## ArcticNet Arctic Observation Networks

www.arcticnet.ulaval.ca

Martin Fortier, Louis Fortier and dozens of ArcticNet network investigators, students and collaborators

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rcticNet is a Network of Centres of Excellence of Canada that brings together scientists and managers in the natural, human health and social sciences with their partners in Inuit organizations, northern communities, government and industry to help Canadians face the impacts and opportunities of climate change and globalization in the Arctic. Over 100 ArcticNet researchers and 275 graduate students and postdoctoral fellows from 28 Canadian universities and five federal departments collaborate with over 100 partner organizations in Canada and nine foreign countries.

As part of its annual expedition onboard the Canadian research icebreaker CCGS Amundsen, ArcticNet maintains three Long-Term Oceanic Observatories (LTOOs) of 4 oceanographic mooring lines in the Beaufort Sea, Northern Baffin Bay and Hudson Bay. ArcticNet is also maintaining 4 additional LTOOs in the Laptev Sea and East Siberian Sea in collaboration with the Nansen and Amundsen Basins Observational Systems Network (NABOS).

On land, ArcticNet researchers have access to the Centre d'études nordiques' Qaujisarvik Network of eight land-based research stations into which feed 88 automated stations acquiring data on environmental and geological variables. Located along a north-south transect, the Qaujisarvik Network stretches 3500 km from Radisson, Quebec in the South (53 °N) to Ward Hunt Island, Nunavut in the North (83 °N). Other terrestrial observatories are located throughout the coastal Canadian Arctic with most contributing to the Canadian IPY program.

On the human health front, ArcticNet researchers are leading a research initiative with colleagues in Greenland, Alaska and Siberia to develop an international longitudinal study to assess the impacts of dietary and environmental changes on cardiovascular disease, cancer and diabetes in Inuit populations around the world. In 2004, they visited all 14 Nunavik communities with the CCGS Amundsen to assess the health condition of Inuit. All remaining Inuit communities in Canada (in Nunavut, Inuvialuit and Nunatsiavut) will be visited with the Amundsen as part of a major Canadian IPY project.

ArcticNet researchers are also present annually in over 40 Inuit coastal communities. With the help of northerners, ArcticNet is supporting numerous community-based monitoring programs on snow & sea-ice properties as well as on marine mammal ecology.

Over the next few years, ArcticNet will participate massively in the International Polar Year (IPY), both as a successful proponent of new research projects and as a supplier of expertise, services, data management and logistics in support of the IPY. ArcticNet will strive to consolidate the scientific legacy of this augmented Arctic research effort in partnership with its numerous Canadian and international partners.













