Research Infosource](#), Memorial ranked 18th among Canada's top research universities in 2021. Over the past five years, Memorial holds the position of top Canadian university for the study of marine/ocean engineering in the [ShanghaiRanking Consultancy's Global Rankings](#). In 2021, Memorial was included for the first time in the [Times Higher Education \(THE\) Impact Rankings](#), which are the only assessment measuring global impact of universities against the United Nations' Sustainable Development Goals. In 2022, [Memorial ranked very well](#) in the goal 14 (life below water) and is among the leading universities in Canada in the category. Memorial also received favourable rankings in four other key goals: 4 (quality education); 5 (gender equality); 9 (industry, innovation and infrastructure); and 17 (partnerships for the goals).

The achievements of Memorial's researchers, and many of our strengths, were celebrated in [The Big Reset: The Report of the Premier's Economic Recovery Team](#) (May 2021) and the provincial [Public Post-Secondary Education Review](#) (April 2021). Additionally, Memorial's strategic plan [Transforming Our Horizons 2021-2026](#) embraces that "Memorial boasts nationally and internationally leading research expertise."

Acknowledging the significant accomplishments of the past decade, our *Research Strategy* will sustain this momentum into the future. We set out the **Core Principles** for research at Memorial and identify the **Goals and Objectives** necessary to build on our accomplishments. The *Research Strategy* supports Memorial's growth as a research-focused institution and the need for up-to-date research infrastructure and support services.

As an aspirational document, the *Research Strategy* pushes us to pursue, support, and celebrate research excellence. We are attentive to the impact of research, in all its forms and outcomes as appropriate to specific disciplines, both locally and globally. Such impact includes how published and/or creative work influences thinking or disciplines. Excellence also considers the quality of the educational experiences and mentorship provided to undergraduate and graduate students who are involved in research.

In addition, research excellence means considering our work through the lens of EDI-AR and Indigenization. These concepts take into account inequities in opportunity, unconscious bias, and other systemic barriers to success. The *Research Strategy* emphasizes Memorial's commitment to engage in ethical research including EDI-AR and Indigenization in all its forms, through all our campuses, to respect human dignity and communal growth and developments. As a working document, the *Research Strategy* shapes action plans and informs Memorial's strategic investments in support of research.

Members of the Memorial community are encouraged to provide feedback about this *Research Strategy* through vrfeedback@mun.ca. Received comments and ideas will help inform future operations and strategic planning. In order to ensure our research community thrives, we will continue to review the *Research Strategy* to assess performance of our **Goals and Objectives** and continue to communicate Memorial's research successes and developments.

Core Principles

These **Core Principles** are the foundations of our *Research Strategy* and members of the Memorial community work to uphold them into all aspects of research. We have the responsibility to consider these principles and work to incorporate them in research projects, training, research administration, delivering research outcomes, collaborating, and all areas of research development and scholarship. Commitment to these principles will guide Memorial's research accomplishments through achieving our **Goals and Objectives** and leading our **Strategic Research Themes**.

- Strengthening Indigenization and EDI-AR in all aspects of the research enterprise.
- Valuing research and its outcomes including but not limited to knowledge, innovation, diversity, and excellence.
- Upholding Memorial's obligations to the global challenges as well as the strategic priorities of the country, province and people of Newfoundland and Labrador.
- Acknowledging the freedom of researchers to ethically pursue research that is based on their individual and collective curiosity, ingenuity and creativity.
- Cultivating an ecosystem to support all aspects of research at Memorial University.

Goals and Objectives

Goal 1: Attract, retain, support and celebrate people engaged in and supporting research

Objectives:

- Encourage Indigenization and EDI-AR through recruitment, mentoring and retention.
- Advance Memorial's research opportunities and celebrate the achievements of researchers and research teams.
- Foster research excellence by elevating administrative and technical research support staff through professional development and recognition.
- Celebrate research success and excellence and strengthen Memorial's research reputation, and placement in rankings nationally and internationally.
- Mentor faculty, students, post-doctoral fellows and trainees to achieve excellence in research.
- Expand enrolment in high quality, research-based graduate programs.

