ArcticNet Annual Report 2022/23

Working together in a changing Canadian Arctic

ArcticNet

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ArcticNet is a Network of Centres of Excellence of Canada that brings together more than 1,000 Arctic researchers, Highly Qualified Personnel (HQP), engineers, and managers studying human health, natural and social sciences in the Arctic.

With partners from over 50 universities and colleges, northern post-secondary institutions, and Inuit communities, ArcticNet works collaboratively with international research teams throughout Denmark, Finland, France, Greenland, Japan, Norway, Poland, Spain, Sweden, the United Kingdom, and the United States, to study the impacts of rapid climate, environmental and socio-economic change.

ArcticNet is hosted at Université Laval, Québec City, with an ArcticNet team also hosted at the University of Ottawa.

Contents

Introduction

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Executive Summary

The past year has been an exciting one for ArcticNet with many programs nearing an end and the development of a major new strategic and operational plan that will lay the groundwork for our future. The year was also marked by the strengthening of our relationships with existing partners and the development of new partnerships that helped shape the vision and culminated in the co-development of our proposal to the Government of Canada's Strategic Science Fund.

ArcticNet continues to be a world-renowned institution with an established reputation as a formidable, professional, and well-connected organization where major science initiatives can flourish. International scientists and organizations continue to use ArcticNet as a sounding board, entry point, and partner for discussing, and developing major science collaborations and this year was no different. In 2023, during presidential visits to and from Finland, Germany, and Iceland, high-level conversations occurred that lay the groundwork for important international science missions in which Canada and ArcticNet will play major leadership roles.

Again, this year, ArcticNet played an important role, as an international role model for equity, diversity, and inclusion and, in particular, on reconciliation with Indigenous peoples. One of our proudest accomplishments has certainly been ArcticNet's North-by-North Program moving from its infancy into adolescence, with many important advancements over the past year. The program, entirely governed and implemented by Inuit partners within ArcticNet, has supported more than 30 researchers in the North and is already making a major difference – not only in supporting scientific discoveries but also in supporting the lives and livelihoods of Inuit. In total this year, ArcticNet participants have undertaken 78 projects, Academic (53) and North-by-North (25) Programs combined.

ArcticNet's focus on HQP includes a robust commitment to training from the North and South. In the past, ArcticNet focused on South-to-South, South-to-North, and North-to-South training within formal university structures. This year, we expanded our focus with North-to-North training among researchers and knowledge holders. With the full implementation of the North-by-North program, we enhanced training capacity throughout and within the North. ArcticNet supports a wide array of training and funding opportunities to develop the capacities and diversified skills needed for research excellence. HQP continue to play essential roles in all programs and governance committees.

As a well-oiled machine and mature network, ArcticNet leadership has taken the reins on defining its future as the leading Canadian Arctic science funder and convener. Once more, ArcticNet's staple Annual Science meeting was a huge success. Held in Toronto and bringing together over 1200 members of the Arctic research community, attendees participated in conversations, discussions and learning activities centered on the most pressing Arctic issues. Northerners are an integral part of ArcticNet and this year's ASM included 420 Northerners (35% of total participants) taking part in the conversation around the future of Arctic research in Canada. Beyond our ASM and impressive scientific dissemination via publications (>800), knowledge mobilization of our growing understanding of the Arctic took on multiple forms with webinars series, northern workshops and summer schools, an Inuit Youth Connect program, and a multitude of creative outreach activities.

With Indigenous and federal partners, we have carved out a niche in the Canadian Arctic research scene in which we will continue to support inclusive research and cutting-edge science to address the challenges and opportunities faced by the North and the global society. This framework is designed to deliver a science mandate that is exclusively achievable through a strong and diverse networked approach with a proven record of accomplishment. To continue supporting Canada in its responsibility as a leader in Arctic research, a viable future is being sketched by ArcticNet, taking care to ensure the canvas be inclusive, collaborative and grounded in convergent research for a healthy, vibrant North.

ArcticNet Leadership:

Jackie Dawson
Scientific Director

Philippe Archambault
Co-Scientific Director

Donna Kirkwood
Chair of the Board of Directors

Christine Barnard
Executive Director

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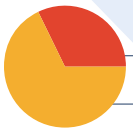
ArcticNet by the Numbers

78 active projects

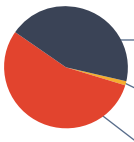


25 North-by-North
53 Academic

50

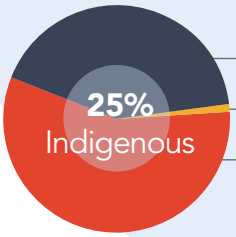
- Universities
- Colleges
- Northern post-secondary institutions
- Inuit communities.

196 researchers



44% Female
1% Non-Binary
55% Male

799 Highly Qualified Personnel



58% Female
0.3% Non-Binary
42% Male

+17% **Increase** of 17% from the previous year (661)

800+ publications in the 2022/23 fiscal year alone

301 of which were peer-reviewed

72 workshops

Hosted by ArcticNet funded projects to mobilize knowledge

Annual Scientific Meeting 2022

1200+

- **1200+** participants
- **600+** participants at the Early Career Northern Researchers' Annual Meeting 2022, hosted at the Annual Scientific Meeting 2022
- **420 (35%)** Northern participants

About ArcticNet

A world-leading research network studying the Canadian North

ArcticNet began as a Network of Centres of Excellence first incorporated in 2003. Since those early beginnings, the organization has grown and developed into a world-leading research network bringing together communities, governments, partners, and researchers working toward a common goal: a strong, thriving, and resilient Canadian Arctic.

Earth's rising temperatures are causing tremendous environmental and socio-economic consequences felt first and most severely in Arctic communities and territories. ArcticNet contributes to the growth and distribution of knowledge required to strengthen capacity and economic development in the Arctic and establish national policies and strategies to assist Canadians with the impacts and opportunities of climate change.

ArcticNet brings together more than 196 Arctic researchers and 800 HQP from 50 Canadian post-secondary institutions and Inuit organizations with northern communities, research institutes, industry partners, governments, and international agencies to create a uniquely diverse approach to northern research. ArcticNet works collaboratively with international research teams from Denmark, Finland, France, Greenland, Japan, Norway, Poland, Spain, Sweden, the United Kingdom, and the United States, to study the impacts and opportunities of socio-economic and climate change in the Canadian North.

Mission

- Deliver world-class science addressing national and Indigenous priorities,
- Advance and prioritize Indigenous-led research in the North, for the North, and by the North,
- Connect Canada's diverse Arctic knowledge assets to enhance discovery, decision making, inclusion, and leadership,
- Advance and transform the management of Arctic science in Canada through support of Indigenous self-determination in research,
- Train and mentor Canada's next generation of northern and southern Arctic scholars,
- Train and mentor Arctic youth in Indigenous self-determined research, research management and administration, and knowledge co-production,
- Support decision makers and Arctic leaders through rapid knowledge assessments and policy briefings, and
- Enhance international leadership and Canadian-led innovations in Arctic science.

Building on two decades of research, relationship building, and knowledge sharing to understand the changing Arctic region, ArcticNet is well poised to continue building coordinated, collaborative, and sustainable Arctic research in Canada.

Vision

A future where improved observations, modelling, capacity-building, and knowledge exchange enable researchers, Inuit, Indigenous communities, Northerners, and decision-makers to co-develop adaptation strategies minimizing negative impacts and maximizing positive outcomes resulting from the transformation of the Canadian Arctic.

Funding Research

Academic Research Program

ArcticNet's Academic (formerly named Core) Research Program (including the extension granted in 2021/22) included 53 active projects in the fiscal 2022/23, organized into five main themes: 1) marine systems; 2) terrestrial systems; 3) Inuit health, education, and adaptation; 4) northern policy and development; and 5) knowledge transfer.

Ten (10) Academic projects were selected to receive surplus funds through the High Performing Project Top-Up Fund to bolster additional research and knowledge dissemination needs.

