RESEARCH TRENDS IN IQALUIT
BASED ON SCIENTIFIC RESEARCH LICENSES (2004-2019)

MARCH 2023

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In collaboration with:
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For more information visit
straightupnorth.ca/research-trends-in-nunavut/
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Obtaining Information on Research Projects

All NRI license holders must provide a plain language summary of research activities completed each year. These summaries are published each year in the NRI *compendia for research* (see Resources p. 17). These annual summary reports are available in English and Inuktitut, and for some locations in Inuinnaqtun. They are meant to provide a snapshot of research fieldwork including when, how, and by whom, and what information was collected. To obtain summary reports for any research projects conducted in or near your community or region please contact the NRI Manager, Research Liaison (see contact information below).

Researchers' Ethical Obligations

Nunavummiut must be treated with fairness and respect. Researchers are required to abide by the laws of each community and to follow ethical principles and codes of conduct (see Resources p. 17). Researchers are expected to engage in culturally appropriate behaviour following local protocols. Researchers are responsible for learning what is respectful and responsible in the local context, as each community is different.

Your Rights in Research

Remember, you **always have the right to refuse to participate in a research project** even if your community has approved the research. Researchers must obtain your informed consent before they ask you any questions, and they must always respect your privacy and confidentiality.

It is against the law to conduct research in Nunavut **without a license**. Researchers must follow the terms and conditions in their research licenses and ensure their work does not cause harm or disruption to the community or to wildlife and the environment. Research licenses can be suspended or revoked, and a researcher may face fines or other penalties, when there is documented proof that research is causing harm.

If you have concerns that a researcher working in your community has not secured your informed consent, or may be causing harm or disruption, please contact the Nunavut Science Advisor (see contact below).

<table>
<thead>
<tr>
<th>Manager, Research Liaison</th>
<th>Nunavut Science Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:researchlicenses@arcticcollege.com">researchlicenses@arcticcollege.com</a></td>
<td><a href="mailto:researchlicenses@arcticcollege.com">researchlicenses@arcticcollege.com</a></td>
</tr>
<tr>
<td>(867) 979-7279</td>
<td>(867) 979-7290</td>
</tr>
</tbody>
</table>
Did you know that the NRI only licenses about 60% of research happening in Nunavut?

Why we created this report

The goal of this report is to help Nunavummiut learn about who is doing research, what they are studying, and where. This report was developed by analyzing research summaries from NRI license applications. To learn more about the numbers presented in this report, see Understanding the Numbers (p. 16). This work is part of the NRI's ongoing efforts to:

1. improve Inuit engagement in research;
2. make research results more accessible to Nunavummiut;
3. reduce community research fatigue; and,
4. encourage research that addresses Inuit priorities.

Other Research Permits

Even when researchers have a license, they might require other approvals to conduct their project. Other approvals are usually required for fieldwork, depending on the location and type of research activity. Examples of other authorizations a researcher may need include:

- Review by the Nunavut Planning Commission (NPC) - for all land and water based activities;
- Screening by the Nunavut Impact Review Board (NIRB) - environmental impact screening;
- Authorization from the Nunavut Water Board (NWB) - to use water or deposit waste in the environment;
- Approval from Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) - to use Federal Crown Lands in Nunavut for research purposes; and,
- Approval from a Regional Inuit Association (RIA) - to access or use Inuit Owned Lands for research purposes.
A research license is required for each year that a research project takes place in Nunavut. Projects that are conducted for longer than one year can receive a multi-year research license, and this must be renewed at the end of each year.

In this report, research license numbers represent the individual license issued each year.

Research project numbers represent an individual project (which may hold several licenses over multiple years).

WHERE RESEARCH IS HAPPENING

92% total projects in the community

8% total projects occurring at field locations outside the community (but reviewed by Iqaluit)

RESEARCH IN AND AROUND IQALUIT (2004-2019)

WHERE RESEARCH IS HAPPENING

A research license is required for each year that a research project takes place in Nunavut. Projects that are conducted for longer than one year can receive a multi-year research license, and this must be renewed at the end of each year.

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Research project numbers represent an individual project (which may hold several licenses over multiple years).

