



Institut nordique du Québec

2014-2015 ACTIVITY REPORT

Together for the North

INRS
UNIVERSITÉ DE RECHERCHE



UNIVERSITÉ
LAVAL



McGill

A WORD FROM SOPHIE D'AMOURS AND RENÉ THERRIEN



In recent years, many Quebec researchers and experts have made groundbreaking efforts to rally the scientific community in founding a new institute for northern studies: the Institut nordique du Québec (the Institute). The cornerstone of this initiative was a far-reaching alliance between Université Laval, McGill University, Institut national de la recherche scientifique, and numerous other public, private, and academic partners. The mission of the Institut nordique du Québec is to keep its partners on the cutting edge of advancing knowledge and its applications in the field of northern and circumpolar development.

The social, environmental, and economic issues surrounding northern development are complex — as are the underlying challenges. We therefore adopted an inclusive, collaborative, and multidisciplinary approach that would support the Institut nordique du Québec's development and optimize its odds of success. By working closely with northern and Aboriginal communities, members of the Institut nordique du Québec made a commitment to play a key role in the ethical and harmonious development of Northern Quebec and the Canadian Arctic.

The past year, 2014–2015, has been a landmark year. It is the year that saw the conclusion of vital partnerships, the launch of the Institut in conjunction with northern communities, and a \$3 million commitment from the Government of Québec to get the ball rolling. The partners crystalized their vision and laid a foundation by drawing on the expertise of Quebec researchers. We thank the members of the implementation committee who advised the executive committee on setting up the Institute. More than 30 people had a hand in preparing statutes and other important documents.

The project made significant progress this year, and Quebec researchers have cemented their status as leaders in northern research and innovation. We are delighted to present this annual report detailing all this progress.

A handwritten signature in black ink, appearing to read 'S. D'Amours'.

Sophie D'Amours
Chair, Executive Committee

A handwritten signature in black ink, appearing to read 'René Therrien'.

René Therrien
Chair, Implementation Committee

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Background

THE NORTH: CHALLENGES AND INNOVATION

Researchers from Quebec and elsewhere in Canada have been active in the North for over half a century. From marine ecosystem protection to the loss of sea ice, they study the issues—and there are plenty of them!—affecting the North. Perhaps it would be more accurate to speak of the Norths, given the world of diversity and contrast that exists between the 49th parallel and the Arctic of Nunavik. Climate change, industrialization, and modernization have dramatically impacted the environment, economy, culture, and health of populations within this region.

Building on their wide-ranging expertise in the natural, social, health, and engineering sciences, Quebec and the rest of Canada have, over time, become world leaders in northern research. A consensus has grown within the scientific community that this expertise needs to be brought together to assist decision-makers and societies in tackling the challenges the North presents.

The result is the Institut nordique du Québec (INQ), bringing together the best northern and Canadian arctic research talent to work toward ethical and harmonious development of Northern Quebec and the Canadian Arctic. The project, which was officially announced in fall 2014, came about through an unprecedented academic partnership spearheaded by Université Laval, McGill University and Institut national de la recherche scientifique (INRS), in close collaboration with the public and private sectors.

Northern Quebec in Figures



Area of
1.2 million km²



72%
of Quebec's
surface area



Over
200 000 km²
of forest



Over
75%
of Quebec's hydroelectric
capacity



Over
120,000
people



1/3
of the population of
Aboriginal origin



4
Aboriginal nations
(Inuit, Cree, Innu,
and Naskapi) in
31 communities



32
Non-Aboriginal
communities
(James Bay,
Lac Saint-Jean, and
Côte-Nord regions)



215
Université Laval,
McGill University,
and INRS researchers
working on northern
issues

The Project

The architectural design concept for the new building on the Université Laval campus will emphasize wood and natural lighting. The cost is estimated at \$75 million.