North-by-North Program

The research focus areas supported through this program include permafrost; hydrology; northern business and economy; Indigenous approaches to environmental management; health and community; oral history; institutional case studies; climate-sensitive health outcomes; Indigenous mental health; Inuit-led conservation science; and northern food systems.

Inuit Qaujisarnirmut Pilirijjutit (IQP)

The Inuit Qaujisarnirmut Pilirijjutit (IQP) supported 21 projects. The Inuit Research Management Committee (IRMC) continues to ensure that funded projects respond to regional research priorities and regional standards for research and community engagement through the annual review process.

3 IQP projects were selected to receive surplus funds through the High Performing Project Top-Up Fund to bolster additional research and knowledge dissemination needs.

Northern Research Leaders Program (NRLP)

The NRLP supported eight Project Leaders with 33 research and research-support positions in the 2022/23 fiscal year ($1.5M in 2022/2023 and 2023/24) at Yukon University, Aurora College, Nunavut Arctic College, and Labrador Campus of Memorial University, substantially expending research capacity in northern universities and colleges.

High Impact Publications Program

The High Impact Publications Program was launched last year in response to feedback received from the Research Management Committee (RMC) and a larger community of Arctic researchers to make use of the diverse datasets and knowledge that has been generated throughout ArcticNet's rich history via interdisciplinary teams. The program aims to generate high impact synthesis papers. The program funds 10 highly productive interdisciplinary research teams and represents a total budget of $848K.

Joint ArcticNet/MEOPAR Postdoctoral Fellow (PDF) Program

The five projects were selected for 2022/2023 for the joint ArcticNet/MEOPAR PDF Award Program. This award grants $20,000 per year for a maximum of two years to support excellent candidates in their Arctic marine and coastal zone research, and to connect them into both funding networks; furthermore, selected candidates will provide "support" to assist applicants in preparing their proposals for the next North-by-North Inuit Qaujisarnirmut Pilirijjutit (IQP) Call for Proposals.

Research Highlights

ArcticNet supports a wide range of world-leading research teams generating knowledge, building partnerships, training highly qualified personnel, and mobilizing knowledge to end-users. The following highlights showcase a few of the currently active projects in ArcticNet's funding portfolio; to read about these and other projects in more detail, please visit www.arcticnet.ulaval.ca.

Marine Systems

Glacier ice volume, iceberg discharge and shipping risk in the Canadian arctic and beyond and GO-Ice: glacier-ocean dynamics in a changing Canadian arctic

Dr. Luke Copland's (Ottawa U) two ArcticNet funded projects focus on glaciers, ice, and ocean properties in the Canadian Arctic. These projects have resulted in a wide range of peer-reviewed articles, with one being a major achievement in publishing; the first estimate of frontal ablation for every glacier in the northern hemisphere. This article published in Nature was one of the last missing puzzle pieces on global climate assessment reports. Research results from this project have contributed directly to high-priority scientific reports, such as the Intergovernmental Panel on Climate Change (IPCC) and helps northern communities understand how, and why, their environment is changing. Indeed, Dr. Copland and his team utilize SIKU, The Indigenous Knowledge Social Network, to share their results and findings directly with Northerners and encourage them to share their own findings, ensuring that communities and the public have access to the information they gather.

Marralik estuary beluga project

As a part of ArcticNet's Inuit Qaujisarnirmut Pilirijjutit (IQP) program, this project is immersed in Nunavik Inuit communities and uses a unique approach to conducting research on belugas by involving local Inuit youth. For the past 2 years, project leader James May has hosted a youth camp to share Inuit knowledge and train local youth on research techniques. Indeed, camp attendees are trained in observing beluga, collecting environmental DNA (eDNA) samples, and learning about wildlife management. A particularly exceptional outcome of this project is Christina Uquuataq Lock, a high-school student and camp attendee, who presented a poster at ArcticNet's 2022 Annual Scientific Meeting (ASM) in Toronto on "Sharing Inuit and Scientific Knowledge to Promote Change in Wildlife Health and Management" with the knowledge she gained at this research camp and was awarded the Inuit poster award. This untraditional yet effective approach to research was featured in a blog post in June 2023 on the ArcticNet website.

Terrestrial Systems

Understanding and predicting future coastal climate-vegetation-cryosphere interactions in coastal Labrador

This project, led by Dr. Robert Way (Queens U), investigates the unique interaction between vegetation, snow cover, permafrost and people in northern ecosystems across Labrador and northern Québec. Early results found that increasing shrub density and height can degrade permafrost through the insulating attributes of the shrubs' presence, which may have future impacts on infrastructure, the environment and the people living in surrounding areas. To date, they have found that areas of increased shrub growth were most prominent in low elevation areas, where permafrost is the warmest and most sensitive to change. Moreover, changes to permafrost are suggested to be linked to snow cover variability. This key finding is especially important as precipitation and snow predictions by local weather reports in the Arctic are growing increasingly unreliable, as detailed in this Science article. Dr. Way's research will help create models that inform on historical climate variations related to temperature, precipitation, and snow cover, and simultaneously assess future climate variability.

Developing seasonal multi-layer network models to evaluate cumulative impacts on arctic ecosystems

In the Arctic, the effects of multiple stressors arising from rapid warming and industrial development on ecosystems and the species that compose them are poorly understood. To effectively predict how Arctic biodiversity will be affected by environmental change and anthropogenic activity, this project aims to create predictive models based on changes in animal abundance and distribution with advanced technology and community-led monitoring. Satellite tags are one of the impressive forms of technology being used in this project and have allowed researchers to collect data on 170 individual Arctic foxes over 13 years on Bylot Island (Nunavut). With this impressive historical data set, Dr. Dominique Berteaux (UQAR), project member, has tracked the unbelievable long-distance dispersal of 27 adult and 20 juvenile foxes with some journeys being over 6000 kilometers and crossing international boarders to Greenland, which was highlighted in this piece by Scientific American. Project members have also greatly contributed to knowledge mobilization activities by hosting workshops on snow properties and animal-tracking for local Nasivvik high school students, producing a short documentary entitled *Mittimatalik* and participating in knowledge sharing at *Goose Camp* with a highly engaged Facebook page.

Inuit Health and Adaptation

Supporting humans in a thawing landscape

In the North, permafrost thaw induced by climate change directly impacts the lives and livelihoods of Northerners by damaging infrastructure, transportation networks, affecting food security by reducing access to subsistence hunting, and more. Despite the significant costs associated with technological and cultural adaptations, permafrost thaw and its impacts on society are unclear. Led by Dr. Fabrice Calmels (Yukon University), this project addresses the concerns of Northerners towards permafrost thaw in various Northern communities across Canada. In March 2023, it was announced that $3.4 million of the National Trade Corridors Fund would be invested towards the "Enhancing Yukon trade corridor resilience to northern geohazards" project at Yukon University, as a part of Dr. Calmels' ArcticNet funded research. This funding will contribute to the installation of monitoring stations along Yukon highways to identify factors contributing to permafrost thaw. Ultimately, this information can direct solutions to eliminate risks associated with permafrost thaw (e.g. road erosion) and mitigate the disruption of the transportation of goods to remote Northern communities.

Knowledge Transfer

Using co-produced knowledge to understand and manage subsistence marine harvests in a changing climate

Guided by Inuit and research knowledge and expertise, this highly-collaborative project enhances our understanding of key subsistence marine species in relation to environmental change. Although western science offers 40+ years of monitoring studies in the Inuvialuit Settlement Region (ISR), Traditional Ecological Knowledge (TEK) can provide a more holistic body of knowledge pertaining to the marine environment. Thus, TEK of the marine environment, beluga, and key fish species generates knowledge on variations in the natural environment not detailed in scientific studies. Indeed, co-design of telemetry studies, co-interpretation of data, co-production of knowledge, and Inuit data sovereignty are the main objectives of this project. As such, knowledge sharing has spanned across numerous Northern communities including: Aklavik, Tuktoyaktuk, Paulatuk, Ulukhaktok, and Kugluktuk in the form of 20+ workshops, meetings, and trainings. In addition, efforts to disseminate research results are impressive, with 20 peer-reviewed publications, 2 non-peer-reviewed, and 8 outreach documents shared with Northern residents and research partners, many of which were co-authored by Inuit partners.

