It is our pleasure to introduce this 4th edition of the Geography Research report, highlighting the breadth, scope, dynamics, and significance of our work. This year’s report highlights work done in the five research clusters of Climate and Environmental Change; Globalization, Economy, and Resources; Health and Well-being; Society, Knowledge, and Values; and Sustainable Communities and Regions. Profiles of several of the department’s faculty and graduate student researchers are illustrated here. Rights-Based Fishery Management; the Saltfish Frontier; Marine and Coastal Mapping; Tree-line response to Environmental factors; Microplastics in the world Ocean; Northern Governance, Public Policy, and Homelessness; Adaptive Cities and Engagement; Sustainable Coastal Communities; and Local Knowledge in Miawpukek First Nations are a few of our research areas. We explore a wide range of research questions at the interface of natural and human environments.

Support from the Scholarship in the Arts initiative, Faculty of Humanities and Social Sciences, to produce this report is gratefully acknowledged.
Our research interests encompass five clusters

**Globalization, Economy, and Resources**
Examples of ongoing research projects include study of Community and small-scale fisheries; Adaptation and Industrial Development in northern and Arctic Canada; International trade in Rubbish Electronics; and community rights to resources in Atlantic and Arctic Canada.

**Sustainable Communities and Regions**
Examples of ongoing research projects include Building sustainable communities in the coastal subarctic; Complexity in Multiple-Use Coastal Areas; Value Chain Analysis of locally produced food; and Economic Impact Analysis developed for Atlantic Canada.

**Climate and Environmental Change**
Examples of ongoing research projects include SMARTIce: Integration of Inuit Quajimajatuqangit in sea-ice monitoring and forecasting; Global Treeline Range Expansion and impacts of fire in boreal forests; Habitat and Environmental Impacts on Cold-water Corals; and Forecasting Grand Banks Fog.

**Society, Knowledge, and Values**
Examples of ongoing research projects include analysis of Human dimensions in wildlife resources in boreal and northern regions; GIS Analysis of marine habitats and Marine Protected areas; study of Anti-immigrant sentiment; and Place-Based Science: monitoring marine plastics in extreme environments.

**Health and Well-Being**
Examples of ongoing research projects include analysis of Anthropocene Impacts in marine and coastal regions, Community-Based Economic Development in Atlantic Canada, development of a Digital Epidemiology Chronic Disease Tool; and investigating relationships among Science, Technology, and Society.

Our departmental website (www.mun.ca/geog) provides constantly updated information on all our research efforts. We welcome researchers and visitors from around the globe, in our continuing efforts to highlight human-environment relationships and benefit communities and society worldwide.
WE ARE:

Faculty 18

PhD Students 23

MA & MSc Students 49

- 3 Post-doctoral fellows
- 4 Honourary Research Professors
- 4 Professors Emeriti
- 6 cross-appointed Professors

In the past year, we held 90 research grants and contacts, totalling in excess of $35 million

Memorial University Department of Geography Research Report 2018-19
# BETWEEN 2018 AND 2019

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Memorial University Department of Geography Research Report 2018-19
Rights-based fisheries management (RBFM)

Sharmane Allen

Over the past four decades, rights-based fisheries management (RBFM) with its emphasis on property rights, economic efficiency, privatization, and marketization, has become a dominant mode of fisheries management worldwide. Essentially RBFM is premised on the theory that a lack of property rights in commercial fisheries creates open-access situations that in turn produce overcapitalization and overcapacity leading to inefficiency, overfishing, and the eventual depleted fish stocks. Initially the proposed remedy was for the state to enclose the commons and take the necessary steps to grant access rights (i.e. fishing licenses) and/or harvesting rights (i.e. fishing quotas) to fish harvesters and fishing companies in order to control capacity. However, with the proliferation of neoliberal ideology in the 1980s this remedy was amended to include the state sanctioning of market transferability of licenses and quotas, better known as individual transferable quotas (ITQs). This specific instrument was heralded as the ultimate means for the state to rationalize excess capacity and facilitate economically profitable fisheries in the midst of stock collapses and financial downturns in the industry.

