

Evolving uses of technology in Nunavut research practice: *How physical, health and social scientists use technologies to collaborate, conduct, and report on research*

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Stuart And Juno visiting Apex Hill
Photo: Stuart Anderson



1. McMaster University
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Overview

Research Question

How has the use of technologies evolved alongside research practice when collaborating, conducting, and reporting on research in Nunavut?

Objectives

1. Identify **effective** communication technologies used by researchers to collaborate with community partners;
2. Characterize which and how technologies are used to conduct research in field- or **community-based research**;
3. Describe/explore technologies used for **knowledge mobilization**;
4. Examine the infrastructure, accessibility and **community** factors affecting choice of technologies;
5. Assess how technologies in Nunavut have changed over time; and,
6. Explore objectives 1-5 through the lens of each scientific discipline (physical, health and social science).



NRI and NAC TP buildings
Photo: Stuart Anderson

Interviews

RESEARCH TRENDS IN
NUNAVUT

BASED ON SCIENTIFIC RESEARCH
LICENSES (2004-2019)

JUNE 2022



McMaster
University

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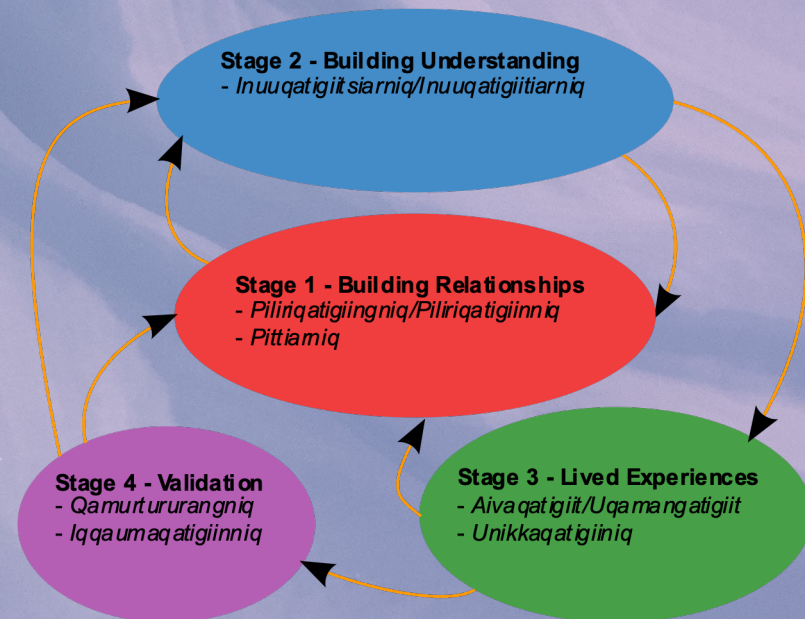
In collaboration with:

Jamal Shirley, Nunavut Research Institute



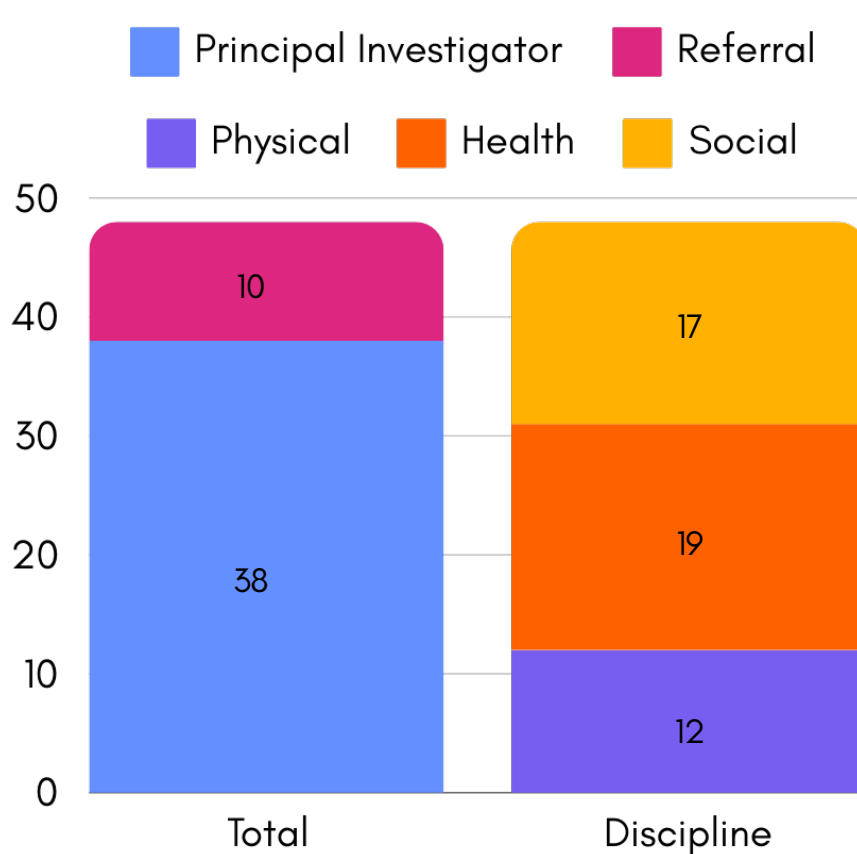
Carleton
UNIVERSITY

- I identified **top 20 license-holding Principal Investigators** from physical, health and social science using **Isirvik** (NRI licensing database).
- I engaged **participants in semi-structured interviews** to discuss technologies they have used in their research in Nunavut.