Goal 2: Support an environment of research excellence

Objectives:

- Respect and promote the Indigenous guiding principles of trusting relationships, respect, responsibility, accountability, reciprocity and power-sharing for Indigenous research.
- Understand and embrace differences and provide tools to reduce biases to further develop EDI-AR efforts.
- Encourage curiosity, creativity, innovation, thoughtfulness and critical inquiry.
- Enhance supports for researchers to access state-of-the-art services and to obtain and manage funding.
- Develop and maintain high-quality research infrastructure, space, equipment, technologies and support services.
- Increase supports, infrastructure and social scholarship for sharing research findings and outputs, including across campuses.

Goal 3: Collaborate locally, nationally and internationally to learn, create, share and apply research

Objectives:

- Engage and collaborate with Indigenous partners in creating, sharing and applying research with other post-secondary institutions, governments, industry and community organizations.
- Encourage and celebrate partnerships and engagement that foster respectful and diverse research towards better EDI-AR practices.
- Support and encourage existing and new external collaboration activities, particularly with communities in Newfoundland and Labrador.
- Support and encourage local, national and international research collaborations with other post-secondary institutions, governments, industry and community organizations.
- Foster a culture of innovation-driven research and entrepreneurship to create vibrant communities with sustainable economic contributions within the province and beyond.

Goal 4: Support high impact research activities in Strategic Research Theme areas

Objectives:

- Support research excellence within the Strategic Research Themes through hiring, retention and funding practices.

- Increase opportunities for Memorial researchers to communicate and collaborate with one another across the Strategic Research Themes.
- Work with all levels of governments to enable continued growth in research and partner with the Province of Newfoundland and Labrador to develop research areas which are of strategic importance.
- Encourage greater participation in research and/or scholarly activity with a specific focus on attracting new federal research funding.
- Disseminate and transfer gained knowledge and discoveries through a variety of mechanisms to audiences inside and outside Memorial.
- Support the implementation of mechanisms to measure research impact with particular attention to the United Nations' Sustainable Development Goals.

Strategic Research Themes

The **Strategic Research Themes** highlight two important aspects of research activities at Memorial:

- existing areas of research strengths which hold considerable potential for expansion of expertise, resources and contributions from our researchers;
- new, aspirational areas of significant research opportunities for which Memorial is strategically positioned to achieve research impact.

The themes identify Memorial's research priorities to other funders and partners, in areas where we have strengths to build on, and where we see opportunity for growth. They also include research areas where there is a need for fundamental and applied research in our province.

The titles of the themes reflect issues and opportunities for research growth across Memorial, including areas where the institution will provide targeted support. The descriptions of each theme capture our current strengths, how these unify the university and where we see potential for growth.

Research practices and projects in each theme will uphold our **Core Principles** as we continue to be dynamic, transformative and innovative. We will strengthen Indigenization and EDI-AR by collaborating meaningfully and inclusively. We acknowledge researchers' freedoms to ethically pursue research and purposefully design supports for all aspects of research at Memorial. It is important to value and celebrate research and its outcomes as we imagine the future and transform research possibilities.

Memorial is committed to helping build a better, more responsible and prosperous future for our province, our country and our world. In that context, Memorial is promoting the importance of the [United Nations' Sustainable Development Goals](#) among our university community. We are

also being more deliberate with respect to the positive impact Memorial is making on our society and the environment.

Increased collaboration across disciplines offers significant potential for researchers to benefit from one another's work. Memorial's *Research Strategy* includes support for communication and co-ordination of research activities and the sharing of research across the **Strategic Research Themes** and academic disciplines. Additionally, greater interaction across Memorial's campuses, as well as with other post-secondary institutions, are encouraged and supported.

External engagement (i.e. sharing research findings and partnering on research activity with communities, governments, organizations and industry) and interdisciplinary collaboration are vitally important to realizing the significant opportunities presented through the themes. Memorial researchers working in the themes are internationally recognized for their achievements in engagement and sharing with Newfoundland and Labrador communities, nationally and internationally. As this strategy evolves, stronger relationships are encouraged with groups in other regions to contribute to a stronger, more inclusive society.