A standardized and unfettered RBFM regime based solely on ITQs has not materialized in Newfoundland and Labrador’s commercial fishery. Instead, it features a mix of ITQs, enterprise allocations (EAs), non-transferable individual quotas (IQs), community-development quota (CDQs), and competitive fisheries (e.g. no individually assigned quota). Collectively, this regime is complex and marred in conceptual and legal ambiguities that are contradictory and difficult to decipher. Much of complexity rests with concepts of property and property rights in relation to fishing licenses and quotas. While Fisheries and Oceans Canada maintains that fishing licenses (and associated quotas) are ‘privileges’, many actors involved in the fishing industry perceive and perform them as private property. Using legal geography, my research takes an in-depth look into the theoretical underpinnings of RBFM and its implementation in the Province’s commercial fishery with the goal of answering the following questions: What is RBFM? When and how was RBFM implemented in the Province’s commercial fishery? Are fishing licences and quotas property in the context of this fishery? How are fishing licences and quotas perceived and practiced by various actors in this fishery? How have Canadian courts ruled on the legal nature of fishing licences and quotas? How have court rulings impacted the Province’s RBFM regime?
Using archival and secondary sources, *Fishing Measures: capitalist natures on the saltfish frontier* (ISER Book) examines the rise of quantification in the organization and regulation of Newfoundland’s saltfish industry between the late 1880s and the late 1930s. This book contributes to the history of global fishing by showing how the post-WW2 industrialization of fishing was preceded and enabled by the emergence of quantitative forms of knowledge in this earlier period.

Shifting my focus from marine to mineral resources, my second research project focuses on the Geological Survey of Newfoundland and the development of the island’s mineral resources. This project uses Surveyor James Howley’s private diaries and correspondence to document the embodied practices of geological science. This research demonstrates how geology was infused with Victorian ideals of masculinity, class, and whiteness, and its relation to the production of space for British and American investment on the edges of Empire.
Mapping the way to Coastal Restoration

Brandon Tilley

The Government of Canada’s Coastal Restoration Fund (CRF) was created to protect and restore coastal habitats that have degraded over time or due to anthropogenic activities. The World Wildlife Foundation (WWF) of Canada has been awarded a portion of this fund and are eager to forge restoration success stories. Through my Master of Science research, I will create detailed maps and analyses of selected beaches on the island of Newfoundland to inform restoration activities to be undertaken by WWF and its partner organizations. My research will involve high-resolution mapping using the latest drone technology and an analysis of short term changes in beach morphology and ecology. The objective of this research is to inform restoration efforts and provide baseline data for restoration projects. This project will contribute to WWF’s goal of stabilizing populations of key marine species in Newfoundland.

Characterizing seafloor geohazards in a Canadian Arctic embayment

Robert Deering

A greater understanding of nearshore seabed processes and characteristics is necessary to help inform the responsible and sustainable development of coastal and seafloor infrastructure in the Canadian Arctic. Iqaluit, capital of Nunavut, has started construction on the deepwater Port of Iqaluit to bolster the city’s capacity as hub of the region and is considering installing a seafloor fibre-optic cable to connect it to southern Canada and other communities in the territory. Iqaluit is situated at the head of Inner Frobisher Bay, a complex, active, partially-enclosed fiord in southeastern Baffin Island. Since 2014 a targeted seafloor mapping initiative has acquired high-resolution bathymetric data of the inner bay, revealing a variety of glacial geomorphological features and marine geohazards, including 246 relict submarine slope failure scars. The primary goal of my research is to understand the timing, morphometry, and triggers of the events that formed these scars using acoustic bathymetric and substrate data, as well as sediment cores (pictured). A secondary goal of my research is to improve the deglacial history of the region using the marine stratigraphic record. These research goals will generate marine geoscience knowledge that can be used to aid informed decision-making for future infrastructure projects in Inner Frobisher Bay.
Graduate Students

Understanding Hunter and Student Attitudes toward Large Carnivores in the Făgăraș Mountains, Romania

