

# Collaboration opportunities with INQ in Canada's North

Swiss Polar Day 2023



Jean-Éric Tremblay, INQ director

# Fostering enhanced SPI-INQ collaborations towards *a better understanding of Arctic and high-altitude systems and their changes*

- Regular exchange at strategic level
- Development of joint initiatives and collaborative projects
- Exchange of expertise and personnel
- Access to facilities (Sion, Québec & Canada's North)



*Signing of the MoU in Montréal (13 April 2023)*

NEXT SLIDES: What is INQ?

Accessible research facilities

Thematic areas / regions

Collaboration process

# INQ's mission

Support the sustainable development of Northern Quebec and the Canadian Arctic by federating forces in scientific research, fostering innovation and creating synergies between researchers, northern communities (including local & indigenous knowledge), government and the private sector.

## First Peoples in northern Quebec



**LPéAb**  
Société Makivik  
Makivik Corporation

*Inuit*



*Innu*



*Naskapi*



*Cree*

## A diverse research landscape



**270**  
affiliated  
researchers

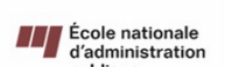


**62**  
research chairs, with  
holder affiliated to INQ  
(3 INQ-funded chairs)



**85**  
affiliated entities  
(centres, institutes...)

## Fifteen institutions of higher education





## INQ's Objectives at a glance

- Promote multidisciplinary and intersectoral research
  - Provide administrative, technical and logistical support
  - Create adapted tools and guidelines for research
  - Develop versatile labs and analytical capacities
  - Offer adapted training opportunities
  - Develop international collaboration and outreach
- 
- Operation funded by Ministère des Ressources Naturelles et des Forêts du Québec
  - Research funded by Fonds de Recherche du Québec
  - Geographically distributed, with **main facility** in Québec city



- Synergy (ArcticNet, Centre d'étude nordique, Québec-Océan, SDWG secretariat...)
- Cutting-edge thematic laboratories
- Agile short-term storage and expediting facilities (field work)
- Support base for northern research stations and ships
- Technical shops for instrument development, calibration and maintenance
- Offices for resident research teams and hot desks for visiting scientists