Northern Policy and Development

Modernizing ecosystem monitoring to support sustainable development in the eastern Canadian Arctic

Using a myriad of modern approaches to environmental monitoring, this project has multiple goals to advance science, policy, and wildlife management across the Arctic. With the specific objective to track the movement of birds in relation to human activity and climate change, Dr. Paul Smith (Carleton U) and Dr. Christina Semeniuk (Windsor U) are using a multi-sector collaborative approach to increase the efficiency, reliability, and utility of environmental research and monitoring. With their collaborative approach, part of this project involves work at Environment and Climate Change Canada's (ECCC) Inuit Field Training Program to train and mentor Inuit on environmental monitoring techniques and opportunities in environmental science to build capacity in the North. Further, project members have designated time and effort towards knowledge mobilization by leading workshops in Nunavut and Greenland, and conducting public outreach. The innovative and broad scope of this project has produced a remarkable 30+ peer-reviewed journal articles, including an article published in the prestigious journal Nature.

Northern Research Leaders Program

Memorial University of Newfoundland's Labrador Campus

Since its establishment as the newest campus of Memorial University in January 2022, The Labrador Campus has successfully grown and expanded their research capacity and leadership. With supplemental funds from the University of Alberta and the Canada Research Chairs program, they created and delivered a national randomized household survey on climate change and mental health, the first of its kind in Canada. This survey has gathered nation-wide data on the prevalence and distribution of various climate-sensitive mental and emotional health outcomes. Moreover, two highly qualified personnel (HQP) were indirectly supported through this work; one PhD and one undergraduate student. In addition, Joseph Onalik, an Inuk youth in Nain, was allocated a grant to conduct an apprenticeship with Liz Pijogge at the Nunatsiavut Government and with Dr. Max Liboiron at Memorial University to work as part of the team at the Nunatsiavut Land and Natural Resources Department. Dr. Liboiron's work is featured in CBC's *Stories from the Land* series highlighting local research leadership in Nain, this episode is the only one in the series that includes research activities as a part of Indigenous tradition in Canada (coming out in 2023).

Training the Next Generation of Arctic Researchers

Canada's capacity to act as a leader on Arctic issues depends on the academic and professional preparation of the next generation of Arctic leaders. A large percentage of these leaders will come from ArcticNet's own HQP and Northern HQP (NHQP). To support their professional development, ArcticNet makes value-added training resources available, promotes, and develops relevant initiatives by working closely with a proactive ArcticNet Student Association (ASA). HQP also continue to play essential roles in all ArcticNet programs and governance committees such as the Board of Directors and the Research Management Committee.

HQP graduating from ArcticNet-funded projects prove to be innovative (adapting their sampling to continuously changing conditions), resourceful (complex logistics to reach their sites, obtaining research permits), culturally savvy, and armed with skill sets ranging from survival skills for work in remote areas, to polar bear safety, to how to escape from a sinking vessel in freezing waters. Furthermore, ship-based work and work in remote stations represent special milieus where researchers bond and interact across disciplines and connect ideas, breaking down discipline-specific silos. An integral part of the training includes how to ethically and respectfully conduct workshops and consultations in the North with Inuit, First Nations and Métis, and how to best prepare for interactions with communities and how to share results to diverse crowds. This process is now a required skill from the onset of the projects, as Northerners participate in co-designing projects. This collaborative work with Northerners enables better translation of science into meaningful knowledge for community members, as well as knowledge co-production and mobilization for strengthened decision-making.

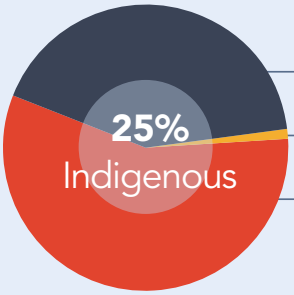
In 2022/2023, ArcticNet supported 799 HQP across universities and government departments, with 323 NHQP (40%). Of the total HQP (M.Sc., Ph.D., postdocs, research staff, and undergrads), 58% were female.

799 Highly Qualified Personnel

+17%

Increase of 17% from the previous year (661)

Demographics



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42% Male

ArcticNet Training Funds

ArcticNet's focus on HQP includes a robust commitment to training from the North and South. In the past, ArcticNet focused on South-to-South, South-to-North, and North-to-South training within formal university structures. This year, we expanded our focus with North-to-North training among researchers and knowledge holders. With the full implementation of the North-by-North program, we enhanced training capacity throughout and within the North. ArcticNet supports a wide array of training and funding opportunities to develop the capacities and diversified skills needed for research excellence.

Training Fund Highlights

Through our staple ArcticNet Training Fund, 13 students from across Canada were able to take part in a variety of national and international training opportunities related to their academic research projects; while 11 HQP, including 7 students, were provided access to the Fieldwork Safety Training Fund as part of our commitment to achieve health and safety excellence in activities and operations conducted in the field.

As part of ArcticNet's Knowledge Mobilization (KM) strategy to boost science dissemination, a new fund was launched in February 2023 to help researchers and HQP publish higher impact material and foster greater science literacy. This fund aims to facilitate the publication of science briefs and articles that target government and non-governmental organizations and invite them to make informed decisions based on all types of knowledge: western, traditional, local, Indigenous.

ArcticNet Student Association (ASA)

The ASA brings together undergraduate, M.Sc. and Ph.D. students from across Canada studying the Arctic. With support from and in close collaboration with ArcticNet, the ASA is run by students and for students. This gives the executives of the ASA the opportunity to build leadership capacity and provide training opportunities for the next generation of Arctic researchers.

The 2022 ECNR annual meeting, formerly known as Student Day, was a two-day event held in Toronto, as part of the opening activities of the ASM2022. The conference aimed to bring together students and professionals and to provide valuable insight on Arctic research. The event was organized by the ASA as well as graduate students from Memorial University of Newfoundland–Labrador Campus representing the Association of Canadian Universities for Northern Studies (ACUNS). The event included keynote speeches, panel discussions, and interactive workshops and was well attended with over 660 participants from various parts of Canada. The attendees included undergraduate students, graduate students, postdoctoral fellows, as well as a few students from a local high school looking to explore Arctic research.

Keynote speakers included northern leaders who shared insights on topics such as bear safety, conducting culturally sensitive research, and using visual media as both a research tool and a form of communication. The panel discussions were informative, covering topics such as the roles of Inuit Research Advisors (IRAs), the diverse perspectives on how ECRs can interact with the ocean, and how ScIQ can be used to guide research with Nunavut communities. The quality of the keynote speeches and panel discussions was impressive, with engaging, informative, and interactive workshops. The event was successful in bringing together the ECNRs and promoting safe and respectful conduct of northern research.

ArcticNet-MEOPAR Postdoctoral Fellowship

ArcticNet and the Marine Environmental Observation, Prediction and Response Network (MEOPAR) are pleased to announce the recipients of the second round of the ArcticNet-MEOPAR Postdoctoral Fellowship. Fellows under this program demonstrate excellence in Arctic coastal and marine research and a commitment to supporting Inuit-led research through the IQP.

ArcticNet and MEOPAR are thrilled to work together again to support the next generation of Arctic marine and coastal researchers by providing training and knowledge mobilization opportunities in addition to funding. Fellows are funded for one year with the opportunity to renew funding.

Meet the 2022-23 fellows:

- Dr. Charlotte Carrier-Belleau, Université Laval
- Dr. Matthew Gilbert, University of New Brunswick
- Dr. Emma Harrison, Dalhousie University
- Dr. Jean Holloway, University of Ottawa
- Dr. Mallik Mahmud, University of Calgary

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Mobilizing, Transferring and Exchanging Knowledge

Knowledge must move beyond the researcher's desk to realize impact. Publications, workshops, training sessions and conferences all contribute to ArcticNet's knowledge exchange and the translation of our growing understanding of the Arctic.