Jacqueline Riener

Hunting large carnivores have been an ongoing tradition for Romanian hunters through the centuries. However, in 2016, the Romanian Minister of Environment introduced a trophy hunting ban on all large carnivores (gray wolves, brown bears, Eurasian lynx) and wildcats. Not only has the multi-million-euro industry that was used as the management tool toward large carnivores and wildcats been shut down, but the responsibility of managing these species has been taken from the hands of the hunters. This situation has led the hunters to question why this ban is occurring since Romania has the largest population for these species in Europe. To understand hunter views and opinions about large carnivores and wildcats, human dimensions of wildlife (HDW) approach has been used through the understanding of hunter wildlife value orientation, attitudes, and behavioural intentions. Understanding hunter attitudes toward wildlife have long been a central theme to human dimensions (HD) research, but little is known of hunter’s views in Romania. Usually, HD researchers focus on understanding a specific interest group’s attitudes toward a single species. However, this research focuses on understanding how attitudes vary across four species to explore whether hunters value all carnivores equally.

Demographic constraints on boreal forest expansion into the tundra

Katie Goodwin

Northern regions are experiencing some of the most intense warming due to climate change. We expect conifers like black spruce to expand their ranges northward in this warming climate. However, this is only happening half of the time, suggesting that looking at temperature alone cannot tell the whole story. Tree species’ growth requirements can change during its life cycle from germination to cone production. The stage with the strictest requirements can limit expansion if no suitable conditions exist beyond its range. Working with Dr. Carissa Brown in the Northern EDGE Lab, the goal of my research is to characterize how black spruce’s requirements change throughout its life cycle to identify which life stage impedes northern range expansion in the Yukon. I am taking a “plant’s-eye view” approach by comparing the conditions trees of different ages inhabit to the surrounding treeless tundra to determine which factors may limit tree establishment. By understanding whether germination, seedling establishment, adult survival, or cone production act as the bottleneck on range expansion, we can better predict where and under what conditions black spruce range shifts will occur in a changing climate.
Science is based in cultural values

Dr. Max Liboiron  CLEAR Lab

Science is based in cultural values. Usually, those values include objectivity, autonomy, and the idea that knowledge is an inherent good. My research investigates how scientific techniques pertaining to marine plastic pollution can become feminist and anti-colonial, privileging values of equity, humility, reciprocity, and justice, in opposition to historical patterns in Western science that have privileged universalism, colonial relationships to Land, and disinterested objectivity. With my lab team in the Civic Laboratory for Environmental Action Research (CLEAR), I create alternative laboratory methodologies that draw from feminist Science and Technology Studies (STS) and Indigenous thinkers. For example, CLEAR recognizes care work in the lab as intellectual labour worthy of authorship credit and we have a protocol for equity in author order; when CLEAR conducts plastic ingestion studies, we sample fish from human food webs rather than from oceans by collecting gastrointestinal tracts from fish harvesters using citizen science; before we publish research, we conduct community peer review, where people from the areas we gather samples from can tell us whether and how our data should circulate to do the most good, since there are many historical cases where research has caused harm; rather than using expensive, elite, and inaccessible scientific instruments, we invent and build our own from materials that can be found in rural Newfoundland and Labrador and freely release the plans online so a broader group of people can conduct their own science.
CLEAR is based on the research needs and questions of the people of Newfoundland and Labrador. When we began work in 2014, we investigated plastics in water, sediments, shorelines, and animals. At the request of several communities, we now focus on monitoring human food webs for marine plastics, since plastics absorb and concentrate oily chemicals and can move them into the food web that rural and Indigenous peoples depend on. We’ve worked in rural fishing communities on the Avalon Peninsula, with NGOs collaborating on sites from the Bay of Fundy to the west coast of Newfoundland, and with the NunatuKavut Community Council and the Nunatsiavut Government in Labrador. In each case, we start with conversations about what questions and concerns arise from communities. We never assume we have access to land during this process, and the spirit of permitting and consent—of communities, of guardians of the land, of Indigenous governments, and even of fish—has increasingly become a key part of our research.
Visible homelessness is on the rise

Dr. Julia Christensen, Canada Research Chair (Tier II): Northern Governance and Public Policy

