



# Cape Breton University

## Strategic Research Plan Summary

### 2020 – 2025

#### **Vision Statement**

Research is what animates us. The curiosity and intellectual lives of our researchers is what makes CBU an exciting and compelling institution. The “CBU 2025” Strategic Research Plan is the institutional expression of this curiosity and drive. This plan harnesses some of our strongest research directions and identifies clear priorities to shape and drive decision-making over the next five years. The goal is to ensure that the university has the means to foster research seamlessly and the directive to promote research with pride. We want to welcome new faculty into a robust research culture, nurture the careers of existing researchers, and support the advancement of seasoned scholars. The plan necessitates that we identify priority infrastructure, themes and approaches. At the same time, we need to hold tight to the primary value of academic freedom.

Our size is our strength. We are small enough to reach across campus to share an idea, or lend a hand, but we are big enough to see across our Island and beyond, gathering the best ideas and bringing them home. Some of our work requires high inputs of funding, some requires tireless community consultation, still other requires quiet study and reflection. All research matters.

Cape Breton University fosters research excellence. We raise awareness of CBU’s commitment to respect and the benefits of equity, diversity and inclusion in research environment. We remain rooted in Cape Breton and connected to the world. CBU will be known as a university of discovery, impact, and world-class expertise regionally, nationally, and globally.

#### **“Better Together” – CBU’s Commitment to Equity, Diversity and Inclusion**

Rooted in Unama’ki, connected to the world, Cape Breton University envisions a rich research culture that champions equity, diversity and helps create a truly inclusive place to work, study and research. Our pursuit of excellence in research is guided by the knowledge that identity is complex, and the belief that diversity and inclusion support academic excellence by inspiring innovation, increasing collaboration, improving learning, and advancing research. A signatory to the Dimensions Charter, CBU is committed to these principals and associated practices that will further strengthen its research activities. We believe that success in our equity, diversity and inclusion efforts will make us more resilient, innovative, and strengthen the impact of research in our communities – we are better together.

CBU’s commitment to strengthening efforts related to equity, diversity and inclusion involve internal reflection, increasing awareness, building capacity and promoting policy supported by a community of scholarship. CBU’s five-year Strategic Research Plan prioritizes:

- expanding research initiatives that include data collection and analysis relevant to equity, diversity and inclusion;
- identifying and removing internal barriers to recruitment, retention and career advancement in research environment;
- providing opportunities to learn about and reflect on cultural competencies; and
- valuing diversity in scholarship, multiplicity of perspectives/experiences, and methodological approaches to research undertaken at CBU.

# “CBU 2025” – STRATEGIC RESEARCH PRIORITIES

## CREATIVE APPROACHES TO COMPLEX PROBLEMS

Apply our existing research expertise and strengths to address complex global problems and have lasting social impact. Through leadership, innovation, and the commitment to equity, diversity and inclusion, we will foster research that sparks positive change. Cape Breton Island is a unique place with a storied history of L'nu culture, European settlement, de-industrialization and its aftermaths, all set against striking landscapes and waterways.

Target: **Social Impact** – Led by a commitment to equity, diversity, and inclusion, and rooted in our history of community development, we will mobilize our knowledge for greater benefits to society. Our research is attuned to the questions that communities want addressed, and we work in partnership to develop research that both services social goals and benefits scholarship. We are closely tied to life on this Island, but our researchers have both global outlook and global reach.

Target: **Research Quality**– We value discovery-based research and its applications. Fundamental discovery research provides knowledge to apply; innovations in technology advance fundamental research. We embrace a broad range of research practice, from research-creation that explores research questions through artistic practice and application, as well as traditional forms of scholarship. We support a broad definition of research at its highest quality.

Target: **Research Leadership** – We will encourage and help develop Research Leaders from across all disciplines. We will ensure ongoing support for existing and recognized Research Leaders. We will become a small university with a reputation for productive and dynamic interdisciplinary and transdisciplinary research, attracting talented researchers with diverse backgrounds in broad research disciplines.

## BUILD INSPIRING RESEARCH INFRASTRUCTURE

Support our existing research facilities and invest in core research infrastructure needed to grow. Enhance our ability to support large-scale cutting-edge research by developing collaborative research infrastructure initiatives provincially and nationally.

Target: **Infrastructure Support** – Adopt an infrastructure strategy for sustainable Infrastructure Funding allocation to maximize research performance across all disciplines and in the priority areas.

Target: **Digital Technology Capacity** – We will lead strong initiatives to support Digital Technology development and digital capacity-building to support research and digital scholarship. This will build upon existing capacity in this area across several CFI-funded labs in the digital humanities and areas of growth in machine-learning, Artificial Intelligence, and big data. We will harness these shared strengths in research interests and methodologies to grow our digital technology capacity.