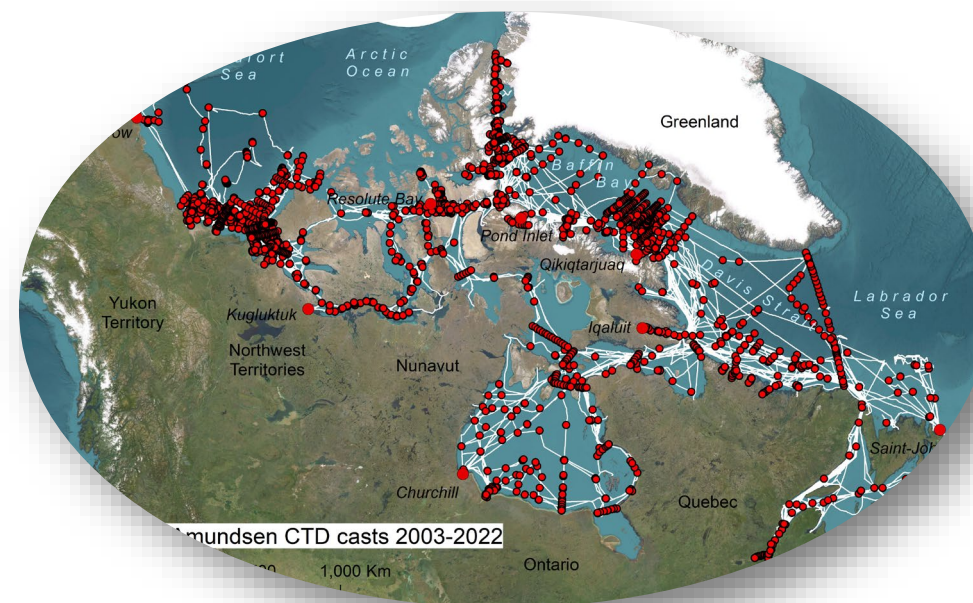
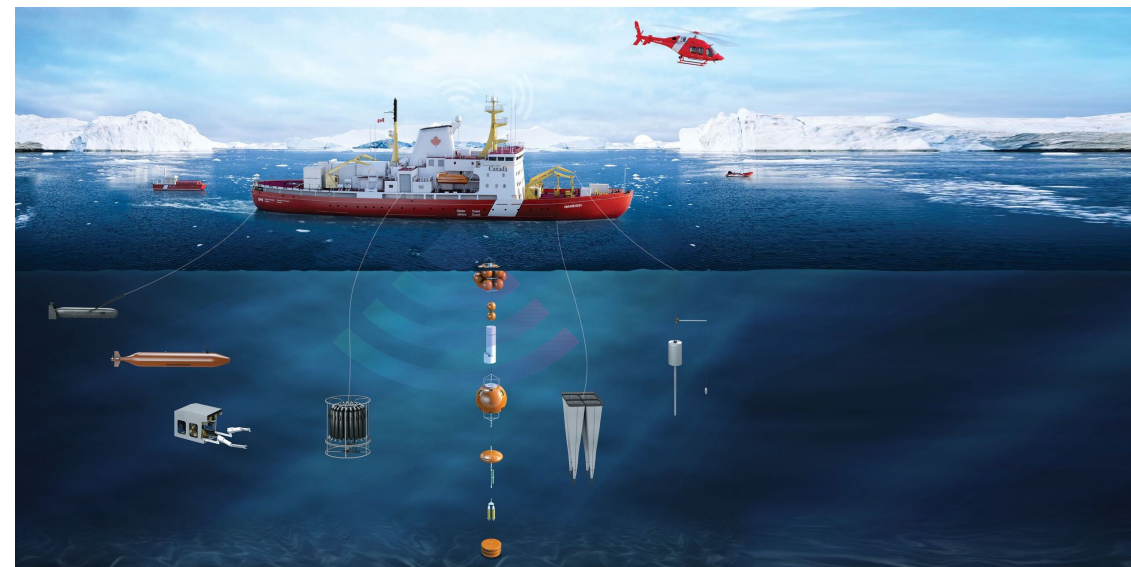