Knowledge Mobilization Initiatives launched:

1. Skills for Northern Research Impact (SNRI) Webinar Training Series: Open to the ArcticNet network at large, including researchers, students, HQP, and partners, the webinars presented through the series aimed to help the ArcticNet community build and practice science communication and knowledge sharing skills and to connect with a variety of audiences and end-users.
2. Assessing Marine Polar Ecosystem Sensitivity to Rapid Changes in the Arctic: ArcticNet is also supporting post-secondary outreach and capacity building initiatives. In collaboration with Nunavut Arctic College, and with the generous support from Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), ArcticNet organized a one-day workshop on the topic of Marine Polar Ecosystem Sensitivity to Rapid Changes in the Arctic. Intended for Indigenous students of the Environmental Technology Program (ETP) at Nunavut Arctic College, the workshop was hosted on March 3rd, 2023, and is now available for wide public viewing.
3. Arctic Minded: ArcticNet is currently developing a podcast with the strategic objective of sharing the stories of ArcticNet's researchers, HQP, staff, leadership, and community partners. Through storytelling, we hope to draw awareness towards the individuals who contribute to our understanding of a changing Arctic. Further, by producing a podcast using plain-language and that is accessible to all, ArcticNet can promote knowledge sharing to the public and reinforce the importance of preserving Arctic regions where climate change impacts are felt first and most severely.
4. Following the Atauttikkut program workshops in fiscal year 2021-22, the Atauttikkut Project Forum was held. Facilitated by Debra "Naaqtuuq" Robertson, this round-table of sharing and discussion began with a traditional song and drumming, followed by an overview of climate change in the Arctic from different perspectives: the Eurocentric scientific perspective and the "One Health Approach", which recognizes the relationships and interdependencies between animal health, human health and environmental health, an emerging field of research that aligns with Indigenous conceptions of health. At the ASM2022, a special session was dedicated to the Atauttikkut project in the form of a Town Hall. The main funders of this project spoke: two welcome videos, courtesy of the Société du Plan Nord and the Consul General of the United States in Quebec were presented. The unveiling of the highlight video was followed by a poem reading by project participant Kaylene "Inuraaq" Evans. The Town Hall activities culminated in a speech by the special guest of the event, Ms. Sheila "Siila" Watt-Cloutier who delivered a poignant message of hope to the Atauttikkut project participants and to the entire audience present in the hall that day. The rest of the Town Hall was dedicated to discussion and exchange among those present. Through all the activities proposed within Atauttikkut, the project achieved its objectives of increasing the capacity and skills of northern youth, facilitating exchanges between youth from different regions of the Arctic, and allowing Indigenous youth to share their cultural and environmental realities.

Commitment to Equity, Diversity and Inclusion

In 2020 and 2021, ArcticNet launched its Equity, Diversity, and Inclusion (EDI) Strategy and Key Performance Indicators (KPIs) specific to EDI to structure the way in which the Network operates and strives to create an inclusive and safe environment for Arctic research. In 2022-2023, ArcticNet continues to put its strong commitment to EDI into action in new and exciting ways. ArcticNet recognizes that the diversity of a team can help drive and shape research questions, methods, and perspectives by incorporating new knowledge and ways of doing. With this belief, the Network has launched numerous new EDI initiatives, such as:

- Through its EDI initiatives and for the ASM2022, ArcticNet partnered with HearU to offer a safe space for all employees, researchers, students, and/or visitors to anonymously report instances of harassment, discrimination, bullying, micro-aggression, or any other form of unfair treatment that may have been experienced or witnessed during ArcticNet events. At the ASM2022, HearU also ran a "safe-space lounge" where conference attendees could chat with counsellors, learn more about the HearU tool, and decompress in a calm, safe environment. In May 2023, HearU participated in a public and recorded webinar through the SNRI series on how to use the HearU tool and the benefits of using the platform.
- ArcticNet Training and Knowledge Mobilization Coordinator, Dr. Martine Lizotte, was invited to host the "Power Hour" at the Polar Marine Science Gordon Research Conference (GRC) in Ventura (USA) in March 2023. The Power Hour is intended to support growth of ALL in the scientific community and provide a forum for discussion and mentoring. Dr. Lizotte gave a talk entitled "Allyship in Polar Marine Sciences: Fostering Greater Inclusion" to a group of 82 people where allyship was defined, common pitfalls were explored, and a call to positive action was proposed.
- In 2023, ArcticNet will also be launching its Arctic Research Code of Code, co-written with over 35 national and international partners involved in Arctic research.

Annual Scientific Meeting 2022

For the first time since the COVID-19 pandemic, the 18th Annual Scientific Meeting (ASM2022) was held in-person from December 4 to December 8 in Toronto ON, with 1200+ attendees from across Canada and around the world. Northern participants reached 420, representing 35% of total participants, was the highest Northern participation thus far. Participants were able to attend over 60 scientific sessions, 8 of which were livestreamed for a wider audience (all livestreams available here). The scientific programming demonstrated a commitment to research excellence, where approximately 450 researchers, throughout topical sessions, plenaries, and posters, shared their expertise on a range of environmental, health, and socio-economic Arctic issues.

ArcticNet was honoured to open the conference with remarks from Natan Obed, President of Inuit Tapiriit Kanatami (ITK), Jennifer Hubbard, President and Chief Executive Officer at Polar Knowledge Canada (POLAR), and Sheila Watt-Cloutier, Canadian Inuk activist, author and Nobel Peace Prize nominee. Statements given via video recording also included the Honourable Steven Guilbeault, Minister of Environment and Climate Change Canada, and the Honourable Dan Vandal, Minister of Northern Affairs.

- **1200+** participants
- **600+** participants at the Early Career Northern Researchers' Annual Meeting 2022, hosted at the Annual Scientific Meeting 2022
- **420 (35%)** Northern participants

The ArcticNet Student Association (ASA) kicked off ASM2022 by hosting over 600 students and early career researchers during the first ever annual Early Career Northern Researchers (ECNR) Annual Meeting, formally known as Student Day. The Annual Meeting was hosted in partnership with the Association of Canadian Universities for Northern Studies (ACUNS), Memorial University of Newfoundland – Labrador Campus, and the Association of Polar Early Career Scientists (APECS) Canada. The ECNR Meeting featured a plenary on how to conduct respectful and reciprocal northern research, multiple training sessions for ECNRs, various documentary screenings, and a lunch with mentors.

Throughout the ASM, four plenaries touched on a variety of subjects; The One Health Approach to Address Complex Challenges in the Arctic, Alternative and Sustainable Energy Innovation in the Arctic, Ocean Decade Initiatives for a Changing Arctic, and Sensitivity of Arctic Regions to Contaminants and Pollutants. These plenaries featured experts from a multitude of different sectors.

In addition to a compelling Scientific Program, ArcticNet hosted over 220 posters and 26 exhibitors in their exhibitor hall. ASM2022 ended with the award gala with the presentation of over 30 awards, including nine student poster awards. The Northern Travel Fund allowed for over 40 Inuit, First Nations, Métis, and other Northerners to attend the ASM2022. Thank you to Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), Arctic Research Foundation (ARF), Canadian Mountain Network (CMN) and Sentinel North for contributing to the fund alongside ArcticNet to provide funding for Northerners. Thank you as well to all ASM2022 sponsors who made this year's event possible: Amundsen Science, ARF, CIRNAC, Sentinel North, Weston Family Foundation, Polar Knowledge Canada, Canadian Science Publishing and CMN. Thank you to all the participants, presenters, partners and exhibitors for their contributions that helped make the ASM2022 such a success.

Our partners, LiveIt Earth, livestreamed and recorded all the plenary sessions and select topical sessions (available here) and created the ASM2022 Highlight Video (available here).

ArcticNet in the Media

ArcticNet continued to grow its social media presence and engagement, connecting with an audience of over 8300 followers on Twitter. ArcticNet launched an Instagram account this year, gaining a new online audience of over 250 followers.

In the 2022/23 fiscal year, ArcticNet was mentioned in 321 media articles and ArcticNet Network Investigators were mentioned in 1652 media articles.