THE INSTITUT NORDIQUE DU QUÉBEC

The INQ will bring together Quebec's leading researchers to crystallize the latest research findings and expertise in order to provide governments and northern communities the knowledge and know-how they need for the sustainable development of Northern Quebec and the Canadian Arctic. The INQ will also support the Indigenous peoples of the North in their political, economic, and social development by pooling scientific knowledge with the knowledge held by Aboriginal communities. And it will help train the researchers of the next generation of researchers, who will adapt sustainability concepts to the unique conditions of Northern Quebec and the Canadian Arctic. Training future experts to face the challenges of Northern Quebec, both occupationally and in research and innovation, is among the INQ's priorities. As the only centre of its kind, it will create synergies among northern centres of excellence and add to the knowledge we need to tackle questions relating to social, economic, and climate change in the North. The INQ will act as a magnet for top-notch research talent, a source of technological and social innovation, and a powerful economic engine. It will position Quebec and Canada at the forefront of research and innovation on the international stage, while promoting partnerships with other countries invested in major northern and arctic research programs, such as the United States, Norway, Iceland, France, Japan, Denmark, and China. INQ researchers will be centre stage in global northern research, with northern communities and institutions as full participants.

The INQ will act as a magnet for top-notch research talent, a source of technological and social innovation, and a powerful economic engine. It will position Quebec and Canada at the forefront of research and innovation on the international stage ...

The INQ has plans for facilities in at least four locations: a main building at Université Laval with facilities and equipment at INRS, McGill, and in Kuujuaq. (Nunavik is the only part of the Canadian Arctic without a postsecondary institution.) The new building in the works for the Université Laval campus will be a hive of research activity that brings together several of Quebec's centres of excellence on the North working in fields ranging from natural resources to health, engineering, social sciences, and humanities. It will house specialized laboratories, storage space, and workshops for technological innovation and preparation of expeditions to northern terrestrial and marine environments. There will be a lecture hall and a videoconference room for use in communicating with northern communities and other partners. Space will also be set aside for distance studies for northern students and other residents. Overall, the building will be the headquarters for some 200 people, including researchers, visiting researchers, professionals, and graduate students.

Vision

RESEARCH AND INNOVATION FOR A SUSTAINABLE NORTH

The INQ's vision reflects its partners' desire and determination to develop a sustainable North based on a foundation of knowledge.

To integrate scientific knowledge with that of local communities, including Aboriginal knowledge, and partner with the public and private sectors to develop the Canadian Arctic and Northern Quebec for future generations, providing clean energy, healthy ecosystems, viable infrastructures, economic prosperity, vibrant cultures, and adapted education and healthcare systems.

WHAT SOME OF OUR PARTNERS ARE SAYING:



"The INQ will serve as an all-in-one integrated platform for interdisciplinary research. It will also be a fantastic showcase for the development of international partnerships."

Marcel Babin

Canada Excellence Research Chair in Remote Sensing of Canada's New Arctic Frontier, Director, Takuvik Joint Research Unit, and Professor in the Department of Biology at Université Laval



"Beyond the interdisciplinary approach researchers have long sought, northern development calls on us to chart a cross-sectoral and inter-organizational course in developing knowledge. Soon we'll be looking back and realizing that the INQ was the new bridge connecting science to the knowledge that helps communities, agencies, organizations and governments develop a sustainable North respectful of culture and the environment."

Yves Bégin

Vice Rector of Research and Academic Affairs, INRS



"Our hope is that the Institut nordique du Québec will be an inspiring example of partnership. We're putting science and innovation to work for society in an ambitious effort to develop Quebec's North sustainably—a worthy challenge!"

Brigitte Bigué

INQ Project Director



"The INQ provides an unprecedented opportunity for networking across disciplines and to learn from the distinctive social, environmental and economic concerns of communities in Northern Quebec, while contributing the scientific knowledge and technical expertise necessary to reach local solutions."