UNIVERSITÉ  
LAVAL





**CENTRE D'ÉTUDES NORDIQUES**  
CEN Centre for Northern Studies



**AMUNDSEN**  
SCIENCE

# Some thematic areas for collaboration...

# Ecosystem functioning

## Sea-ice and glaciers

# Ocean biogeochemistry

# Permafrost dynamics

# Climate feedbacks

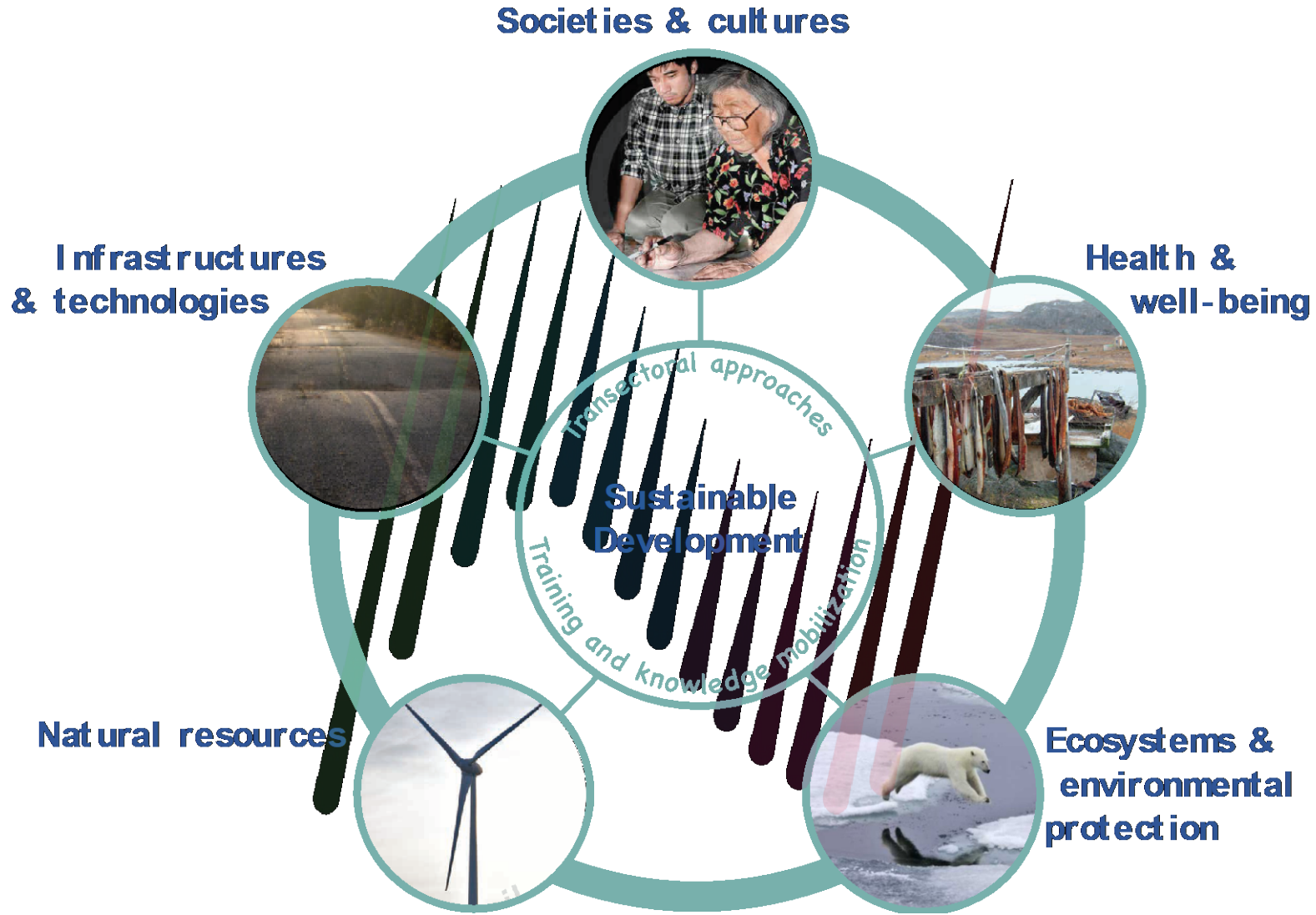
## Infrastructure stability

## Biodiversity / invasive species

## Emerging diseases, zoonoses

# Food security

# Energy supply and transition



## Societies & cultures

## Infrast ruct ures & technologies

## Health & well-being

## Sustainable Development

## Natural resources

## Ecosystems & environmental protection



# TRANSFORMING CLIMATE ACTION: ADDRESSING THE MISSING OCEAN

2023-2030

155 M\$

Reduce uncertainty / Mitigate change / Adapt equitably



Horizontal connectivity (freshwater, nutrients...)