Media Highlights

1. Siberian wildfire may have amped up Arctic algal bloom featuring ArcticNet researcher Mathieu Ardyna, posted on Futurity with a reach of 53M.
2. Legendary Mountain Explorer Bradford Washburn's "Lost Cache" Found after 85 Years featuring ArcticNet researcher Luke Copland, posted on Yahoo! Finance with a reach of 43M.
3. Davie announces funding for the Prince Albert II of Monaco Foundation (CANADA) to expand the Arctic Corridors and Northern Voices Program featuring ArcticNet Scientific Director Jackie Dawson, posted on Yahoo! Finance with a reach of 43M.
4. Government of Canada invests in climate change geohazard research in Yukon featuring ArcticNet researcher Fabrice Calmels, posted on Yahoo! Finance with a reach of 39M.
5. Explorer's camera from 1930s found on glacier in Yukon territory featuring ArcticNet researcher Luke Copland, posted on ABC News with a reach of 23M.

Publications

ArcticNet's projects comprise over 800 publications in the 2022/23 fiscal alone, 301 were peer reviewed publications. Of these 301 publications, 198 (66%) were open-access.

24 publications (8%) were published in journals with an impact factor greater than 10, such as Nature, Science, and Proceedings of the National Academy of Sciences (PNAS).

The top 10% of journals had impact factors equal to or greater than 9.8 (31 publications). The average impact factor was 5.7 from April 2022 to April 2023. 61 publications (20%) had an impact factor greater than the average.

Partnerships

ArcticNet has a geographic area of focus rather than a thematic one. This results in a broad and diverse research portfolio that requires a multidisciplinary and multisectoral approach with partners from academia, government, Indigenous organizations and communities, industry, non-profits, and international entities. To meet the needs of such a diverse group of stakeholders, the Network constantly engages with existing and relevant new partners to meet the needs of a changing Arctic. This year, ArcticNet continued building partnerships with various communities, organizations, governments, industries, and universities, including:

- In the 2022/2023 fiscal year, one of the largest areas of focus was the renewal of ArcticNet and its subsequent SSF application. Partnerships posed a significant part of this process, therefore allowing ArcticNet to develop new Indigenous partnerships, continue building our relationship with Inuit Tapiriit Kanatami (ITK) and Polar Knowledge Canada (POLAR), sign 13 new Memorandums of Understanding (MOUs) capturing the intention to work with a variety of partners, and obtain significant funding partnerships with Davie Shipbuilding and Oceans North.
- Thanks to partner contributions to the Northern Travel Fund, the ASM2022 hosted a record-breaking number of Northern participants. These partnerships, including CIRNAC, Arctic Research Foundation (ARF), Sentinel North, and the Canadian Mountain Network (CMN), contributed funds that exceeded $225K, which, when coupled with ArcticNet's contribution, supported 40 Northern and Indigenous attendees to the ASM.
- ASM2022 welcomed several sponsors this year, including but not limited to: Amundsen Science, ARF, CIRNAC, the Weston Family Foundation (WFF), Sentinel North, and the CMN.
- The Weston Family Foundation continues to be a key partner for ArcticNet, including being the first partner to directly fund an IQP project, continuing to support the ASM, support for the Network's SSF proposal, and a series of training courses with accreditation set to launch in Fall 2023, with the purpose of developing and incorporating efficient knowledge mobilization strategies and activities in their research projects and proposal writing.

National and International Visibility

This year, ArcticNet expanded and enhanced its national and international visibility. The Directors secured multiple meetings with high level government agencies and ministries to discuss Arctic science, including Ministers Vandal, Champagne, Duclos, Anand, and Joly. Two federal ministers, Vandal and Guilbeault, highlighted the importance of Arctic science efforts in Canada and the important role of ArcticNet while providing opening remarks at ASM2022. Overall, ArcticNet engaged with a large number of government agencies and ministries, including and not limited to CIRNAC, Indigenous Services Canada, Fisheries and Oceans Canada, Transport Canada, Canadian Coast Guard, Natural Resources Canada, National Research Council, Environment and Climate Change Canada, Canadian Hydrographic Service, Global Affairs Canada, Innovation, Science and Economic Development Canada (ISED) and POLAR.

The Directors attended numerous events organized by relevant international embassies and gave several talks at embassy events for the ambassadors to Canada from Switzerland, Finland, Italy, Norway, Germany, and Iceland. The efforts made to enhance ArcticNet's influence and visibility this year were highly successful and the Network is now even better connected to decision-makers, influencers, and leaders across Canada and internationally.

Strategic Science Fund

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2022/2023 was a year charged with strategic planning, co-development, and broad engagement. The ArcticNet directors worked to steer the Network through a myriad of initiatives with agility and vision. At the highest level of governance, the Board of Directors and the Transformation Committee guided the Network through major strategic initiatives, including ArcticNet's submission of a full application to ISED's Strategic Science Fund (SSF) and the establishment of new partners and the maintenance of strong allies to co-create the future of ArcticNet.

For the SSF application, we requested just under $47M to support ArcticNet into the future (2024-2029). If successful, the funds will anchor a national Arctic science program, which is valued in excess of $157M (with contribution commitments from partners). Leading up to submission, weekly meetings with the SSF writing team (ArcticNet, ITK/Inuit Circumpolar Council (ICC), and POLAR) were held throughout June, July and August. We obtained 21 letters of support; the first 20 were submitted, including a joint letter from ITK/ICC, a joint letter signed by 23 universities, 11 by Indigenous or territorial governments, 3 private or philanthropic organizations, 3 federal departments, and one international research council. We spent months engaging with multiple national and international partners and succeeded in obtaining 15 MOUs. The strength the letters of support provide and the clear commitment from partners are a testament to the relationships we have firmly secured over the past few years.

The new organizational mission is to support collaborative knowledge generation and mobilization, and the collective power of discovery through diversity, talent, culture, self-determined research, and leveraging action, to achieve more together than we could apart. To operationalize this vision and mission, our objectives are organized around four pillars: (P1) Leveraging discovery and diversity, (P2) Convening and connecting, (P3) Unleashing capacity, and (P4) Mobilizing knowledge.

From now until 2024, strategic planning and engagement will proceed, and concrete steps will establish the new corporation and ensure the proper transformation of ArcticNet. That being said, the current governance structure of ArcticNet is poised for a very smooth transition.

ArcticNet Directors

Dr. Jackie Dawson, Scientific Director

Dr. Jackie Dawson (Ph.D.) is an Associate Professor at the University of Ottawa in the Department of Geography, Environment, and Geomatics and holds the Canada Research Chair in Environment, Society, and Policy. She is also a Scientific Director of the Network of Centres of Excellence, ArcticNet. Dr. Dawson is an Applied Scientist working on the human and policy dimensions of environmental change in ocean and coastal regions and is considered an expert in Arctic shipping, Arctic tourism, and Arctic oceans governance. She is an elected fellow of the prestigious College of the Royal Society of Canada, the Global Young Academy and the Royal Canadian Geographic Society. She has served as an invited expert on two Canadian Council of Academies (CCA) Expert Panels and now serves on the CCA Scientific Advisory Committee. Dr. Dawson is also currently serving on the United Nations Decade of Oceans Science (2021-2030) Arctic Task Force. Dr. Dawson has published over 75 peer reviewed journal articles, 50 technical reports, and 20 book chapters. She also acted as an invited lead author on Arctic Council's report 'Adaptation Actions for a Changing Arctic' and continues to contribute to several Arctic Council working groups. Dr. Dawson has secured over $47M in research funding and has given over 200 public presentations including more than 60 invited national and international speeches. Dr. Dawson has trained over 100 HQP including 39 postdoctoral fellows, graduate, and undergraduate students, and 62 Inuit and Northern research assistants.

