

## Interested in partnering with us?

Please reach out! This is only the tip of the iceberg when it comes to Memorial's oceans and northern expertise and opportunities.

To get started, contact Mandy, our oceans and northern coordinator, at mandy.rowsell@mun.ca

Cold Ocean and Northern Strength at Memorial University

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# LOCAL INSIGHT, GLOBAL RELEVANCE

Memorial University has been shaped by wind, water and ice. Our strength in cold-ocean and northern research, teaching and public engagement didn't just happen: it's the result of nearly 100 years of working here, in some of Earth's coldest, wettest and harshest environments

With a campus in Labrador as well as sites across the province, and partnerships across northern Canada and the circumpolar North, we are on the ground — and in the ocean!

And we're not working on our own. Meaningful partnerships anchor our work in community and help address both local opportunities and global challenges.

# **Exceptional people**

Memorial is home to world-class students, faculty and staff who are committed to working in, and with, coastal and northern communities. From medicine, engineering and technology to science, folklore and education, our expertise spans disciplines and boundaries.



**DR. BING CHEN** leads a global network of experts on organic and emerging pollution in marine and coastal environments. His team is tackling a new generation of oil spill response and cleanup using nano/biotechnology and artificial intelligence.



**DR. LISA RANKIN** and her team are at the forefront of global archaeological climate change research. They use digital technologies to find important coastal sites in Labrador and the North and collaborate with Indigenous and local governments to plan for climate change impacts.

# World-changing projects

The Qanittaq Clean Arctic Shipping Initiative, led by the Inuit Circumpolar Council and Memorial University, is generating the knowledge needed to support safe and sustainable Arctic shipping. The initiative will see Inuit leaders and communities partner with national and international academic institutions, government, and industry to develop robust operation technologies, innovative ship design and increased capacity in communities to steer the future of Arctic shipping.

Memorial University is also a partner of the **Nippon Foundation-GEBCO Seabed 2030 Project**, which will create a complete map of the ocean floor by 2030. All data collected will be accessible to university and community users around the world in support of sustainable ocean management.

Memorial University is a partner in Transforming **Climate Action: Addressing** the Missing Ocean, a program featuring multidisciplinary researchers from Dalhousie, Université du Québec à Rimouski and Université Laval as well as Memorial. Researchers from areas such as oceanography, engineering and social justice are working together on the most intensive investigation into the ocean's role in climate change ever undertaken.

#### Meaningful partnerships

Memorial University shares a unique partnership with **Nunavut Arctic College**. The collaboration focuses on promoting northern research opportunities, building administrative capacity and expanding post-secondary programs and leadership in Nunavut.

#### The Future Ocean and Coastal

**Infrastructures** project is identifying and addressing infrastructure needs to support sustainable and inclusive coastal communities and ocean industries in Atlantic Canada. This interdisciplinary and engaged team, co-led through Memorial's Grenfell and St. John's campuses, includes members from 34 different disciplines and more than 90 public partners.

# **One-of-a-kind facilities**

The Launch, led by the Fisheries and Marine Institute, is Memorial University's portal to the ocean. It provides access to technical expertise, infrastructure and technology, and opportunities for collaboration. Facilities include ocean and subsea observation systems and an ocean technology development and testing facility, with the creation of Canada's first maritime autonomous systems testbed currently in progress.

The **Pye Centre for Northern Boreal Food Systems** is a hub for community-led and northern-focused food systems research, education, production and distribution in Labrador. The centre is uniquely positioned as one of the only university-led research and education farms in Canada based in a truly northern location.

The **Ocean Sciences Centre** is a research facility focused on the North Atlantic fishery, aquaculture, oceanography and ecology. The centre is home to a deep-sea research lab, a flow-through seawater conditioning system and a public education program that helps visitors understand what lies beneath the frigid North Atlantic.

### **Unique programs**

Located at the Labrador Campus of Memorial University, the **Arctic and Subarctic Futures Graduate Program** concentrates on the needs and priorities of the North. The program offers multiple pathways to pursue graduate education in, by and for the North that emphasizes land-based learning, Indigenous pedagogies and community-led research methods.

In collaboration with the Ocean Startup Project, Memorial University is a proud leader of **Lab2Market Oceans**. The national ocean-innovation program encourages academic research teams to extend their work beyond the typical academic path and into the world of innovation, entrepreneurship and commercialization. Researchers are taught how to build entrepreneurial skillsets and connect with the network they need to turn their ideas into successful businesses.

