



From Early Sparks to Lasting Impacts

CFREF Symposium
26-27 May 2025

Sentinel
North



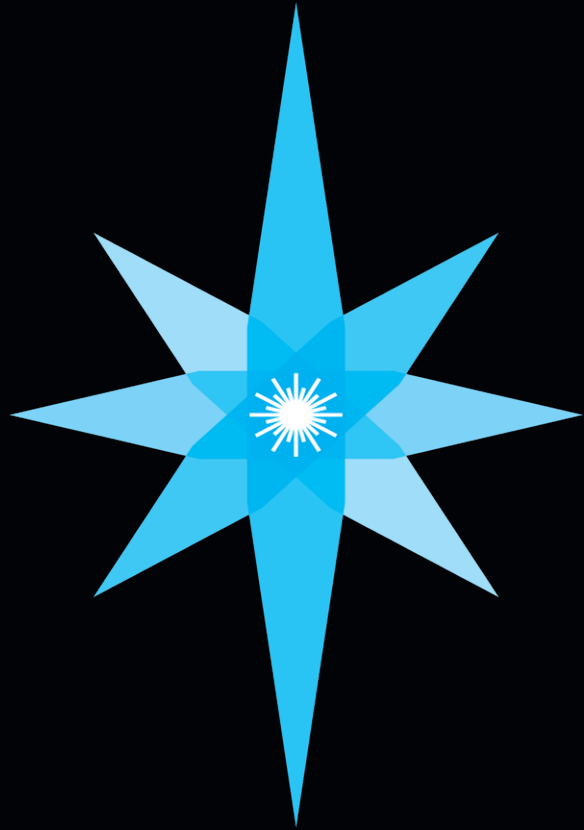
SHEDDING LIGHT ON THE NORTH

HEALTH | ENVIRONMENT | INNOVATION



To shed light on the northern
environment and its impact on
humans through interdisciplinary
research initiatives and innovation in
support of sustainable health and
development

2015 - 2025



The Sentinel North Strategy

Uniting and consolidating
the research strengths of **ULaval**

- Arctic research
- Optics and photonics innovation
- Microbiome and cardiometabolic health
- Neurophotonics and mental health

242M \$



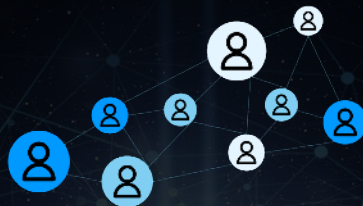
Leveraged

98M \$



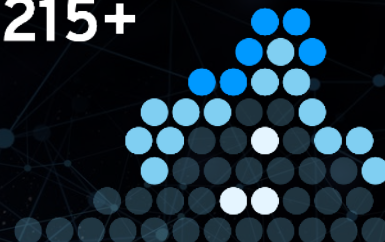
ULaval CFREF

90+



Interdisciplinary Research Teams

215+



ULaval Researchers

700+



ULaval Graduate Students
And PDFs

350+



National and International
Partners

Sentinelles
Nord



2015 – 2025

A MOBILIZING NETWORK @ ULAVAL

500+

Community of
researchers and
staff

45+

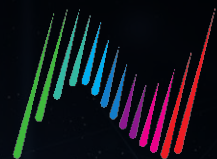
Departments

15+

Centres & research
institutes



Ouverture 2026



Institut nordique
du Québec
Ensemble pour le Nord

Continuing to propel **ULaval's** research strengths in northern and Arctic research

- State-of-the-art research laboratories
- Training, outreach and knowledge mobilization
- Incubator for social and technological innovation

Prof. Jean-Éric Tremblay
Directeur scientifique

Brigitte Bigué
Directrice des opérations

SENTINELLE NORD | UNIVERSITÉ LAVAL

Joint International Research Units



Chemical and Biomolecular Research of the Microbiome and its Impacts on Metabolic Health and Nutrition JIRU (CNR, Italy)

- CERC in the Microbiome- Endocannabinoidome Axis in Metabolic Health (Chairholder: Vincenzo Di Marzo)



Child Neural Development and Psychiatry JIRU (U.Lausanne, Switzerland)

- CERC in Neurophotonics (Chairholder: Pierre Marquet)



Québec-Brazil Photonics Research JIRU (UNESP, Brazil)

- CERC in Photonic Innovations (Chairholder: Younès Messaddeq)



Takuvik JIRU (UL/CNRS, France)

- CERC in Remote Sensing of Canada's New Arctic Frontier (Chairholder: Marcel Babin)



Consiglio Nazionale
delle Ricerche



UNIL | Université de Lausanne



Research Station Qikiqtarjuaq, Nunavut



UNIVERSITÉ
LAVAL





Sustaining Key activities

- Diversified funding sources—combining grants, industry, international partners, and community support to build resilience.
- Embedded projects within local and global partnerships, ensuring ongoing collaboration and shared ownership.
- Developed scalable and modular sustainability projects —allowing for changing situations or growth without starting from scratch.