Dr. Philippe Archambault, Co-Scientific Director

Dr. Philippe Archambault (Ph.D.) is a Professor in the Department of Biology at Université Laval, in Québec City. He is also a Scientific Director of the Canadian Network of Centres of Excellence, ArcticNet. He is a researcher who strives to link fundamental biodiversity questions and theoretical research on global change and its effects on ecosystems functioning to applied science and policymaking. His work has been used to develop Marine Protected Areas in Canada and has been incorporated into United Nations high-level environmental management decision-making. His well-known reputation in Research Network leadership is based on his headship of different national and international initiatives such as the multisectoral Network of Innovation called 'Notre Golfe', winner of the 'Prix Étoile' from Québec-Ocean, or as chairman of the 4th World Conference of Marine Biodiversity, winner of the 'Prix du Club des Ambassadeurs du Palais de congrès de Montréal et des Fonds de recherche du Québec'. He is on the International Science Advisory Board of Ocean Networks Canada and a benthic expert on Circumpolar Marine Biodiversity program which is a cornerstone program of the Arctic Council's Conservation of Arctic Flora and Fauna Working Group. Additionally, he co-leads a theme section on the effect of multistressors on marine biodiversity in the Natural Science and Engineering Research Council (NSERC_ of Canada, Canadian Healthy Oceans Network. The result of his research on connectivity of marine biodiversity at the planetary level was selected as one of the 10 discoveries of 2019 by the Québec Science magazine. He is strongly engaged in training the next generation of marine scientists.

Dr. Christine Barnard, Executive Director

Dr. Christine Barnard (Ph.D.) is a bilingual northern research and infrastructure executive with more than sixteen years of leadership experience in Arctic and northern research networks. As Executive Director at ArcticNet, the world's largest national Arctic research network, Dr. Barnard leads a team to support, promote and develop multidisciplinary and cross-cultural Arctic research. She has steered ArcticNet into a new phase of its mandate, focused on advancing innovative science, empowering northern communities and strengthening national and international partnerships that bring Canada's Arctic expertise to the world. She believes in participatory leadership, thinking strategically and acting purposefully. Dr. Barnard brings a wealth of senior leadership experience managing the research and infrastructure program at the Centre d'études nordiques (CEN) at Université Laval, a collective of over 300 multidisciplinary scientists studying northern terrestrial and freshwater systems. She co-developed research stations with Inuit communities and managed millions of dollars in infrastructures funds. Since 2006, Dr. Barnard has served and currently serves on numerous national and international boards and advisory committees, such as international Sustaining Arctic Observing Networks (SAON) Advisory Panel of the Arctic Council, the Canadian Consortium for Arctic Data and Interoperability (CCADI), the Board of Directors for the Canadian Network of Northern Research Operators (CNNRO), the Hudson Bay Consortium Steering Committee, the Infrastructure Working Group for the Institut nordique du Québec (INQ). She has also represented Université Laval and CEN at the Association of Canadian Universities for Northern Studies (ACUNS), the International Network for Terrestrial Research and Monitoring in the Arctic (INTERACT) and the University of the Arctic. Over the course of her professional career, Dr. Barnard has gained a reputation for sound program management, strategic thinking in political arenas, collaborative partnership development, and science management expertise. She is passionate about northern communities, and the role research can play in supporting the sustainable development of a healthy North. Dr. Barnard holds an M.Sc. and a Ph.D. in Environmental Sciences.

ArcticNet Board of Directors

The **Board of Directors** is responsible for the overall governance of the network and acts in accordance with the By-Laws of ArcticNet Inc. A majority of Board members are senior officials of organizations other than Network Member Institutions, coming from Inuit organizations, government, industry, non-governmental organizations, and not-for-profit organizations. Subcommittees of the Board of Directors include the Executive Committee, the Audit and Finance Committee, the Governance and Nomination Committee, and the Transformation Committee.

Voting Members

- Dr. Philippe Archambault: Co-Scientific Director, ArcticNet/Professor, Université Laval
- Cedar Bradley-Swan: Chief Executive Officer, Adventure Canada
- Dr. Jackie Dawson: Scientific Director, ArcticNet/ Professor, University of Ottawa
- Dr. Jean Holloway: Postdoctoral Fellow, University of Ottawa
- Dr. Digvir Jayas: Vice-President (Research and International), University of Manitoba
- Dr. Brendan Kelly: Executive Director, Study of Environmental Arctic Change (SEARCH) Program
- Dr. Donna Kirkwood: Chair of the Board of Directors
- Lisa Koperqualuk: President, Inuit Circumpolar Council Canada
- Megan Leslie: President and CEO, World Wildlife Fund Canada
- Guy Levesque: Associate Vice-President (Research Support and Infrastructure), University of Ottawa
- Dr. Olivier Moroni: Assistant to the Vice Rector and Head of Research Infrastructures and Special Projects, Université Laval
- Natan Obed: President, Inuit Tapiriit Kanatami
- Dr. Milla Rautio: Professor, Université du Québec à Chicoutimi

Non-Voting Members

- Dr. Christine Barnard: Executive Director, ArcticNet
- Sara Esam: Senior Program Manager, Networks of Centres of Excellence

ArcticNet Secretariat

Acting under the direction of the Executive Director, ArcticNet's Administrative Centre is located on the campus of Université Laval in Québec City, Québec, Canada and is responsible for the daily operations of ArcticNet. Staff also operate out of the University of Ottawa, Ottawa, Canada. The Centre comprises the administrative offices of the network and includes its staff and equipment.

- Dr. Jackie Dawson: Scientific Director
- Dr. Philippe Archambault: Co-Scientific Director
- Dr. Christine Barnard: Executive Director
- Alexa Reedman: Research and Partnerships Manager
- Pascale Ropars, replaced by Guillaume Proulx: Science Program Officer
- Claude Lévesque: Research Program Coordinator
- Shirin Nuesslein, replaced by Aisha Sada: Program Officer, Northern-Led Research
- Erica Baird: Communications and Events Officer
- Dr. Martine Lizotte: Training and Knowledge Mobilization Coordinator
- Julia Macpherson: Science Communications Coordinator
- Christine Demers: Executive Assistant
- Sabrina Gaudreault: Administrative, Events and Human Resources Coordinator
- Mayli Descoteaux, replaced by Érica Leroux: Finance Administrator

ArcticNet Committees

The **Research Management Committee** (RMC) manages the Core Research Program, High Impact Publications Program, advising on the ASM scientific program, and ensures ongoing assessment of all projects to provide recommendations to the BOD regarding research priorities and budget allocations.

The **Inuit Research Management Committee** (IRMC) provides guidance, recommendations and direction to the ArcticNet Board of Directors related to Inuit research needs and priorities, policy development, and research activities. The IRMC leads all stages of ArcticNet's North-by-North (NxN) program development and implementation with specific responsibility for the Inuit Qaujisarnirmut Pilirijjutit. Voting members of this committee are representatives from the Inuvialuit Regional Corporation (IRC), Makivik Corporation, Kativik Regional Government (KRG), Nunavut Tunngavik Inc. (NTI), and Nunatsiavut Government. Non-voting observers include the Inuit Circumpolar Council Canada (ICC), Inuit Tapiriit Kanatami (ITK), ArcticNet directors and North-by-North Program staff

The **Inuit Research Advisors** help facilitate research in each of the four Inuit Land Claim regions of the Canadian Arctic.

The **Territorial Advisory Committee** (TAC) provides guidance and recommendations related to needs and priorities of Northern post-secondary institutions and the territories with regards to strategic planning, research needs/gaps, input of traditional knowledge, community involvement, training, and education. The members are actively involved in the North-by-North Program, specifically the **Northern Research Leaders Program**.

The **ArcticNet Student Association** works to broaden the ArcticNet student experience by promoting student learning, research and networking opportunities between students, academics, governmental partners, and northerners.