WHERE RESEARCH IS HAPPENING

92% total projects in the community

8% total projects occurring at field locations outside the community (but reviewed by Iqaluit)
Locations are based only on information provided in license applications, and may not represent all locations where field research occurred.
A Principal Investigator (PI) is the lead researcher on a project. The PI takes responsibility for submitting the license application, and making sure that the proposal is followed or adjusted as needed. The PI often lists other research team members in their application. However, numbers shown here only represent the affiliation of the PI.
TYPE OF RESEARCH IN AND AROUND IQALUIT

DISTRIBUTION OF ALL PROJECTS BY DISCIPLINE

SOCIAL SCIENCES AND TRADITIONAL KNOWLEDGE (SS)
PHYSICAL AND NATURAL SCIENCES (P)
HEALTH RESEARCH (H)

PROJECTS OVER TIME BY DISCIPLINE

DURATION OF PROJECTS BY DISCIPLINE

INTERDISCIPLINARY PROJECTS

# OF PROJECTS

0 100 200 300
0 25 50 75

1-Year
2-Year
3-Year
4-Year
5-Year
Over 5-Year

Health Research 99 23%
Physical Sciences 91 22%
Social Sciences 229 55%


# OF PROJECTS

75 70 70

19 5 19

All Disciplines  H & SS  P & H  P & SS
### Top 10 Research Topics

Research topics refer to the focus of a research project.

<table>
<thead>
<tr>
<th>TOTAL</th>
<th># of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Culture and society</td>
<td>114</td>
</tr>
<tr>
<td>2. Inuit Qaujimajatuqangit</td>
<td>70</td>
</tr>
<tr>
<td>3. Policy and Governance</td>
<td>64</td>
</tr>
<tr>
<td>4. Education</td>
<td>51</td>
</tr>
<tr>
<td>5. Climate Change</td>
<td>44</td>
</tr>
<tr>
<td>6. Sovereignty and Self-Determination</td>
<td>37</td>
</tr>
<tr>
<td>7. Land use and Traditional Activities</td>
<td>34</td>
</tr>
<tr>
<td>8. Marine (ocean, coastal areas, sea ice)</td>
<td>26</td>
</tr>
<tr>
<td>9. Wellbeing</td>
<td>25</td>
</tr>
<tr>
<td>10. Economy</td>
<td>20</td>
</tr>
<tr>
<td>11. Public Health &amp; Health Promotion</td>
<td>20</td>
</tr>
</tbody>
</table>

### Social Topics

<table>
<thead>
<tr>
<th>SOCIAL TOPICS</th>
<th># of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Culture and society</td>
<td>114</td>
</tr>
<tr>
<td>2. Inuit Qaujimajatuqangit</td>
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</tr>
<tr>
<td>6. Land Use and Traditional Activities</td>
<td>34</td>
</tr>
<tr>
<td>7. Economy</td>
<td>20</td>
</tr>
<tr>
<td>8. History</td>
<td>16</td>
</tr>
<tr>
<td>9. Justice and Law</td>
<td>14</td>
</tr>
<tr>
<td>10. Gender</td>
<td>12</td>
</tr>
</tbody>
</table>

### Land & Water Topics

<table>
<thead>
<tr>
<th>LAND &amp; WATER TOPICS</th>
<th># of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Climate Change</td>
<td>44</td>
</tr>
<tr>
<td>2. Marine (ocean, coastal areas, sea ice)</td>
<td>26</td>
</tr>
<tr>
<td>3. Wildlife*</td>
<td>18</td>
</tr>
<tr>
<td>4. Resource Development</td>
<td>16</td>
</tr>
<tr>
<td>5. Climate &amp; Weather</td>
<td>16</td>
</tr>
<tr>
<td>6. Hazards</td>
<td>12</td>
</tr>
<tr>
<td>7. Plants*</td>
<td>12</td>
</tr>
<tr>
<td>8. Infrastructure</td>
<td>10</td>
</tr>
<tr>
<td>9. Fish*</td>
<td>8</td>
</tr>
<tr>
<td>10. Air &amp; Atmosphere</td>
<td>7</td>
</tr>
</tbody>
</table>

### Health Topics

<table>
<thead>
<tr>
<th>HEALTH TOPICS</th>
<th># of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wellbeing</td>
<td>25</td>
</tr>
<tr>
<td>2. Public Health &amp; Health Promotion</td>
<td>20</td>
</tr>
<tr>
<td>3. Epidemiology</td>
<td>19</td>
</tr>
<tr>
<td>4. Health Practitioners &amp; Workers &amp; Learners</td>
<td>19</td>
</tr>
<tr>
<td>5. Health Systems &amp; Monitoring</td>
<td>17</td>
</tr>
<tr>
<td>6. Health Services</td>
<td>14</td>
</tr>
<tr>
<td>7. Community Wellness</td>
<td>12</td>
</tr>
<tr>
<td>8. Clinical &amp; Medical Research</td>
<td>5</td>
</tr>
<tr>
<td>9. Population Health</td>
<td>3</td>
</tr>
<tr>
<td>10. Rehabilitation</td>
<td>2</td>
</tr>
</tbody>
</table>

*Some of the projects licensed by the NRI address topics related to wildlife, plants and fish. However, research on wildlife, fish, and plants is not directly licensed by NRI (see About this Report, p. 2) and so the full scope of wildlife and fisheries research is not represented in this report.
RESEARCH METHODS

Numbers shown on p. 8-9 only represent the research methods and reporting tools that were described in license applications (not all licenses included this information).