Rosie Goldstein

Vice-Principal, Research and International Relations
McGill University



"The INQ brings together a community of accomplished researchers from diverse backgrounds—academic, industrial, institutional, national, and international—in pursuit of a common goal. This multidisciplinary community of cutting-edge researchers allows us to envisage a form of northern economic, social, and energy resource development that incorporates the most advanced possible knowledge. The institute will position Quebec as a world-class player in northern science, in the broadest sense of the term."

Gaétan Lantagne

Scientific Director, Institut de recherche d'Hydro-Québec



"The INQ will give me easier and better access to a group of people working on northern issues. I see this platform helping me keep Canadian and international researchers, as well as government agencies with a similar focus, up to date on my work, and sparking us with new ways to share our findings and keep our fingers on the pulse of society and its needs. I also believe the INQ will help make science more cross-disciplinary. I'm really looking forward to see all it will bring us."

Isabelle Laurion

Researcher at Centre Eau Terre Environnement and Professor at INRS



"With the INQ the scientific community has a fantastic opportunity to improve the health and welfare of Aboriginal people in Quebec by making a real effort to adopt a thoughtful and culturally sensitive approach based on relationships, respect, and reciprocity. This initiative will lay the foundations for maintaining and improving Aboriginal health and welfare."

Paul Brassard

Associate Professor in the Faculty of Medicine at McGill University and Researcher in the Clinical Epidemiology Division of McGill University Health Centre



"I'm very pleased with the establishment of the INQ. This is great news, and the Nunavik Research Centre, run by Makivik Corporation, will work with the INQ to plan and conduct interdisciplinary research. Such synergy will help guide and inform wildlife management decision makers so they can ensure the long-term viability of the resources the Inuit of Nunavik depend on for food and sustenance. It's a relationship that's part of our definition of who we are."

Adamie Delise Alaku

Executive Vice President, Renewable Resources, Makivik Corporation



"By regrouping Quebec's forces in the natural sciences, social sciences and health sciences, the INQ will allow Quebec to achieve leadership in the full spectrum of northern research topics, and to gain international recognition as a global hub for northern innovation, interdisciplinary collaboration and education at all levels."

Warwick F. Vincent

Director of Centre d'études nordiques and Professor in the Department of Biology at Université Laval



"The Canadian Arctic and Northern Quebec are the new frontier for research, social innovation, and economic development. The INQ will serve as the crucible of northern research in Quebec, pooling and cross-fertilizing scientific expertise from here and abroad to promote the harmonious and sustainable development of these strategic and fast-changing lands."

Louis Fortier

Scientific Director of ArcticNet, Project leader, Canadian Research Icebreaker CCGS Amundsen, and Professor in the Department of Biology at Université Laval



"Regional development, specifically that of northern communities, demands a collaborative, multidisciplinary approach, since it has to address issues relating to the economy, education, sustainable development and community welfare. Currently there is no organization that can cover all these bases while working closely with the communities. An institution like the INQ can apply the kind of collaborative approach that's necessary in a multidisciplinary framework if it's to respond to the needs of northern communities."

Francis Fournier

Québec City Laboratory Director at FPInnovations



"The INQ's collaborative approach and aggregation of multidisciplinary expertise will enrich our thinking and help us develop a mineral industry north of the 49th parallel that creates wealth sustainably and respects local communities. Successful northern development will depend strongly on developing northern resources, and new ways of doing things are essential if Quebec's mining industry is to set a new worldwide standard for northern operations."

Claire Lavallée

Executive Director, COREM



"We need a northern institute to find energy options that work north of the 49th parallel. Northern communities and natural resource development depend on it."

Jasmin Raymond

Researcher with Centre Eau Terre Environnement and Professor at the INRS



"I think the INQ has the potential to become an innovative research structure by establishing a solid partnership with northern institutions and with both Aboriginal and non-Aboriginal communities in the North. This means considering their concerns in terms of research and, most importantly, working together with them to build knowledge about the North. The INQ will also give us a strong presence in the North in the form of research and training centres set up in partnership with northern institutions in each of the three main territories (Nunavik, Eeyou Istchee—James Bay, and the North Shore)."

