Building Capacity for Arctic Health Research:

The Nasivvik Centre for Inuit Health and Changing Environments

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The History of Arctic Environment and Health Research

Past
- Fly-in fly-out research
- Use of northern communities and people as laboratory

Present
- Aboriginal people working with researchers today
- Involved in some aspects of research direction and management

Future
- Aboriginal identified and directed research and communication
- Effective uptake and use of research results in Aboriginal communities
Networking – Existing ACADRE Centres
Advisory Board of the Centre

**Inuit Regional Partners**
- Labrador Inuit Association
- Nunavik Nutrition and Health Cmte / Makivik Corporation
- Nunavut Tunngavik Inc.
- Inuuvialuit Regional Corp.

**Inuit National Partners**
- Inuit Tapiriit Kanatami – Environment and Health Depts.
- NAHO – Ajunnginiq Centre
- Inuit Circumpolar Conference – Canada

**Chairperson** Mary Denniston, LIA
**Director** Eric Dewailly, U Laval
**Co-Director** Chris Furgal, U Laval
Objectives of the Centre

- In cooperation with communities, identify priority questions for environmental health and conduct training and research to help communities address these issues;

- Motivate students to pursue post-secondary and graduate studies in the environment and health sciences and encourage them to become interested and participate as young researchers to projects in their region;

- Support training initiatives and the development of capacity in Inuit environmental health.
Objectives of the Centre

Research on Inuit ⇒ Research with Inuit ⇒ Research by Inuit

• Train individuals as environmental health researchers in northern communities to support the identification and study of priority questions;

• Communicate, disseminate and support the understanding and use of the information and knowledge generated;

• Enhance Inuit capacity at the local, regional, national and international levels.
Science and Training Program of the Centre

THEME 1: Changing environments and Inuit health

A. Inuit health and contaminants
B. Inuit health and climate change
C. Chronic diseases and environmental change
Science and Training Program of the Centre

THEME 2: Monitoring and surveillance for public and environmental health in Inuit regions

A. Evaluation and enhancement of capacity
B. Development and transfer of new technologies and tools
Science and Training Program of the Centre

THEME 3: Inuit knowledge and science in environmental health research

A. Develop methods and conduct work bringing together Inuit knowledge and science
Education and Training

*Secondary / Post-Secondary Training*

**Collège Marie-Victorin (Montreal)**
Establishing research training course with students and promoting summer research opportunities

**Nunavut Sivuniksavut (Ottawa)**
Training students in research design and methods for independent research course
A three-module training course with second year students includes:
- Introduction to Research and the Nasivvik Centre
- Research design and methods
- Data analysis and interpretation
Nunavik Science Camp

Nasivvik funded the development of a module on water and health to be included in the Nunavik Science Camp.

This provided the curriculum and delivered the course to 54 Inuit high school students in Nunavik.

Weblink: http://www.kativik.net/science_camp/2004
Amundsen Shipboard training in Arctic environmental health

Designed and conducted a one-week course on environmental health research for 4 full-time Inuit Research Advisors on board the Amundsen during the Nunavik Inuit Regional Health Survey (in partnership with ArcticNet)

Instruction was given by researchers involved in the Inuit health survey and ArcticNet

Weblink: http://www.qanuippitaa.com

* Soon to expand to landbased training camp via Atlantis
Summer Student Intern / Research Assistantship Program

Student: Sarah Fraser, Psychology
Supervisor: Dr. Gina Muckle, Laval University
Project: The role of behaviour in the relationship between lead exposure and motor function in Inuit preschool children.

Student: Martha Nowdalk (3rd year nursing)
Supervisor: Dr. Laura Arbour, University of British Columbia
Project: The Study of Congenital Heart Defects in the Northern Population

Student: Marie-Christine Ross-Huot, 2nd year student, MD program at Laval U.
Supervisor: Dr. Pierre Ayotte, Laval University
Project: The Nunavik Health Study: Determination of dioxin-like compounds in plasma samples from Inuit adults using the DR-CALUX bioassay.