Visible (or ‘acute’) homelessness is on the rise in several Arctic urban centres, most notably across Alaska, the Canadian North, and Greenland. Alongside the increasing concentration of social and economic resources in Arctic urban centres, a picture of increasing disparity and marginalization has emerged amongst certain sectors of these northern populations. Though urbanization and homelessness in circumpolar Arctic communities have both been the focus of recent media and research attention, these two phenomena have only been examined separately, with little attention given to the role of northern social policy and governance, uneven rural-urban geographies, and rural-urban movement in rising visible homelessness in urbanizing Arctic locales. At the same time, research and policy engagements have not paid attention to the ways in which northern communities are mobilizing and engaging in innovative contextually- and culturally-relevant approaches to address housing insecurity. Through current, collaborative engagements with Indigenous communities, NGOs and local governments in the Northwest Territories, Labrador, Nunavut, and Greenland, our research group addresses these gaps by examining the diverse processes and forms of social marginalization in northern communities as well as innovations around housing and homelessness programs and services, highlighting the significance of social policy to the contemporary challenges and opportunities encountered by northern peoples and communities.

In Yellowknife, Northwest Territories, I am working with Dr. Lisa Freeman (Kwantlen Polytechnic University) on a project looking at the relationships between resource development and housing inaffordability. We have partnered with Alternatives North, a social justice collective in Yellowknife, to examine the ways in which private and public rental housing monopolies frame the work of housing advocates as well as the implementation of transitional housing and Housing First programs. This research has shed light on the challenges of taking a model like Housing First, which was developed in cities like New York and Portland, and applying it a totally different (northern, small-sized city) context. It has also revealed the ways in which cultural practices of homemaking and kinship are not recognized in these models. This is something that Indigenous organizations in the NWT, like K’asho Got’ine Housing Society in Fort Good Hope are working to address through community-led supportive housing plans. I am excited to get to work with the Housing Society as well as the Katlodeeche First Nation in 2019 to support their efforts at developing and implementing community-led housing programs.
The research with Alternatives North also led to an interesting methodological experiment. Along with And Also Too, a social justice-oriented collaborative graphic design studio, we worked with research participants in workshop settings to develop a fold-out poster that will be used to communicate main research themes. This poster also provides a utopian element in that it asks policymakers and the general public to brainstorm with us potential new avenues towards housing affordability and accessibility. It also tells the story of two fictional characters based on research interviews to help people to better understand the ways in which housing policies and monopolies conspire to prevent greater housing security for a substantial part of the community.

In Greenland, I am collaborating with Dr. Steven Arnfjord on research that looks at the social dimensions of urbanization and homelessness in Nuuk, Greenland. Through participatory photography workshops and interviews with adults in the community who are experiencing housing insecurity and homelessness, we are exploring the ways in which urbanization in Greenland as a whole frames the emergence of acute homelessness in Nuuk. This research has had a significant policy impact, informing recent efforts by the Greenlandic government to develop an anti-homelessness strategy for the country.

Finally, I am partnering with a large group of university- and community-based scholars, Indigenous governments, NGOs and local government on a knowledge sharing and mobilization network that spans the territorial and provincial Norths. The New Partners in Northern Housing and Homelessness research network is built around six thematic groups to facilitate inter-community, pan-northern knowledge sharing and collaboration around supportive housing models, government, housing design, programs and services, health, and metrics. As communities across the Canadian North grapple with housing insecurity and homelessness, many feel isolated from one another and uninformed about the ways in which they are each working to address these challenges. There are many innovations and strategies to share and learn from, and this research network aims to facilitate meaningful connections between northern communities in an effort to effectively alleviate housing insecurity while building on community strengths.
Memorial University's ACE Space is a new teaching and research collective with a goal to understand and explore what small- and medium-sized cities offer to themes and challenges of critical importance in Canada and the wider world.

While undergraduate and graduate students form a critical core, ACE Space led by Dr. Nicholas Lynch, Dr. Yolande Pottie-Sherman, Dr. Julia Christensen in the Geography Department, and Dr. Roza Tchoukaleyska in the School of Science and the Environment (Grenfell campus).