Thierry Rodon

Northern Sustainable Development Research Chair, Director of the Interuniversity Centre for Aboriginal Studies and Research, and Professor in the Department of Political Science, Université Laval



"As a partner in this university initiative, the government has clearly demonstrated its will to support research and the development and dissemination of knowledge in all spheres of the Plan Nord. Given the nature of the sustainable development issues in Northern Quebec, it is of the utmost importance to pool Québec's expertise in northern development research. This unique partnership will allow the government, private sector, and northern communities to benefit from the scientific knowledge and technical know-how needed to sustainably develop Northern Quebec."

Robert Sauvé

President and CEO of Société du Plan Nord



"The INQ paves the way for discussions between First Nations and Inuit communities and the scientific community to identify the issues and tackle the challenges of developing and protecting the Plan Nord areas and Nuchimiyuschiy, the traditional Naskapi lands."

Noah Swappie

Chief of the Naskapi Nation of Kawawachikamach

Research Priorities

FORWARD-LOOKING RESEARCH

The INQ's mission is to keep its partners at the forefront of knowledge development and its application with respect to northern and circumpolar development.

The Institute's scientific mission is comprised of six research themes organized around 15 interdisciplinary platforms that address major issues in sustainable northern development.



Theme 1

Wellbeing and development of northern communities

1. Governance, public policy, education, and sustainable development
2. Cultures and societies

Fast fact

The average dropout rate among First Nations and Inuit youth is more than three times higher than for Quebec as a whole. Community, family, and school factors all play a role.

Theme 2

Health and nutrition

3. Determinants and profiles of health in Nunavik Inuit communities: Northern Health
4. Aboriginal health and nutrition: Northern Nutrition

Fast fact

Inuit in Nunavik and Nunatsiavut have a shorter life expectancy than most Canadians. Young men and elderly women are particularly vulnerable to early death.



Theme 3

Ecosystem functioning and environmental protection

5. Investigation, monitoring, and management of coastal zones and ice-bound seas
6. Northern terrestrial and freshwater environments

Fast fact

The North is experiencing widespread climatic destabilization caused by increasing greenhouse gas emissions. The effect on the environment, ecosystems, and population is unmistakable.

Theme 4

Infrastructure and technology

7. Adapting technologies to the North
8. Engineering for a sustainable North
9. Research on public and environmental safety in the Arctic

Fast fact

Landslides, collapsed roads, fissured embankments —building a road or landing strip in the North, where much of the land is underlain by permafrost, is far from simple. Experts are working on ways to stabilize infrastructure and regenerate permafrost.

Theme 5

Energy and natural resources

10. Mineral exploration and mining
11. Forest management
12. New energy sources

Fast fact

Canada's wind energy potential is among the greatest in the world. Nunavik's wind resources alone could supply 40% of the country's needs.

Theme 6

Training and knowledge transfer in the North

13. Training and research in Nunavik
14. Transfer of northern development expertise
15. Outreach and communications

Fast fact

Northern communities have a crucial role to play in the economic development of the North. Training and retaining specialized workers is a key challenge in isolated regions.

History

THE INQ TAKES SHAPE

The need for a multidisciplinary, interuniversity research institute to address the issues facing northern and arctic regions emerged out of a series of discussions, deliberations and key events.

Québec unveils the original incarnation of its Plan Nord, a blueprint for the development of the mining, energy, social, cultural, and tourist potential of Québec areas north of the 49th parallel.

Université Laval publishes *Mobilizing for a Sustainable North: Research Issues and Priorities*, which sets out a scientific foundation for sustainable northern development based on an unprecedented voluntary consultation involving some 65 northern researchers and experts.

Fonds de recherche du Québec holds a northern research day with more than 115 researchers. Université Laval is invited to present its approach for mobilizing expertise on the North.