Research Management Committee

Members

- Jean Allen: Senior Research Advisor, Nunavut Tunngavik Inc.
- Andrew Applejohn: Territorial Representative, Government of the Northwest Territories
- Dr. Philippe Archambault: Co-Scientific Director, ArcticNet
- Nicole Couture: Manager/Researcher, Geosciences & CC, Natural Resources Canada/Government of Canada
- Dr. Dorthe Dahl-Jensen: Professor, University of Manitoba
- Dr. Jackie Dawson: Scientific Director, ArcticNet
- Dr. Chris Derksen: Research Scientist, Environment and Climate Change Canada
- Jeremy Ellsworth: Environment and Research Coordinator, Inuit Circumpolar Council Canada
- Gregor Gilbert: Director of Environment and Wildlife, Makivvik Corporation
- Véronique Gilbert: Assistant Director, Lands and Environment, Kativik Regional Government
- Dr. Sherilee Harper: Researcher, University of Alberta
- Sarah Kalhok Bourque: Chair – Northern Contaminants Program, Indigenous and Northern Affairs/Government of Canada
- Dr. Susan Kutz: Professor, University of Calgary
- Dr. Zou Zou Kuzyk: Associate Professor, University of Manitoba
- Rodd Laing: Director of Environment, Nunatsiavut Government
- Eric Loring: Senior Policy Advisor, Inuit Tapiriit Kanatami
- Dr. Lisa Loseto: Research Scientist, Fisheries and Oceans Canada
- Martin Lougheed: Inuit Tapiriit Kanatami
- Dr. Guillaume Nielsen: Industrial Research Chair, Yukon University
- Annika Ogilvie: Ice and Remote Sensing Analyst, Fednav Limited
- Jenn Parrott: Director, Innovation Science and Climate Change, Inuvialuit Regional Corporation/Inuvialuit Settlement Region
- Dr. Kevin Turner: Assistant Professor, Brock University
- Carol-Anne Villeneuve: ASA President/Student, University of Montreal

Observers

- Dr. Christine Barnard: Executive Director, ArcticNet
- Sara Esam: Senior Program Manager, Networks of Centres of Excellence
- Claude Lévesque: Research Program Manager, ArcticNet
- Alexa Reedman: Research and Partnerships Manager, ArcticNet
- Guillaume Proulx: Science Program Officer, ArcticNet

Inuit Research Management Committee

Members

- Jean Allen: Senior Research Advisor, Nunavut Tunngavik Inc.
- Brenda Anderson: Inuit Research Advisor (IRA), Nunavut Tunngavik Inc.
- Gregor Gilbert: Director of Environment, Wildlife and Research, Makivik Corporation
- Rodd Laing: Director of Environment, Nunatsiavut Government
- Monica Nashak: Inuit Research Advisor, Kativik Regional Government
- Carla Pamak: Chair, Inuit Research Advisor, Nunatsiavut Government
- Jenn Parrott: Director of Innovation, Science and Climate Change, Inuvialuit Regional Corporation (IRC)

Observers

- Dr. Christine Barnard: Executive Director, ArcticNet
- Dr. Jackie Dawson: Scientific Director, ArcticNet
- Jeremy Ellsworth: Environment and Research Coordinator, Inuit Circumpolar Council Canada, Program Support
- Eric Loring: Senior Policy Advisor, Inuit Tapiriit Kanatami
- Martin Lougheed: Inuit Tapiriit Kanatami
- Aisha Sada: Program Officer, Northern-Led Research
- Alexa Reedman: Research and Partnerships Manager, ArcticNet

Inuit Research Advisors

- Eric Loring: Senior Policy Advisor, Inuit Tapiriit Kanatami (ITK)
- Monica Nashak: Inuit Research Advisor, Kativik Regional Government
- Carla Pamak: Inuit Research Advisor, Nunatsiavut Government

Territorial Advisory Committee

Members

- Andrew Applejohn: Senior Science Advisor, Government of the Northwest Territories
- Dr. Davon Callander: Manager – Research and Scholarly Activities, Research Service Office, Yukon University
- Sabrina Kinsella: Acting Senior Science Advisor, Government of Yukon
- Joel McAlister: Director (Western Arctic Research Centre), Aurora College
- Jamal Shirley: Manager (Research Design and Policy Development), Nunavut Research Institute

Observers

- Dr. Christine Barnard: Executive Director, ArcticNet
- Dr. Jackie Dawson: Scientific Director, ArcticNet
- Aisha Sada: Program Officer, Northern-Led Research, ArcticNet
- Alexa Reedman: Research and Partnerships Manager, ArcticNet

ArcticNet Student Association

- Carol-Anne Villeneuve: President, University of Montreal
- Ashley Cameron, Vice President, Memorial University of Newfoundland
- Fowzia Ahmed: Secretary, University of Manitoba
- Caila Kucheravy: English Communications Officer, University of Manitoba
- Khashiff Miranda: French Communications Officer, Université Laval
- Alissa Sallans: Network Liaison Officer, University of Ottawa
- Camille Lavoie: Education and Outreach Officer, Université Laval
- Galina Jonat: Executive at Large, Carleton University
- Josh Komangapik: Northern Communications Officer, Royal Roads University
- Aidan Oliver: Event Coordinator and Network Liaison Officer, Carleton University

Full list of projects

Academic Research Program

Marine Systems

- **Camera community-based Arctic marine mammal studies (CCAMMS)**
  Marianne Marcoux, University of Manitoba
- **An ecosystem approach to quantifying behavioural and energetic impacts of anthropogenic disturbance to Arctic whales**
  Sarah Fortune, Dalhousie University
- **Rapidly changing ecosystem dynamics in the Arctic Ocean's Last Ice Area (RED-AO)**
  Audrey Limoges, University of New Brunswick
  Mathieu Ardyna, Université Laval
- **Weather and aajurait (lead) Monitoring for sea ice safety during the break-up season**
  Derek Mueller, Carleton University
- **Nutrient fluxes and living marine resources in the Inuit Nunangat**
  Jean-Éric Tremblay, Université Laval
- **Community-based research on winter water modifications in the coastal domain of Hudson Bay: Implications for freshwater-marine coupling, biological productivity and the carbon cycle**
  Zou Zou Kuzyk, University of Manitoba
- **GO-Ice: Glacier-Ocean-Iceberg Dynamics in a Changing Canadian Arctic**
  Luke Copland, University of Ottawa
- **Downscaling future oceanography projections in the Canadian Arctic and Subarctic**
  Eric Oliver, Dalhousie University
- **A Co-operative Observation Network to Address Community Research Priorities While Studying Marine Biogeochemistry**
  Brent Else, University of Calgary
- **Arctic Seafloor Mapping Data Processing and Dissemination**
  Jean-Carlos Montero-Serrano, Université du Québec à Rimouski
  Ian Church, University of New Brunswick
- **Fate of kelp forests in a rapidly changing Arctic (ArcticKelp)**
  Philippe Archambault, Université Laval
  Karen Filbee-Dexter, Université Laval, University of Western Australia
- **Improved Canadian Arctic Sea Ice Thickness Estimates**
  Julienne Stroeve, University of Manitoba

Terrestrial Systems

- **Thermokarst Lakes: Dramatic increases in the removal of thermokarst lakes from the Canadian Arctic Landscape (TLRemoval)**
  Philip Marsh, Wilfrid Laurier University
- **Trying to make fetch happen: including tall shrubs in the atmospheric carbon budget of western Inuit Nunangat**
  Oliver Sonnentag, Université de Montréal
- **Understanding Arctic grizzly bear range expansion: a community-oriented approach**
  Douglas Clark, University of Saskatchewan
- **Snow changes Impacts on Kangiqsualujjuamiut (SCIK)**
  Alexandre Roy, Université du Québec à Trois-Rivières
- **Indigenous Knowledge of Berries in the Northwest Territories**
  Erin Cameron, Saint Mary's University
- **Developing seasonal multi-layer network models to evaluate cumulative impacts on Arctic ecosystems**
  Pierre Legagneux, Université Laval
- **Changing nutrients and food web health in northern lakes and rivers**
  Milla Rautio, Université du Québec à Chicoutimi
  Suzanne Tank, University of Alberta
- **Understanding and predicting future coastal climate-vegetation-cryosphere interactions in coastal Labrador**
  Robert Way, Queen's University
- **Ensuring water security in the High Arctic: understanding the impacts of changing permafrost and hydrology on water quality and aquatic ecosystems.**
  Melissa Lafrenière, Queen's University
- **Long-term hydrological dynamics of Canada's largest watershed: climate controls on water quantity and quality of the Mackenzie River Basin**
  Jennifer Galloway, University of Calgary
- **Nunataryuk – Permafrost thaw and the changing Arctic coast: the MacKenzie delta and coastal waters sampling**
  Marcel Babin, Université Laval