Five overlapping research areas define the ACE Space agenda:

**Adaptable Economies:** Many researchers focus on the economies of major metro areas, but we direct our attention toward small- and medium-sized cities. How do they adapt to factors outside their control, from global to local? Are they more susceptible to economic disruption, and how might the negative outcomes resulting from it be mitigated?

**Current Research:** Dr. Nicholas Lynch is exploring how the Circular Economy is taking shape across Canada’s cities — small and large.

**Adapting to Socio-Cultural Change:** Multiculturalism is a defining feature of Canada’s national image and its major cities use their diversity to brand themselves as welcoming and inclusive. In the context of recent refugee resettlement patterns, however, and the Truth and Reconciliation

**Current Research:** Dr. Yolande Pottie-Sherman explores how varying practices of municipal immigration activism shape the experiences of (im)migrants in smaller cities in the U.S. & Canada.
Northern Cities: Canadian cities rest on Indigenous homelands and are shaped by settler-Indigenous relations, making the study of Indigenous urban forms and processes central to reconciliation. In northern and Indigenous geographies, the “urban” connects smaller settlements with towns and cities where key services are concentrated, turning the latter into sites of rich and dynamic community building.

Current Research: Dr. Julia Christensen is examining the dynamics of housing insecurity and homelessness in northern urban locales.

Current Research: Dr. Nicholas Lynch is co-developing an online and interactive Atlas that showcases the closure and transformation of worship spaces in urban and non-urban contexts around the world.

Adapting the Built Environment: The built environment affects urban residents in many ways. As the economies and demographics of small- to medium-sized cities change, so too does the pressure for different forms of housing, transportation, and commercial property. The key is to ensure these changes are undertaken in an equitable way.

Governance & Adaptability: Important decisions about urban space don’t come exclusively from governments; the private sector, civil society, and other groups can have a lot of power in shaping the city to align with their priorities. Neoliberalism, in particular, shifts decision-making power to the private sector, while regional governance structures and the location of urban boundaries have other implications.

Current Research: Dr. Roza Tchoukaleyska is investigating how national policies interact with the social and cultural texture of communities through the use and debates about public space.
In the Northern EDGE Lab, we study the “Ecology of Distributions at their Geographic Extreme”. Besides making a catchy acronym, what does that mean? In short, we study how plant species' distributions are responding to climate change. We are particularly interested in indirect climatic effects (like climate-induced changes to disturbance regimes) and non-climatic effects (like substrate limitations) on species' range limits. What we really find exciting are all of the unexpected constraints on range expansions caused by species' interactions, like predation and competition.

Across our research systems, we have recently been asking questions about how the ecological inertia of ecosystems influences the ability of species that are potentially advancing under climate change (like trees) to colonize. In other words, how good is the boreal forest at resisting invasion of more southerly tree species expanding their ranges under climate change? How good is the tundra at resisting the advance of the boreal forest, and why? The “why” is the exciting part, and we investigate how non-climatic effects and biotic interactions slow species’ advance via field experimentation and observation.

We do our research from one extreme edge of Canada to the other: northern Yukon and coastal Northwest Territories to the eastern edge of Newfoundland. That geographic spread means that there are two main alliances in the lab: Team NL and Team Yukon.
Team NL

On the island, we have ongoing research looking at how the ecological inertia of boreal forests and alpine tundra influence species range dynamics. As environmental conditions become more suitable, we anticipate that temperate, deciduous tree species will expand their populations on the island into boreal forest stands (Piers Evans), that forests will advance upslope on mountains (Anna Crofts), and that non-native species may advance into boreal forests as those forests become more stressed under climate change (Jennifer Sullivan). We also ask questions about how fire regimes are influencing the forests of Newfoundland. One way we do this is to look across time by carbon dating charcoal from Terra Nova National Park (Leah Walker) to see how fires and subsequent forests may have changed over millennia. TeamNL is not restricted to the island, and we are also addressing questions about the role of fire in coastal treeline forest regeneration in Nunatsiavut, along the coast of Labrador (Lucas Brehaut).