Student: Candace Cockney
Supervisors: Andrea Hoyt and Kevin Bill, Fisheries Joint Management Committee, IRC
Project: Fisheries Joint Management Committee student mentoring program – various research projects/placements
Masters Student Scholarships - 1 Yr renewable

Student: Jean-Luc Bernier, Laval University
Supervisor: Dr. Michel Bergeron, CHUL
Développement de tests moléculaires pour la détection d’adénovirus et calicivirus associés aux gastroentérites dans l’eau des régions éloignées

Student: Guylaine Charbonneau, McGill University
Supervisor: Dr. Grace Egeland, CI NE, McGill University
Anthropometric determinants of underlying risk factors for type 2 diabetes mellitus among the Inuit
Doctoral Student Scholarships - 1 Yr renewable

Student: Andrée Maheux, Laval University
Supervisor: Dr. Michel Bergeron, CHUL
Development of rapid molecular microbiology methods for the detection of faecal contamination indicators and pathogens in drinking water

Student: Keith Chalk, Memorial University of Newfoundland
Supervisor: Dr. Bill Montevecchi, Memorial University of Newfoundland
Marine ecosystem monitoring in Labrador

Student: Shawn Donaldson, Carleton University
Supervisor: Nancy Doubleday, Carleton University
Inuit and Scientific Knowledge as Complementary Knowledge Systems: A Cooperative Approach to Managing the Risks and Benefits of a Diet of Fish and Wildlife in Cape Dorset, Nunavut, Canada
Education and Training

*Post-Graduate Awards*

**Post-Doctoral Fellowships – 1 Year non-renewable**

Student: Marie-Ludivine Chateau-Degat, McGill  
Supervisor: Dr. Grace Egeland, CI NE, McGill  
*Maladies chroniques et santé des inuit*

Student: Pierrick Plusquellec, Laval University  
Supervisor: Dr. Gina Muckle, Laval University  
*Effects of perinatal exposure to environmental contaminants on behavioural dimensions objectively measured in Inuit children*
Research Projects Funding

MID-SIZED PROJECTS

Inuvialuit Ethnobotany: Exploring the Relationship between People and Plants in the Inuvialuit Settlement Region (ISR), Northwest Territories

Michael Salomons, (M.Sc., Conservation Biology) Manager of Research Programmes, Aurora Research Institute, Robert Bandringa, M.Sc.; Ethnobotany; Steven Baryluk, B.Sc.; Biology; Myrna Pokiak, B.A., Anthropology; and Raila Salokangas, Undergraduate Intern.
Community-based Research Projects

Program initiated 04-05

**Nunavik**
Nunavik muskox zoonosis, disease and contaminant monitoring during the experimental hunt in Kuujjuaq and Tasiujaq
Makivik Corporation

**Climate Change in Northern Quebec: Land and Resource Access Issues**
C Larrivée, M Barrett, M Tremblay, Kativik Regional Government

**Nunavut**
Food security project
Arviat Health Committee

Qikiqtani Monitoring Program
Environment Committee Municipality of Sanikiluaq

Healthy Land, Healthy Ice, Healthy Life: Understanding Environment-Health Relationships and Mapping Inuusigartiarpit -“Sites for Health”
Ilisaqsivik Society, Clyde River, Nunavut
Community-based Research Projects
Program initiated 04-05

Inuvialuit Settlement Region
Assessing and reducing second-hand smoke exposure in Aklavik homes
Jerome Gordon, Inuvialuit researcher based in Aklavik, Dr. Merryl Hammond and Mr. Rob Collins of the Consultancy for Alternative Education (CAE) in Montreal.

Community monitoring of the Big Fish river
West Side Working Group, Moose Kerr School, Aklavik HTC and Elders, Department of Fisheries and Oceans Canada Fisehreis Management, Fisheries Joint Management Committee Resource Biologists, Inuit Research Advisor.

Labrador
Contaminants in Hopedale, Labrador
Judy Dicker, Labrador Inuit Association, Environmental Sciences Group (Dr. Ken Reimer, Dr. Barb Zeeb, Scientific Advisor)
Centre for Inuit Health and Changing Environments

Centre pour la santé des inuits et des changements environnementaux

www.nasivvik.ulaval.ca