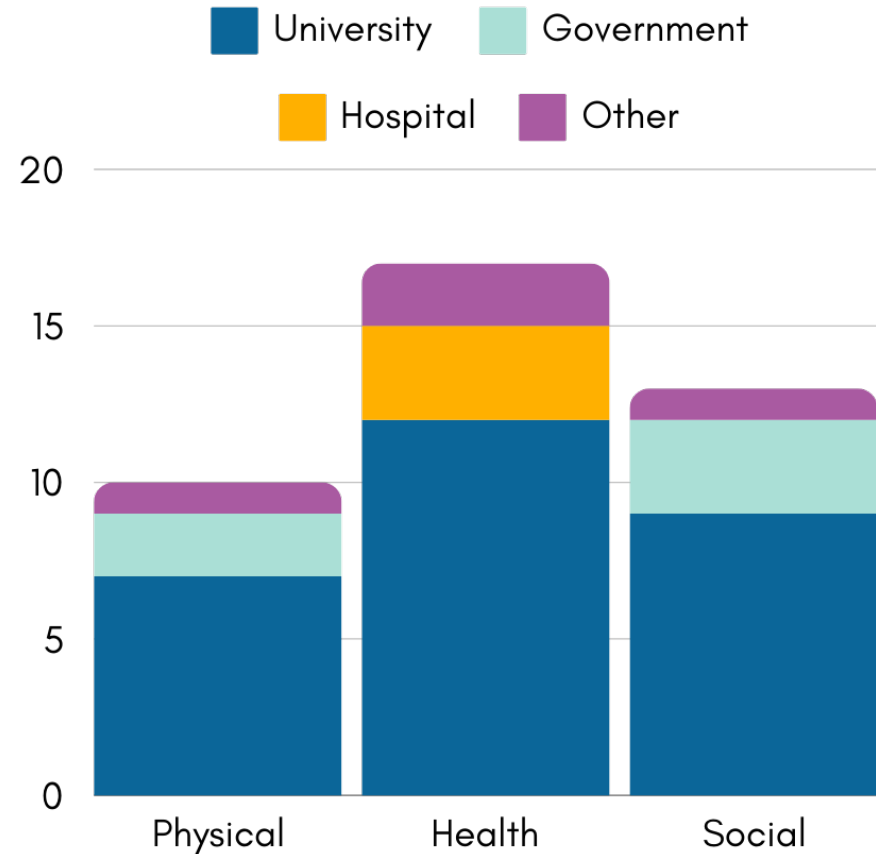


(Polidoro et al. 2022)

Interviews - Completed



Total interviews conducted (48)
and breakdown by discipline



PI affiliation by discipline

Interviews - CRAFT (Cope, 2021)

- **Conditions**

- Under what conditions is a technology being used?

- **Relationships**

- Which relationships are needed or established because of or through a technology?

- **Actions**

- How is a technology used? Who can use it?
- How/where is training done?

- **Feelings**

- How do researchers and community partners feel about technological change?
- How do they feel about the choice they are provided?

- **Themes**

- Optimal **community-based research technologies**.
- "Simple", "basic" and "invisible" technologies.
- Social media: preference and use.
- Satellite technology: communication and conducting research.
- Technology as media.

Photo: Stuart Anderson



Seal skin preparation, and the "simple" technologies used to do so, can help develop relationships, transfer knowledge about other topics, and help individuals feel connected to each other and the land.

Next Steps

Experiential Learning at Research Hubs

- Proposed sites: Cambridge Bay, Iqaluit, Arviat, and Resolute Bay.
- Verify:
 - Available technologies;
 - Types of research; and
 - Community engagement.
- Benefits to research hubs:
 - Video/photos of facility;
 - Inventory of technologies;
 - Improved communications; and
 - Extra hands for daily tasks.



Inuit Tapiriit Kanatami, 2022

References

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- Inuit Tapiriit Kanatami. 2022. *Inuit Nunangat Map*. Inuit Tapiriit Kanatami. <https://www.itk.ca/wp-content/uploads/2023/03/2023-Inuit-Nunangat-Map-Simplified.pdf>
- Polidoro, A., Perrin, A., Buttle, C., Sinclair, R., Ljubicic, G., and Shirley, J. 2022. Research trends in Nunavut based on scientific research licenses (2004-2019). (English/Inuktitut) Iqaluit and Hamilton: Nunavut Research Institute and McMaster University.

Thank You!



Photo: Stuart Anderson

<https://straightupnorth.ca/making-research-work-for-nunavummiut/>

Coding



Physical/Natural
Sciences



Health Sciences



Social Sciences

Collaborate

Conduct

Report

Association

- community
- academic
- government
- Inuit organization
- hospital

Technological Change

- shift in media
- technological advancement
- COVID

Technological Use

- process
- training
- location of technology
- polymedia

Technological Choice

- affordance
- limitations
- audience

Communication Facilitation

- technology type
- validation
- knowledge mobilization
- community engagement

Communication Facilitation

- technology type
- community engagement
- discussion

Research Practice

- location of research
- technology types
- discipline
- culture
- methodology