Team Yukon

Team Yukon really likes black spruce, and black spruce really likes the Yukon. Black spruce is an excellent model species for our research on the roles of disturbance and biotic interactions in species range dynamics; it is a species that can grow in very marginal environmental conditions, like the subarctic treeline, and it is highly adapted to fire. Our Yukon and Northwest Territories study sites are in a region of the subarctic experiencing the most pronounced summer warming, meaning that while environmental constraints are being lessened, fire activity is increasing. In both the Yukon and northwestern Northwest Territories, we ask questions about why some black spruce and other tree populations are advancing into tundra ecosystems, while others are not. We do this across scales, from quantifying microsite niche characteristics of individual trees across life stages (Katie Goodwin), to looking at landscape-scale fires as catalysts to tree range expansion (Lucas Brehaut), to assessing cross-taxon biodiversity across a broad subarctic latitudinal gradient (Kirsten Reid).

In the Northern EDGE Lab, we value natural history, fieldwork, and collaboration. We try to make connections across taxa (even though we really like plants), and to think like geographers: across space, time, and disciplines.

Follow us on Twitter! #NorthernEDGELab @rangeshifts @treelinefires @KirstenAREid @katie_gwin @_coastalwalker @jenvsull
Capture fisheries and aquaculture are important parts of Newfoundland and Labrador’s (NL) economy, society and land- and seascape. Coastal fishing communities whose livelihoods depend on healthy fisheries and ocean ecosystems have long endured numerous stresses, pressures and changes related to the environment, socio-economic conditions, and policies and regulations. With financial support from Canada First Research Excellence Fund, we have a unique opportunity within the Ocean Frontier Institute (oceanfrontierinstitute.com), to conduct in-depth studies and interdisciplinary research to enhance understanding about the changing ocean and to support the development of viable, safe and sustainable fisheries and aquaculture-based communities in Atlantic Canada.
In the Module ‘Informing Governance Responses in a Changing Ocean,’ co-led by Professor Neis (MUN Sociology and SafetyNet), we are examining issues related to short- and long-term social, ecological and institutional changes in fisheries, coastal communities and the economy of the province. We recently conducted a ‘Taking Stock’ exercise to assess existing knowledge about ten key aspects of fisheries and coastal communities and to help us both learn from the past and identify key factors and issues likely to affect the sustainability of NL fisheries in the short and longer-terms. The multi-stakeholder dialogue was held in September, 2018 and brought together researchers and community representatives to discuss the 10 background papers developed by the researchers and to help fine-tune our research questions. Over the next 3-4 years we will be conducting community-engaged research in such key areas as access to resources and markets, intergenerational recruitment, training and retention, perceptions, values and knowledge, marine safety, and community vulnerability and viability.

The Module ‘Social Licence and Planning in Coastal Communities’ is co-led by Lucia Fanning (Marine Affairs Program, Dalhousie). The focus of the module is on aquaculture in Atlantic Canada. The aim is to critically assess questions of social acceptability in a sector that has faced challenges in securing the social license to operate. Our research programme is organized into 5 themes that include: societally endorsed, sustainable aquaculture; occupational health and safety; community-aquaculture dynamics; carrying capacity; and marine spatial planning. In Newfoundland we are working with communities in the Coast of Bays region, and we will be developing research on the north east coast of the island where shellfish aquaculture is the main sector. If you’re interested in finding out more about our project, please visit our website: coastalfutures.ca
The Middle River: Making and Moving Local Knowledge in Miawpukek First Nations (MFN)/Conne River, NL
Pam Hall, with Jerry Evans and MFN

As knowers, we are embedded within the particularities of place—living and learning within specific locations, differing cultural traditions, multiple histories, languages and partial perspectives—all within diverse and rapidly changing ecosystems. My research and creation has for many years, been focused on how we “know” these particularities of place and has centralized questions of who gets to make knowledge, who knows what where, and how the ways we know our place(s) might be revealed, mobilized and brought into conversations about our futures that have, until recently, been dominated by Western scientific knowledge alone.