Université Laval, McGill University, and INRS sign a framework agreement for the foundation of the INQ.



Université Laval, McGill University, and INRS publicly announce their intention to jointly found the INQ.

The provincial government unveils its *Plan Nord à l'Horizon 2035*, listing the conditions of success for the Plan Nord. The INQ is listed as an action priority for the development of scientific knowledge.

The INQ implementation committee is officially appointed.

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The 2014–2015 provincial budget earmarks \$3 million for the INQ. Funds are awarded to Université Laval with the provision that the new headquarters will be on the UL campus.

The INQ implementation committee, drawn from the partner institutions, meets for the first time.

The INQ is cited as a priority federal election issue by the Ville de Québec.

The INQ holds a consultation workshop to develop its strategic positioning and visual identity program.

The beginning of a beautiful story

On October 15, 2014, an important day marking the beginning of the INQ, the Quebec government announced that, through Fonds du Plan Nord, it would be investing \$3 million over three years to get the project up and running.

WHAT THEY SAID:

"Today's announcement is big because three major universities will be working together to establish the Institut nordique du Québec. Our government has made the Plan Nord a pillar of its efforts to support the economic recovery and that's why we will back the Institut nordique as a partner. Our goal is to harness the full potential of the North, while protecting and inhabiting it sustainably. To achieve this, we need a solid understanding of the social, economic, and environmental aspects of the region."

Pierre Arcand

Minister of Energy and Natural Resources and Minister responsible for the Plan Nord

"In the context of climate change and given the unique environment we have to protect, the partners involved in developing the North must have access to cutting edge expertise on our northern environment. The Institute must provide them with the scientific knowledge and traditional know-how of northern communities as well as the technological expertise needed to sustainably develop northern Quebec."

Denis Brière

Rector of Université Laval

"The Institute will help provide government decision makers, communities, and the private sector with the scientific knowledge and technical expertise needed for the ethical and harmonious development of Northern Quebec. The entire northern population will benefit from the Institute's work."

Daniel Coderre

Rector of Institut national de la recherche scientifique

"By bringing Quebec's northern development research expertise together in one place, the Institute will act as a magnet for top-notch high level research and technological talent and a source of social innovation. It will serve as a hub for researchers from the founding universities and private sector representatives."