Target: **Library as Research Engine** – Support the transformation of Cape Breton University’s library and related resources into modern academic library with high quality resources and infrastructure to support world-class research. The Beaton Institute, the Mi’kmaq Resource Centre, and the CBU Art Gallery are important repositories for research production, collection, and inspiration. We are committed to research excellence and promote the need for transparency, innovation and responsible management and sharing of research data.

## UPLIFT RESILIENT RESEARCH NETWORKS

Strengthen our support for partnered research, community-engaged research, L'nu-led research, and for our Research Centres and Institutes through the creation of Research Networks. Empower our faculty, researchers and students to pursue meaningful and diverse research engagements, partnerships and collaborations locally and globally.

Target: **Empower internal connections**

The **CBU Collaborative Research Networks** initiative is a systematic way to focus our research supports, refine our expertise, and promote and attract our areas of strength. Each Network will build on existing expertise, including research Chairs, Research Centres, active Working Groups, experts and knowledge-holders, grants-holders, and scholars. These Networks identify CBU's areas of research strength and ambition. The Networks offer a way to guide and concentrate our research supports. The Networks will be able to apply for the seed fund to create opportunities for cross-school and university-wide collaboration in course and program development. Together, the Networks will: attract faculty, students, graduate students, and post-doctoral researchers; support teaching/programming; attract funding; and inspire the ramping-up of individual research programs and ideas.

Target: **Focused Partnerships** – building on our strong track-record of advanced research-based commercialization and industrial partnership, we will strengthen our position as a leader in innovative and transformative partnerships locally and internationally. Our vision of partnership-building includes reciprocal models, such as the development of capacity in non-profits and community groups through research.

Target: **Community Engagement** – we will take a strong leadership role in local and regional research networks, solving community-led complex problems locally with global impact. The local community was instrumental in the origin of our institution and continues to have a significant impact on our programming and research interests. Repositories like the Beaton Institute and the Mi'kmaq Resource Centre are significant anchors in community-based research data management plans.

## 2025 STUDENT RESEARCH OPPORTUNITIES

Train and prepare 2025 student researchers by 2025. Demonstrate our commitment to the undergraduate student research experience and expand our ability to train and mentor graduate students as well. Capitalize on the existing talent and research experience of international students. Empower all our students to make the links between classroom learning, the research experience, and approaching complex questions.

Target: **Undergraduate Research** – recognize outstanding scholarship of undergraduate student researchers – our scholars of tomorrow – and empower students to pursue the scholarship of discovery, the scholarship of integration, and the scholarship of engagement through research that has long-lasting social impact in their communities.

Target: **Graduate Research** – Focused on creating relevant, progressive, and innovative research opportunities for graduate students and post-doctoral researchers. Committed to high-quality, accessible and inclusive scholarship; innovative research; and a vibrant, multicultural future for the Island. This level of research capacity is key to supporting senior researchers.

## CBU COLLABORATIVE RESEARCH NETWORKS

The **CBU Collaborative Research Networks** overlap and cross-pollinate in more ways than can be imagined or described in this document. Overlaps in interests and approaches will help to form new constellations of research across the Networks as well. The goal is not to be prescriptive, but rather provocative. Certain core principles, such as a commitment to community-led research, and respectful research that serves L'nu communities, undergirds much of the research momentum in these Networks.

We must note, too, that the identification of strategic priority research themes should in no way interfere with a faculty member's ability to choose what to study. The aim of a concept designation is to recognize areas of strength and emerging capacity and to identify areas that are likely to have significant activity in the near future. CBU remains committed to supporting academic freedom and the research that engenders.

**Purpose:** Networks provide structure and momentum to encourage and enable faculty across Schools and disciplines to connect on research questions and projects. These Networks will be well-primed to address urgent research questions, apply for grants across agencies, respond to community research needs, and make significant contributions to their fields. The networks will be anchored by the experience and expertise by named Chairs, past Chair holders, and scholars who have made significant publication or leadership roles in their fields.

**Goals:** Networks will broadcast CBU's research expertise externally; this will facilitate the establishment of research partnerships and will help attract and secure graduate students. CBU's research profile will continue to grow.

**Supports:** By organizing research into Networks, CBU will be able to target and streamline its research supports. Communications and Network dedicated web-presence will be key to maintaining the outward face of the Networks and promoting them nationally and to global partners.

**Structure:** Networks will be connected to the CBU's Office of Research and Graduate Studies for supports such as communications, organization, and to inform about targeted funding opportunities. The CBU Collaborative Networks will house formal Research Groups, often centred around a researcher's Chair, community-connected project, major grant, industry partnership, etc. They will also act as loose networks for researchers not within formal groups to connect, celebrate research, share ideas, provide mentorship, and collaborate on opportunities.