Place-based ecological, vernacular, artisanal and technical knowledge practices, and the cultural values and traditions within which they are embedded and evolve offer us a range of strategies for enlivening and valuing the local worlds within which we live. Local knowledge(s) can make a substantial contribution to constructing alternative imaginaries and building equitable, sustainable futures especially if they invite multiple knowledge traditions into conversation.
My central research focus has, since 2011, explored the work that art might do towards making and moving local knowledge(s) in two regions of rural Newfoundland. *Towards an Encyclopedia of Local Knowledge* (ELK) is where this ongoing collaborative art-and-knowledge project has revealed and mobilized such local knowledge practices. As an art-work owned by communities and exhibited in museums and galleries, as a globally-accessible website and a hard-cover retail publication, the *Encyclopedia* project is now (finally) working to move beyond the single knowledge tradition (Western European colonial) from which it emerged.

The Middle River is the next step in this research-creation and I am fortunate to be collaborating with Mi’Kmaw artist Jerry Evans, community youth researchers, and a community Editorial Committee to create (in English and Mi’kmaq) a new Chapter of local knowledge in Miawpukek /Conne River. Based on over 100 days of community-based field work, we hope to advance the intellectual and creative work of the ELK, to forge new approaches to indigenous and non-indigenous collaboration, and most importantly, to diversify, deepen and distribute its methodologies to communities working to preserve, honour and mobilize their own local knowledge resources.
At the 2018 ArcticNet Annual Scientific Meeting held in Ottawa in December, Katherine Wilson, a doctoral candidate in Geography, was awarded the Inuit Partnership of Excellence Poster Award for her presentation: Mobilizing Inuit Qaujimajatuqangit for Sea-Ice Safety: A Sikumiut case study to support Inuit Self-Determination in Research. Inuit Tapiriit Kanatami, the national representational organization protecting and advancing the rights and interests of Inuit in Canada, presents this award annually. It is given to the student whose poster best addresses Inuit priorities, involves Inuit partners, and builds capacity.
Mobilizing Inuit Qaujimajatuqangit for Sea-Ice Safety: A Sikumiut case study

Katherine Wilson¹,², Trevor Bell¹,³, Gita Ljubicic⁴, Andrew Arreak³ and Shelly Elverum³


My PhD project is a case study in understanding a new role for non-Inuit researchers and the approaches needed to truly support Inuit self-determination in research. The following steps outline an emerging model (Research Proposal: Wilson, 2018) taking shape on a community-based project to mobilize Inuit Qaujimajatuqangit (IQ) for sea-ice safety in Mittimatilik (Pond Inlet), Nunavut.

1. Sea-ice experts in Mittimatilik, Nunavut, have identified the need to: 1) share their IQ of sea-ice with the next generation to improve safe sea-ice travel; 2) understand and mitigate the impacts of climate change on sea-ice; and 3) develop a baseline of local sea-ice conditions in anticipation of increased shipping during the fall and winter seasons.

2. The Inuit Management Committee for SmartICE in Mittimatilik, self-titled Sikumiut, governs this research. They decide what Inuit and scientific knowledge is needed and the roles of the partners. They also determine the methods used to communicate their sea-ice IQ to their community.

3. Sikumiut’s approach for this project is based on their IQ and the IQ principles they would like to follow are outlined in Nunavut’s Inuit Societal Values (Government of Nunavut, 1999). Sikumiut will evaluate this project from an Inuit perspective and based on their extensive sea-ice experience.

4. Local Inuit youth have been hired and trained to do this research. They are facilitating workshops with Sikumiut on sea-ice terminology and mapping locations of safe and hazardous travel. Youth are being trained in geographic information science to interpret, detect and monitor sea-ice trends in 20+ years of satellite imagery and to develop maps of local sea-ice conditions. Inuit youth will also run the process to evaluate the project.

5. To be accountable and give back to the community, my primary role in this project is to mentor and strengthen Inuit youth capacity in community-based research. My role intersects all aspects of the research to support Inuit decision-making, IQ, methodologies and ultimately Inuit self-determination in research.

For more information contact: Katherine.Wilson@mun.ca

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