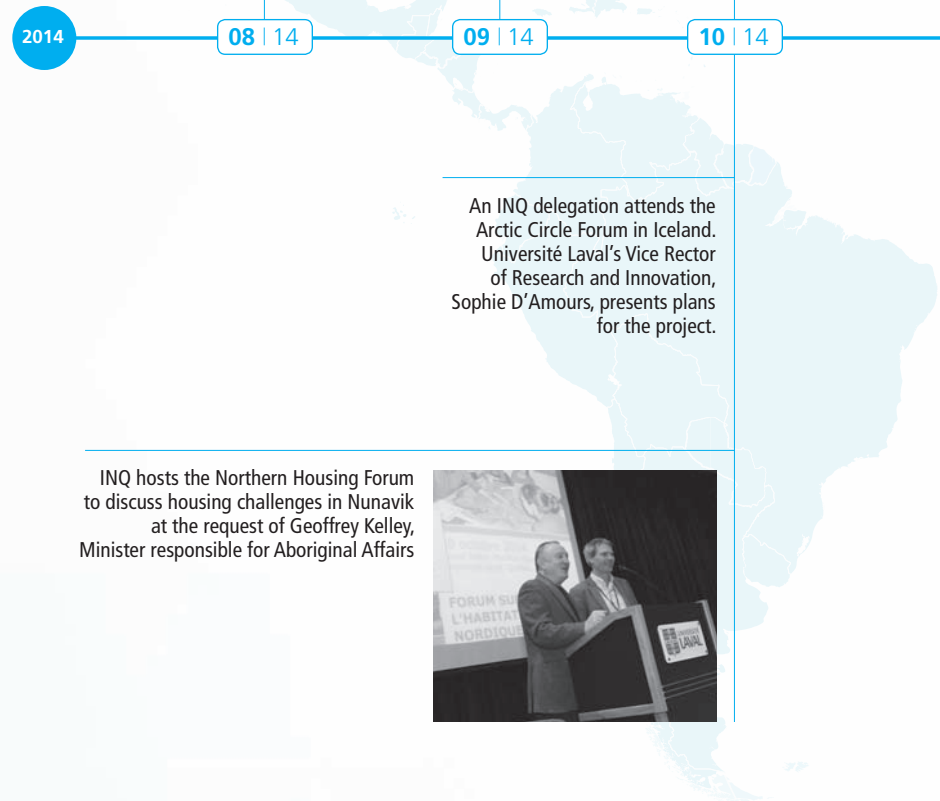
Suzanne Fortier

Vice Chancellor of McGill University

Outreach

AN ENTHUSIASTIC RESPONSE

Plans for the INQ have drawn considerable interest in the scientific community, judging from the way the project has been received at international events. The challenges of the North demand a collective response, and researchers are enthusiastic about this new research, innovation, and knowledge transfer infrastructure.



ArcticNet reports on plans for the INQ at the Canada–Norway Northern Innovation Initiative in Norway.

An INQ delegation travels to Kuujuaq to meet with the Inuit community.

Martin Fortier and Louis Fortier of ArcticNet join Brigitte Bigué, INQ project director, to take part in Transatlantic Science Week in Toronto.

An INQ delegation attends the Arctic Circle Forum in Iceland. Université Laval's Vice Rector of Research and Innovation, Sophie D'Amours, presents plans for the project.

INQ hosts the Northern Housing Forum to discuss housing challenges in Nunavik at the request of Geoffrey Kelley, Minister responsible for Aboriginal Affairs





French president François Hollande and a large delegation of ministers, business leaders, and scientists attend a presentation by the Takuvik Joint International Laboratory and various northern research projects.

A general outline on the INQ is presented to the members of the Centre for Northern Studies at a symposium at Université Laval.



The INQ joins in organizing the International Symposium on Northern Development, which involves academics, decision-makers, businesspeople, corporations, and northern representatives. Sophie D'Amours gives a presentation on the INQ. The Institute also has an information booth, which attracts considerable attention.

INQ partner institutions attend the Mining and Mineral Industry of the Future Trade Fair to spread the word about the INQ to the mining industry.

The INQ is a partner in the "Mining Industry Geopolitics: Northern Québec on the World Stage" symposium at Université Laval.

The INQ holds an information and discussion forum at Université Laval. Over 200 northern researchers and specialists answer the call.

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2015

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A backgrounder on the INQ is distributed to some 1,200 participants at the Arctic Change 2014 conference in Ottawa.

Fonds de recherche du Québec hosts a northern research day at Université Laval. A number of INQ members take part.

The INQ partners with the Interuniversity Centre for Aboriginal Studies and Research for the symposium "Round Table: The Place of Aboriginal People in Northern Research."

Members of the INQ attend the Future Earth Forum in Montréal.

The INQ is represented at the Association des Biologistes du Québec's Annual Symposium.

Université Laval rector Denis Brière awards an honorary doctorate to Icelandic president Ólafur Ragnar Grímsson as part of a research event held in partnership with the INQ.



McGill University holds an information and discussion forum on the INQ to consider prospects for northern research, innovation, and development.

The INQ has an information booth at the annual golf tournament of the Université Laval alumni association (ADUL).

INQ members take part in a symposium in Jonquière on the revival of Plan Nord.



Northern Research Expertise

EXCELLENCE IN RESEARCH FOR DEVELOPMENT ON AN UNPRECEDENTED SCALE

The Institute is piloted by the three founding institutions in partnership with research centres, private partners, Société du Plan Nord, governments, and Aboriginal nations. Together they have implemented a governance structure made up of representatives from the scientific and Aboriginal communities and the energy, mining, and forestry industries.