Knowledge Transfer

- **Dehcho Collaborative on Permafrost**
  William Quinton, Wilfrid Laurier University
- **KUUK-SHIPI-SHIPU Building bridges and local capacities to track change: community-based environmental monitoring in the George River watershed, Nunavik, Canada**
  Esther Lévesque, Université du Québec à Trois-Rivières
- **Understanding Inuit community uses and needs for weather, water, ice and climate information and services**
  Gita Ljubicic, McMaster University
- **Using Co-Produced Knowledge to Understand and Manage Subsistence Marine Harvests in a Changing Climate**
  Lisa Loseto, University of Manitoba

Northern Policy and Development

- **Future Arctic Mobilities: Informing transportation adaptation through climate observations and model projections of changing snow and ice**
  Sapna Sharma, York University
- **ArcticFish: Fisheries resources in the changing Canadian Arctic Ocean**
  Maxime Geoffroy, Memorial University
- **Supporting sustainable development of community Greenland halibut fisheries in the Eastern Canadian Arctic**
  Nigel Hussey, University of Windsor
- **Modernizing Ecosystem Monitoring to Support Sustainable Development in the Eastern Canadian Arctic**
  Paul Smith, Carleton University
  Christina Semeniuk, University of Windsor
- **Understanding the effects of climate change and industrial development on contaminant processes and exposure in the Canadian Arctic marine ecosystem (ACCCPE)**
  Gary Stern, University of Manitoba
- **Mitigating Arctic Shipping Risks Through Improved Prediction of Conditions Leading to Besetments in Pressured Ice in the Hudson Strait**
  Andrea Scott, University of Waterloo
- **Towards a marine management plan for Nunatsiavut: Coastal ecosystem research in support of priority concerns of Inuit**
  Tanya Brown, Simon Fraser University
  Max Liboiron, Memorial University
- **Arctic Shipping and Transportation in a Rapidly Changing Arctic**
  Jackie Dawson, University of Ottawa

Inuit Health, Adaptation & Education

- **Supporting humans in a thawing landscape**
  Fabrice Calmels, Yukon University
- **Qanuilirpitaa 2017 – Understanding the determinants of health and well-being to support the implementation of population health promotion programmes, interventions, and services in Nunavik.**
  Pierre Ayotte, McGill University
- **Community-led housing in the Canadian North: mobilizing the development of supportive housing plans through knowledge sharing and engagement in the NWT and Nunavut**
  Julia Christensen, Memorial University
- **The Canadian Arctic One Health Network**
  Emily Jenkins, University of Saskatchewan
  Patrick Leighton, Université de Montréal
- **Moving from understanding to action on food security in the Canadian Arctic**
  Matthew Little, University of Victoria
  Tiff-Annie Kenny, Université Laval
- **Effective teachers for successful students: An investigation of the preparation and resiliency of Northern educators**
  Ruth Kane, University of Ottawa
  Kathy Snow, University of Prince Edward Island
- **Microplastics and Associated Chemicals: Transport to and within the Canadian Arctic (MPACs)**
  Liisa Jantunen, University of Toronto

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North-by-North Program
IQP

Inuit Health Education and Adaptation

- **Hilap Aulaaniit Qanuq Atayut (The World and its Connections)**
  Emily Angulilak
- **Assessment of the viability of goose harvesting as a response to food sovereignty in Arviat**
  Kukik Baker, Aqqiumavvik Society
- **Bringing back the beluga whale harvest in Aklavik**
  Michelle Gruben, Aklavik Hunters and Trappers Committee
- **Understanding Patterns of Social Interactions in the Inuvialuit Settlement Region to Support Prevention and Management of Infectious Diseases**
  Jenn Parrott, Inuvialuit Regional Corporation
- **Visualizing Rigolet Perspectives on the Muskrat Falls Project**
  Jessica Penney, Nunatsiavut Government

Marine Systems

- **Qikiqtani inshore fisheries surveys: studying coastal marine species in Kinngait, Sanikiluaq, Sanirajak and Igloolik**
  Brian Burke, Qikiqtaaluk Corporation
- **Acoustic monitoring for community empowerment at Clyde River, Nunavut**
  Shari Fox, Ittaq Heritage and Research Centre
- **Walrus Health and Population Dynamics in the Context of Climate Change**
  Mathilde Lapointe St-Pierre, Nunavik Research Centre
- **Marralik estuary beluga project**
  James May, Regional Nunavimmi Umajulirijii Katujiqatigininga (RNUK)
- **Kaujivalliajut nillikulunnik | Getting to know little geese**
  Meredith Purcell, Torngat Wildlife & Plants Co-Management Board
- **Water sampling to establish environmental baseline conditions for rivers supporting Arctic char near Naujaat**
  Johnny Tagornak, Arviq Hunters and Trappers Organization

Northern Policy and Development

- **Kitikmeot Inuit Qaujimajatuqangit framework for polar bear monitoring and management**
  Pamela Wong, Kitikmeot Regional Wildlife Board

Terrestrial Systems

- **Study of Arctic char catches and stock assessment and winter disappearance in Tasirjuarusik**
  Noah Eetook, Northern Village of Kangirsuk
- **Health of Arctic Char near Kugluktuk, Nunavut**
  Eric Hitkolok, Kugluktut Hunters and Trappers Organization
- **Inuit knowledge and molecular biology addressing industrial impacts in the Kivalliq**
  Vincent Lherault, Kivalliq Wildlife Board
- **The effects of coastal storms on beaches in and around Cabin/Camping areas, Ausuittuq, Nunavut**
  Terry Noah, Ausuittuq Adventures
- **Investigating Water Quality in Fish-bearing Lakes in Imaryuk**
  Shanay Williams, Inuvialuit Regional Corporation
- **Approach to Knowledge Sharing for Understanding Culturally Important Marine Areas in Inuit Nunangat**
  Justin Milton, Ikaarvik

Knowledge Transfer

- **Ujjiqsurniq Avatiptini (Ability to Observe our Surroundings): A knowledge exchange between Mittimatalingmiut and Arviarmiut**
  Natasha Simonee, Aqqiumavvik Society
- **Using Traditional and Local Knowledge to Better Understand the State of the Beaufort Sea**
  Tess Forbes, Inuvialuit Regional Corporation
- **Youth research training program with the Foxe Basin Kivalliq North Sapujiyiit/Guardians of the Sea Society**
  Sarah Newell, Foxe Basin Kivalliq North Sapujiyiit/Guardians of the Sea

Financial Report

Statement of operation

REVENUES	
NCE Grant	8 015 617,00 $
Network partners Non nce	856 019,00 $
Others	1 022 959,00 $
Total revenues	**9 894 595,00 $**

EXPENSES	
Research projects	5 812 403,00 $
Research and logistics support	453 500,00 $
Knowledge mobilization	412 017,00 $
Knowledge and training	1 828 697,00 $
Communications	81 150,00 $
Administrative Center	1 212 322,00 $
Total expenses	**9 800 089,00 $**
Excess of expenses over revenues	94 506,00 $

Balance sheet

ASSETS	
Cash	10 457 591,00 $
Account receivable	283 446,00 $
Prepaid expenses	20 817,00 $
Sub-total	**10 761 854,00 $**
Capital assets	16 371,00 $
Total	**10 778 225,00 $**

LIALIBITIES	
Accounts payable and accrue liabilities	690 578,00 $
Deferred grants	7 922 147,00 $
Total	**8 612 725,00 $**

NET ASSETS	
Invested in capital assets	16 371,00 $
Unrestricted Assets	2 149 129,00 $
Total	**10 778 225,00 $**

Working together in a changing Canadian Arctic

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