TOP 10 RESEARCH METHODS

<table>
<thead>
<tr>
<th># of Projects</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>208</td>
<td>Interviews</td>
</tr>
<tr>
<td>56</td>
<td>Surveys</td>
</tr>
<tr>
<td>40</td>
<td>Focus Groups</td>
</tr>
<tr>
<td>32</td>
<td>Research &amp; Training Workshops</td>
</tr>
<tr>
<td>28</td>
<td>Experiential Learning &amp; Observation</td>
</tr>
<tr>
<td>24</td>
<td>Water Sampling</td>
</tr>
<tr>
<td>24</td>
<td>People/ Community Photography</td>
</tr>
<tr>
<td>21</td>
<td>Case Studies</td>
</tr>
<tr>
<td>18</td>
<td>Sediment Sampling</td>
</tr>
<tr>
<td>17</td>
<td>Vegetation Sampling</td>
</tr>
<tr>
<td>17</td>
<td>Descriptive Studies</td>
</tr>
<tr>
<td>17</td>
<td>Environmental Observation</td>
</tr>
</tbody>
</table>

TOP 10 SOCIAL & HEALTH RESEARCH METHODS

(OUT OF 333 PROJECTS)

<table>
<thead>
<tr>
<th>Method</th>
<th># of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>80</td>
</tr>
<tr>
<td>Surveys</td>
<td>50</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>100</td>
</tr>
<tr>
<td>Research &amp; Training Workshops</td>
<td>150</td>
</tr>
<tr>
<td>Experiential Learning &amp; Observation</td>
<td>200</td>
</tr>
<tr>
<td>People/ Community Photography</td>
<td>250</td>
</tr>
<tr>
<td>Case Studies</td>
<td>300</td>
</tr>
<tr>
<td>Descriptive Studies</td>
<td>350</td>
</tr>
<tr>
<td>Epidemiological Studies</td>
<td>400</td>
</tr>
<tr>
<td>Archival Research</td>
<td>450</td>
</tr>
<tr>
<td>Creative &amp; Artistic Methods</td>
<td>500</td>
</tr>
</tbody>
</table>

TOP 10 LAND & WATER RESEARCH METHODS

(OUT OF 91 PROJECTS)

<table>
<thead>
<tr>
<th>Method</th>
<th># of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sampling</td>
<td>20</td>
</tr>
<tr>
<td>Sediment sampling</td>
<td>15</td>
</tr>
<tr>
<td>Environmental observation</td>
<td>10</td>
</tr>
<tr>
<td>Vegetation sampling</td>
<td>5</td>
</tr>
<tr>
<td>Soil sampling</td>
<td>2</td>
</tr>
<tr>
<td>Environmental photography</td>
<td>2</td>
</tr>
<tr>
<td>Ground truthing for remote sensing or aerial surveys</td>
<td>1</td>
</tr>
<tr>
<td>Rock sampling</td>
<td>1</td>
</tr>
<tr>
<td>Weather Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>Ship-based research</td>
<td>1</td>
</tr>
</tbody>
</table>
Community-connected projects are those that involve community members in some capacity, for example, as local guides, translators, or data providers.

Community-partnered projects involve a research partnership between a Principal Investigator and community members or organizations where the community plays an active role in all parts of the research.
**RESEARCH REPORTING TOOLS**

### TOP 10 REPORTING TOOLS
(OUT OF 240 PROJECTS)

1. Journal Article
2. Report
3. Student Thesis
4. Community Presentation
5. Conference Presentation
6. Results Summary
7. Website
8. Book
9. Community Organization Meetings & Updates
10. Radio Presentation

### TOP 5 REPORTING TOOLS OVER TIME
(OUT OF 165 SOCIAL SCIENCE PROJECTS)

- Journal Article
- Report
- Student Thesis
- Community Presentation
- Conference Presentation

YEAR

# OF PROJECTS
Review numbers only represent local community organizations that received research license applications to review. The Government of Nunavut, Nunavut Tunngavik Incorporated, Regional Inuit Organizations, Institutes of Public Government, the Government of Canada, and Non-Governmental Organizations also review research licenses. These could not be easily associated with communities and so are included in regional numbers (p. 13) and the Nunavut-wide report.