That the INQ is associated with Université Laval, McGill University, and the INRS is no accident. All three institutions are noted for their outstanding northern research. Université Laval, whose scientific leadership has been internationally recognized for more than half a century, has no fewer than 140 researchers working in fields connected to northern studies. UL is home to some ten interuniversity groups that devote a substantial share of their research to northern and polar issues. They include the ArcticNet Network of Centres of Excellence, Centre for Northern Studies, Canada Excellence Research Chair in Remote Sensing of Canada's New Arctic Frontier, Interuniversity Centre for Aboriginal Studies and Research, Forestry Studies Centre, Northern Sustainable Development Research Chair, Nasivik Centre for Inuit Health and Changing Environments, and Québec-Océan. Along with these centres, Université Laval is also home to an additional 16 northern research chairs as well as the Takuvik Joint International Laboratory, a partnership with CNRS-France. Together with the Canadian Coast Guard, the University's centres of

The scientific research icebreaker CCGS Amundsen is the pride and joy of ArcticNet, collecting extensive data on the North for Canadian researchers and their international partners. ArcticNet's research program focuses on the long-term effects of climate change and modernization on arctic marine and terrestrial ecosystems and coastal communities.

excellence also operate the CCGS *Amundsen*, the research icebreaker that spearheads Quebec's leadership in arctic sciences.

McGill University, a member of most of these research groups, has its own legacy of projects building on our knowledge of the North. In 1924 it founded the Arctic Institute of North America—the first initiative of its kind. Transferred to the University of Calgary in 1976, it is the origin of many major research projects. McGill also created the Centre for Indigenous People's Nutrition and Environment, Réseau universitaire intégré de santé, Centre for Indigenous Conservation and Development Alternatives, Québec Centre for Biodiversity Science, McGill Arctic Research Station, McGill Subarctic Research Station, and McGill Institute for the Study of Canada. From providing quality health care in remote communities to protecting northern wildlife, McGill researchers, professors, and students play a leading role in sustainable northern development, with more than 40 researchers very active in the fields of health, natural sciences, social sciences, engineering, and economics.

The sustainable development of water resources is a priority for INRS's Centre Eau Terre Environnement (Centre ETE). Centre ETE and the Geological Survey of Canada partnered to create the Québec Geoscience Centre, one of the largest multidisciplinary geoscience research groups in the country. Centre ETE laboratories are equipped with a comprehensive array of analytical equipment for advanced research, as well as powerful modelling and data processing capabilities. The Centre also runs the former CIRSA Research Station in Saguenay and a key set of labs—Laboratories for Scientific

and Technological Innovation in Environment (LISTE)—at the Québec Metro High Tech Park. Lab projects include work on computerized axial tomography, domestic wastewater and industrial effluent purification, and bioconversion of waste into value-added products. Centre ETE has close to 40 research professors, more than half of whom are involved in a wide variety of projects related to northern research.

Université Laval, McGill University and the INRS have long been known for their outstanding research in the North.

The INQ will also tap into the northern studies expertise of Université du Québec (UQ) member institutions. College Centres for the Transfer of Technology (CCTTs) are another resource present in every Quebec region, with over 1,000 researchers, engineers, technologists, and other experts involved in various research and knowledge transfer activities.

INQ IMPLEMENTATION COMMITTEE MEMBERS

Research centres

1. **Warwick F. Vincent**
Scientific Director
Centre d'études nordiques, Université Laval
2. **Jean-Éric Tremblay**
Scientific Director
Québec-Océan, Université Laval
3. **Marcel Babin**
Scientific Director
Takuik, Université Laval
4. **Thierry Rodon**
Director
CIÉRA, Université Laval
5. **Gina Muckle**
Scientific Director
Nasivik, Université Laval
6. **Martin Fortier**
Executive Director
ArcticNet, Université Laval
7. **François Anctil**
Scientific Director
Institut EDS, Université Laval
8. **René Therrien**
Chair
INQ Implementation Committee
E⁴M, Université Laval
9. **Murray Humphries**
Director
CINE (Centre for Indigenous Peoples' Nutrition and Environment)
McGill University
10. **Paul Brassard**
Northern Representative
RUIS (Réseau universitaire intégré en santé)
McGill University
11. **Louis Fortier**
Scientific Director
ArcticNet, NGCC *Amundsen*, Takuik, Université Laval