Deep convection processes

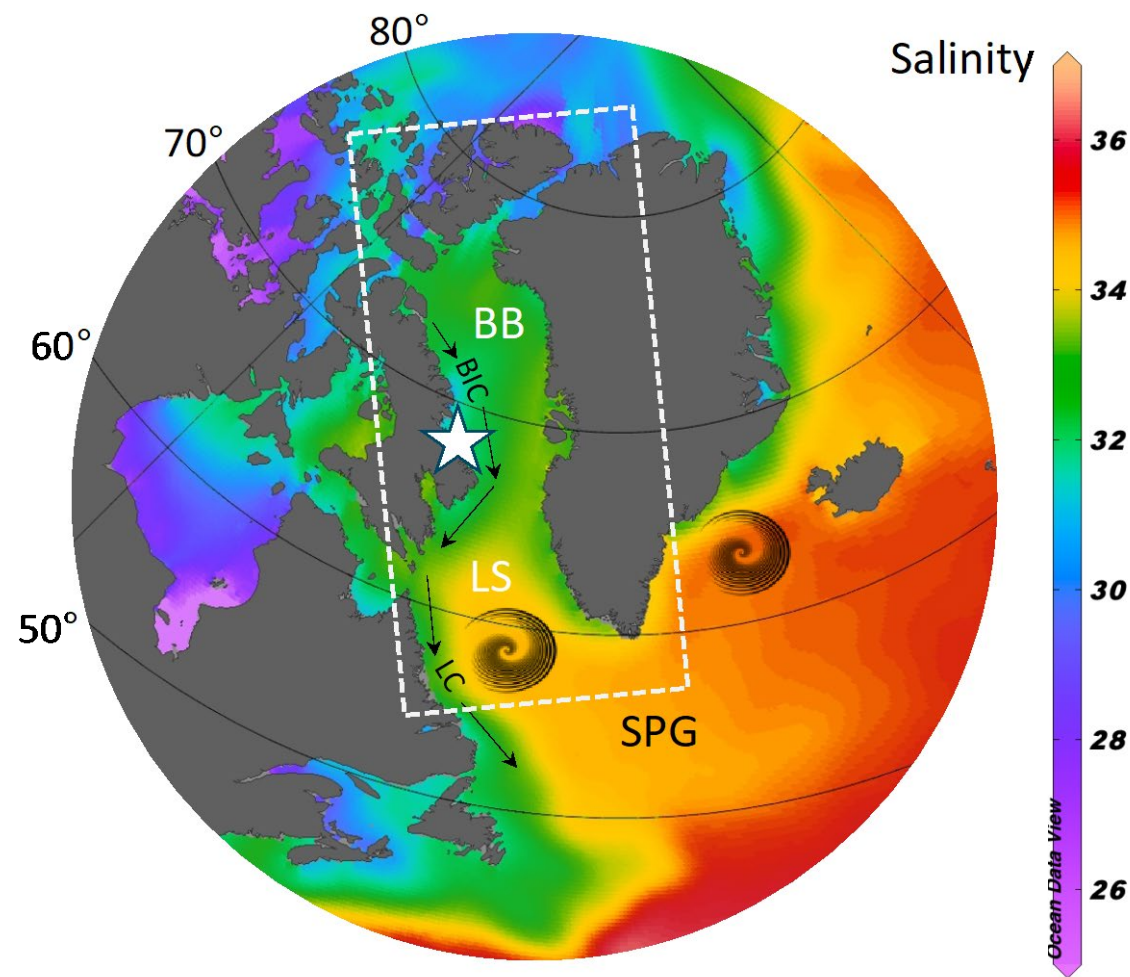
Ocean carbon pumps

## Expeditions

2024: (1x) synoptic survey of ocean gateways

2025: (2x) land/shelf/basin interactions, carbon pumps

2026: convection and sea-ice processes





# Process for Swiss researchers

## CCGS Amundsen

Partnership with INQ researcher/team; or

Direct contact with *Amundsen Science* management to identify a matching programme or campaign

Canadian PI must submit a consolidated application by 30 September before the expedition year  
(declaration of intent: 15 September)

## CEN research stations

Partnership with regular CEN member(s), who can request access to a station; or

Contact CEN management to identify a matching programme

No deadline for submitting request but recommend no later than 15 November in the year prior to the expedition.  
(declaration of intent: 1 November)

SPI and INQ are available for questions and support to interested scientists





# INQ scientific complex (2026)

In collaboration with researchers from the INQ network, the following are foreseen:

- a) Access to the expedition prep areas and workshops in order to:
  - receive sampling equipment and supplies from Switzerland
  - receive and temporarily store samples from the North prior to analysis at INQ or shipment
- b) Access to state-of-the-art analytical laboratories.
- c) Support in obtaining permits to conduct research in the Inuit territories of Nunavik and Nunavut
- d) Access to office space for those who wish to sojourn in Quebec





**Questions?**