**TOTAL LICENSES REVIEWED BY COMMUNITY ORGANIZATIONS**

- City of Iqaluit (Frobisher Bay)
- Amaruq Hunters and Trappers Association (Iqaluit)
- Qaujigiartiit Health Research Centre
- Tammaativvik Boarding Home
- Iqaluit District Education Authority*

*District Education Authority feedback is received by the Government of Nunavut Department of Education, not directly by the Nunavut Research Institute.*
Intpections of research in Nunavut communities (2004-2019)
TOTAL LICENSES BY REGION

LICENSE REVIEW BY ORGANIZATION TYPE
(OUT OF 17,037 REVIEWS)

- Government of Nunavut: 470 (3%)
- Government of Canada: 1530 (9%)
- Nunavut Tunngavik Incorporated: 1796 (10%)
- Regional Inuit Associations: 1909 (11%)
- NGOs: 418 (2%)
- Nunavut Arctic College: 207 (1%)
- HTOs: 2642 (15%)
- Institutes of Public Government: 3693 (21%)
- Hamlets (including City of Iqaluit): 5299 (29%)

All District Education Authorities and School Services
Most Social Sciences/Traditional Knowledge (SS) and Health (H) research occurs in communities, and most Physical/Natural Sciences (P) research occurs outside communities at field locations. We use the license review by Hamlet (or City of Iqaluit) to connect Physical/Natural Science research projects to community profiles. One project may occur in multiple communities, so these numbers are out of the total Hamlet reviews of 3408 projects.
UNDERSTANDING THE NUMBERS

Analysis of License Applications
The research numbers and trends shown in this report are based on the analysis of Scientific Research License Applications. If a full application was not available, the research summary from the NRI annual compendium was used. This means that the analysis only reflects what a researcher proposed when first applying for their license. The numbers do not reflect any final changes or adjustments that a researcher made when actually carrying out the project.

Types of Research
The research numbers and trends shown in this report only represent about 60% of the research that happens in Nunavut. This includes research in the Physical and Natural Sciences (P), Health Sciences (H), and Social Sciences and Traditional Knowledge (SS). Other kinds of research have a separate permitting process, and are not included in this report (see About this Report, p. 2).

Nunavut-led Research
Some scientific activities led by government agencies, Inuit organizations, and by individual Nunavummiut do not require licensing under the Scientists Act. For this reason, the number of Nunavut-led research activities is likely underrepresented in the report. Refer to the NRI's Scientific Research Licensing Guidelines for a list of research activities that are currently exempt from licensing (see Resources p. 17).

Research Topics
For each project we reviewed the summary available in the license application, or annual compendium, to identify all topics relevant to the research (p. 7). This helped to identify the range of research topics covered in Nunavut, as well as to develop keywords that can be used to search research projects in the future.

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NRI Licensing Information  
(https://www.nri.nu.ca/)  
- Scientific Research Licensing Guidelines  
- Compendiums of Research Licensed under the Scientists Act (since 1997)  
- Health Research in Nunavut: Special Considerations for Remote Data Collection  
- Scientific Research Licensing: Frequently Asked Questions

Inuit Tapiriit Kanatami Resources (https://www.itk.ca/)  
- National Inuit Strategy on Research (NISR)  
- NISR Implementation Plan  
- Negotiating Research Relationships: A Guide for Communities  
- Negotiating Research Relationships with Inuit Communities: A Guide for Researchers

Nunavut Research Organizations  
- Agqiumawvik Society (Arviat)  
- Arctic Eider Society (Sanikiluaq)  
- ArcticConnexion (multiple communities)  
- Ikaarvik (multiple communities)  
- Ittaq Heritage and Research Centre (Clyde River)  
- Kitikmeot Heritage Society (Cambridge Bay)  
- Nattilik Heritage Society (Gjoa Haven)  
- Qaujigiartiit Health Research Centre (Iqaluit)  
- Researchers are also encouraged to reach out to the Regional Inuit Association, Hamlet Office, Hunters and Trappers Association, Visitor's Centre, and other organizations in each community you work in, to get recommendations on important local research groups and initiatives.

Research Ethics and Guidelines  
- Examples of Inuit-centred research frameworks  
- Ethical Principles for the Conduct of Research in the North  
- Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans

Photo: Gita Ljubicic