Founding universities

12. **Denis Mayrand**
Assistant Vice Rector of Research and Innovation
Université Laval
13. **Kristina Öhrvall**
Director, Strategic Initiatives
McGill University
14. **Jean-François Blais**
Director
ETE (Centre Eau, Terre, Environnement)
INRS

UQ network universities

15. **Denis Martel**
Vice Rector of Research
Université du Québec en Abitibi-Témiscamingue

Other universities

16. **Geneviève Tanguay**
Vice Rector of Research
Université de Montréal

Société du Plan Nord

17. **Robert Sauvé**
President and CEO
Société du Plan Nord

Aboriginal Nations

18. **Ellen Avard**
Scientific Director
Makivik Corporation, Nunavik Research Centre
19. **Mélissa Saganash**
Director of Cree-Québec Relations
Innu Nation
20. **Mike McKenzie**
Innu-Utshimau (Chief), Sept-Îles
Innu Nation
21. **Élodie Lagrange**
Assistant Project Coordinator, Atmacinta
Naskapi Nation of Kawawachikamach

Private sector

22. **Francis Fournier**
General Manager
FPInnovations
23. **Gaétan Lantagne**
General Manager
IREQ
24. **Claire Lavallée**
General Manager
COREM

College Centres for the Transfer of Technology (CCTTs)

25. **Drishtysingh Ramdenee**
Scientific Coordinator
Institut technologique de maintenance industrielle (Cégep de Sept-Îles)

Senior advisors on the North

26. **Michel Allard**
Professor
Centre d'études nordiques
27. **Najat Bhiri**
Director
Centre d'études nordiques

Project Director

28. **Brigitte Bigué**
Vice Rector of Research and Innovation
Université Laval

EXECUTIVE COMMITTEE 2014-2015

Sophie D'Amours
Vice Rector of Research and Innovation
Université Laval

Yves Bégin
Vice Rector of Research and Academic Affairs
INRS

Rosie Goldstein
Vice-Principal, Research and International Relations
McGill University

Denis Mayrand
Assistant Vice Rector of Research and Innovation
Université Laval

Brigitte Bigué
Project Director
Institut nordique du Québec
Université Laval
(nonvoting member)

EXPANDED EXECUTIVE COMMITTEE 2014-2015

Denis Brière
Rector
Université Laval

Daniel Coderre
Rector
INRS

Suzanne Fortier
Principal and Vice Chancellor
McGill University

Yves Bégin
Vice Rector of Research and Academic Affairs
INRS

Rosie Goldstein
Vice-Principal, Research and International Relations
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Chair
INQ Implementation Committee

Brigitte Bigué
Project Director
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Université Laval
(nonvoting member)

Photos:

David Barber/ArcticNet: page 16

Doug Barber/ArcticNet: page 11 (*Inuit studying maps*)

Elias Djemil: pages 3 and 9 (*photographs of Sophie D'Amours/René Therrien and of Brigitte Bigué*)

Guy Doré: page 11 (*infrastructure*)

Isabelle Dubois/ArcticNet: page 8

Christian Fleury: page 8 (*photograph of Isabelle Laurion*)

Alexandre Forest/ArcticNet: page 10 (*snow and arctic char drying*)

Martin Fortier/ArcticNet: page 4

Isabeau Pratte/ArcticNet: page 11 (*geese*)

Heiko Wittenborn/Nunavik Tourism: page 10 (*Inuit child*)

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