**Measures of Progress:** By the 2025, the CBU Collaborative Research Networks are

- **Community-engaged** – rooted locally, operating with their own momentum and encompass strong community connections.
- **Trans-disciplinary** – growing into transdisciplinary research hubs supporting diverse groups of researchers and community organizations addressing complex local questions from diverse interdisciplinary perspectives.
- **Cross-sectoral** – supporting intentionally equitable, diverse, inclusive and translational world-class research challenging complex global questions with social impact.
- **Respectful** – valuing diversity in scholarship, multiplicity of perspectives/experiences, and methodological approaches to research undertaken at CBU.
- **Digital** – harnessing our shared strengths in research interests and methodologies to grow our digital technology capacity.

**NETWORK IN CULTURE AND COMMUNITY** – An exploration of culture, the arts, and community resilience; Cape Breton is our Living Cultural Laboratory.

**NETWORK IN COMMUNITY ECONOMIES & ECOLOGIES** – Using the lens of community to examine the intersect of social, economic, cultural, and environmental health.

**NETWORK IN ECOLOGIES, ENVIRONMENT & SUSTAINABILITY** – Research in this network spans our expertise from Indigenous-led community ecology projects, to community-engaged food security research, water remediation, and green chemistry. With the ocean and the Bras d'Or Lakes as our laboratories, eco-research at CBU complements the work of the Verschuren Centre for Sustainability in Energy and the Environment.

**NETWORK IN SUSTAINABLE HEALTH AND WELLNESS** – A holistic understanding of health and wellness supported by research in the sciences, health sciences, sports and recreation, community studies, and L'nu ways.

**NETWORK IN INDIGENOUS WELLNESS AND L'NU RESEARCH** – An L'nu-led holistic, two-eyed-seeing approach to understanding Unama'ki and beyond. CBU builds on a 40-year history of education, research, and community-connectedness to create vibrant research partnerships engaged across disciplines, from aquaculture, to health, tourism, and the arts. Inspired by the five Mi'kmaw communities' leadership in sustainable development and community adaptations, research in areas of Indigenous wellness will continue to be a hallmark of CBU.

**NETWORK IN RESEARCH IN SCIENCE AND ENGINEERING** – This Network encompasses diverse research in physical sciences and mathematics. This area represents a long-held undercurrent of expertise at CBU that both connects deeply with the thematic-based Networks above, but also pursues fundamental research not well-captured by the other Networks.

**EMERGING RESEARCH NETWORK IN DATA AND DIGITAL RESEARCH** – To build on our theoretical and application-oriented research capacity to contribute to the fields of Data Analytics, Digital Humanities, Digital Technologies, Business Analytics, AI and Machine Learning. Much of this research is expected to cross-over into other Networks as well; regardless, this could provide a space for researchers across Networks to join to discuss particular aspects of their work.

## RESEARCH CHAIRS AT CBU BY TYPE AND APPOINTMENT

<b>Chair Title</b>	<b>Year Appointed</b>	<b>CBU Collaborative Research Networks supported:</b>
Tier 2 Canada Research Chair in Musical Traditions (SSHRC)	2013	Culture and Community Community Economies and Ecologies Data and Digital Research
Tier 2 Canada Research Chair in Social Enterprise and Inclusive Markets (SSHRC)	2018	Community Economies and Ecologies Sustainable Health and Wellness
Tier 2 Canada Research Chair in Post-Industrial Communities (SSHRC)	2019	Culture and Community Community Economies and Ecologies Data and Digital Research
Tier 2 Canada Research Chair in Sport Coaching and Adult Learning (SSHRC)	2019	Community Economies and Ecologies Sustainable Health and Wellness
Tier 2 Canada Research Chair in Healthy Environments and Communities (NSERC)	2019	Community Economies and Ecologies Ecologies, Environment and Sustainability Sustainable Health and Wellness
SSHRC Exchange University Research Chair in Social Determinants of Health	2018	Community Economies and Ecologies Sustainable Health and Wellness
SSHRC Exchange University Research Chair in Social Sciences and the Humanities – Theatre for Social Change	2019	Culture and Community Sustainable Health and Wellness
SSHRC Exchange University Research Chair in Social Sciences and the Humanities – Food Security	2019	Community Economies and Ecologies Sustainable Health and Wellness
Cape Breton University Research Chair in Science and Technology	2018	Ecologies, Environment and Sustainability Science and Engineering
Purdy Crawford Chair in Aboriginal Business Studies at Cape Breton University	2018	Community Economies and Ecologies Ecologies, Environment and Sustainability Indigenous Wellness and L'nu Research
Viola Desmond Chair in Social Justice at Cape Breton University	2010	Culture and Community Community Economies and Ecologies
Cape Breton University Chair in Marine Ecosystem Research	2004	Ecologies, Environment and Sustainability Indigenous Wellness and L'nu Research Science and Engineering
Farley Mowat Chair in Environment at Cape Breton University	2019	Community Economies and Ecologies Ecologies, Environment and Sustainability
Cape Breton University Teaching Chair in Indigenizing University Teaching and Learning	2019	Sustainable Health and Wellness Indigenous Wellness and L'nu Research