Planning towards a new strategy identified three "umbrella" themes: Sustaining People, Sustaining Place and Sustaining Economy. The intention of these themes is to focus our research strengths in an inclusive way while also recognizing that there will be opportunities for researchers to address issues and opportunities outside of these thematic areas.

- **Sustaining People**
 - Indigenous Peoples
 - Social Justice and Human Rights
 - Health and Wellness
- **Sustaining Place**
 - Arctic and Northern Regions
 - Creative Arts, Culture and Heritage
 - Community and Regional Development
- **Sustaining Economy**
 - Environment, Energy and Natural Resources
 - Technology for a Knowledge Economy
 - Enterprise Development

The planning process confirmed our university's special connection and obligations to ocean-related research. Vital **Oceans** research is present in each of the umbrella themes. More than 40 per cent of Memorial's research is oceans-related and informed by our relationship with the ocean. Memorial will continue to develop important partnerships in oceans research, honour our history and look to new innovations that will help solve global problems.

SUSTAINING PEOPLE

Indigenous Peoples

Research under this theme relates to all aspects of Indigenous issues and opportunities in Newfoundland and Labrador, nationally and internationally. Contemporary issues include but are not limited to the impacts of climate change, globalization, colonization, reconciliation and renewed relationships with Indigenous Peoples. In addition, research areas include the pre-history and history of Indigenous Peoples.

Research is engaged and Indigenous focussed. It integrates processes and approaches, such as Two-Eyed seeing, to meet the needs and priorities of Indigenous Peoples and is carried out with, and led in partnership with, Indigenous Peoples.

Social Justice and Human Rights

Research under this theme relates to systems and structures that contribute to humane, equitable and just societies. Its focus is on ethical conduct and partnering with historically vulnerable and disadvantaged communities, groups and individuals. Research can assist advocating for those whose voices are often excluded in addressing the barriers to their health and well-being and full participation in society, to build their capacity and enable their civic engagement locally, nationally and internationally.

Health and Wellness

Research under this theme relates to improving health and well-being through building research and knowledge provincially, nationally and internationally. Research also relates to the special needs and opportunities of the people of Newfoundland and Labrador, such as food security and the province's aging, rural, remote, Northern, Indigenous, immigrant and racialized populations and distinctive workforces. It encompasses foundational and biomedical sciences, community and public health, innovation, and clinical studies and trials.

SUSTAINING PLACE

Arctic and Northern Regions

Research under this theme relates to all aspects of land, ocean and coastal zones in Arctic, Subarctic and Circumpolar regions. Research in remote and harsh environments requires specialized research that engages with people and communities, environment and resources, health and well-being, governance, approaches and technologies.

Creative Arts, Culture and Heritage

Research under this theme relates to creative and artistic production and expression, curation and interpretation, and archaeological, historical, ethnographic and archival research provincially, nationally and internationally.

Community and Regional Development

Research under this theme relates to building capacity of people, organizations, communities and industries to foster social and economic prosperity and development in rural and urban communities, neighbourhoods and regions. Research is often in partnership with rightsholders or stakeholders, and can be of a variety of disciplines or interdisciplinary.

SUSTAINING ECONOMY

Environment, Energy and Natural Resources

Research under this theme relates to the environment (including climate and environmental change), development of natural resources (fisheries and aquaculture; oil and gas; mining and forestry) and the interaction of people, industry and communities with the natural world, locally, nationally and globally.

Information Technology for a Knowledge Economy

Research under this theme relates to the theoretical foundations of information and communication technology (ICT), the design and deployment of ICT in a variety of settings and the evaluation and impact of the use of ICT. It involves research into the study and design of systems that capture, store, transmit, process and use information in a manner that is efficient, accurate, reliable, secure, profitable and responsible.

Enterprise Development

Research under this theme relates to entrepreneurship, social enterprise and business practices and their social, psychological, environmental and economic impacts on local communities, marginalized communities and mainstream markets.