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Towards Arctic Research Upholding Indigenous Peoples' Rights

Holmberg, Aslak; Morin, Evie; Chahine, Anne S.; Doering, Nina N.; Dudeck, Stephan; Fisher, Charleen; Hermansen, Nina; Herrmann, Thora Martina; Ikaarvik; Kramvig, Britt

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Towards Arctic Research Upholding Indigenous Peoples' Rights:

Recommendations for ICARP IV, the International
Conference on Arctic Research Planning



Imprint

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¹ Ikaarvik is an Indigenous-led youth organization bridging research and communities across knowledge systems (www.ikaarvik.org). Ikaarvik chose to be included as an organization.

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Introduction

Key message: A decolonial approach is needed to fulfill IASC's

"[commitment] to recognizing that Traditional Knowledge, Indigenous Knowledge, and 'Western' scientific knowledge are coequal and complementary knowledge systems, all of which can and should inform the work of IASC" (IASC, n.d.). This document summarizes key recommendations for actions regarding five themes:

1. Indigenous Peoples' right to self-determination as a prerequisite for high-quality Arctic research
2. Ethics, methods, and methodology as key for decolonial research
3. Indigenous-led research in design and practice
4. Indigenous Peoples' co-equal participation in Arctic research funding structures and decision-making for securing decolonial Arctic research in practice
5. Funding for co-creative and Indigenous-led Arctic research

The Arctic is the ancestral home of diverse Indigenous Peoples, where they have generated knowledge about their territories, encompassing natural environments and reciprocal relationships. This profound relationship of Arctic Indigenous Peoples with their ecosystems emphasises their crucial role in research, which holds the potential to impact both tangible and intangible elements of the natural world. The history of Arctic regions is one of colonisation by domestic and foreign governments whose policies and practises are still felt today. This, coupled with the influx of external researchers, brought unequal power dynamics between knowledge systems and methodologies, causing harm to local people and undermining the quality of Arctic research. Indigenous communities and trained Indigenous researchers continue to lead research today. However, despite notable shifts in research methodologies, the enduring legacy of colonialism continues to cast a pervasive influence over the entire research continuum, from idea to conclusions, implementation, and policy outcomes.

In this document, we provide the ICARP IV process with concrete recommendations for actions that can advance the parity and complementarity of Traditional Knowledge, Indigenous Knowledge, and academic scientific knowledge in order to inform the process and lead to better research outcomes for all. However, this document cannot be used as a universally applicable one-size-fits-all approach or as rigid, prescriptive guidelines. The situations of Arctic Indigenous Peoples vary significantly across the Circumpolar North due to diverse geographical, environmental, and cultural factors, which influence their distinct challenges, priorities, lifestyles, and interactions with the changing Arctic environment. Dialogues and relationship-building are key to ensure ethical and effective research practices that genuinely serve to uplift the status, rights, and roles of Arctic Indigenous Peoples.

In order to fulfil the aforementioned commitment, Arctic research needs to be decolonised and Indigenous. Decolonial research translates to

moving away from the typical institutional and researcher-centric systems towards genuine equality in planning and decision-making on research strategies, processes, and funding. The inclusion of Indigenous rightsholders at eye-level in all decision-making, planning and funding of Arctic research, on equal footing with the relevant institutions at the nation-state level, advances the realisation of Indigenous Peoples right to self-determination. Self-determination is the right of Indigenous Peoples to independently guide research processes, ensuring alignment with their values and needs, thereby enhancing the relevance and impact of research outcomes. Decolonising research is crucial for Indigenous self-determination (see: Example 1). Championing Indigenous Knowledge has also yielded ground-breaking discoveries (see: Example 2), which would not have happened without working with Indigenous Knowledge Holders. Some research inquiries are most aptly addressed by Indigenous communities themselves. Overall, decolonial research approaches lead to better science, better knowledge, improved understanding, and better decision-making results. In light of these considerations, we have formulated a set of recommendations for the ICARP IV process.

This document, intended for ICARP IV, was developed over a period of 12 months. We drew upon the *Roadmap to Decolonial Arctic Research: Policy Brief for the European Commission* (Herrmann et al., 2023) (developed under a service contract of EU-

PolarNet 2¹) and elaborated on its key messages and recommendations for action. This document received funding via the European Environment Initiative (EURENI) of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV). It was compiled by members of the CO-CREATE collaborative² and members of the DÁVGI³ project team. The initial version of this document was reviewed in a workshop session, followed by a three-week-long online public consultation process. Comments and suggestions collected during this period were carefully incorporated into the final version of this document.

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- ¹ EU-PolarNet 2 received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101003766. With permission from EU-PolarNet 2, some sections of this document have been taken directly from the Roadmap. Others have been adjusted for broader relevance beyond the EU context. While not explicitly cited in this document, these recommendations build on sources that are cited in the Roadmap text. To give credit to where these ideas come from, we list all relevant Roadmap references in the Literature section. Additional recommendations have been added based on the consultations, workshop sessions, and a review of recent literature (referenced in-text).
 - ² The CO-CREATE collaborative is a research collaborative of like-minded Indigenous and non-Indigenous partners focused on fostering co-creation in the Arctic.
 - ³ DÁVGI: Co-Creation for Biocultural Diversity in the Arctic is a project co-led by the Saami Council, the Research Institute for Sustainability, and Ecologic Institute, which focuses on applying co-creative research methods and reflects on the nature of co-creative partnerships in Arctic research. DÁVGI is funded by the BMUV as part of the EURENI programme.

*"[...]Arctic research
needs to be decolonised
and Indigenised."*

CHAPTER 1

Indigenous Peoples' right to self-determination as a prerequisite for high-quality Arctic research

Key Message

Arctic Indigenous Peoples have inherent rights to the lands, territories and resources of the Arctic. We advocate for a rights-based approach to changing the mechanisms, structures and institutions of Arctic research planning and funding. First, this involves recognising and respecting Indigenous Peoples' right to self-determination and meaningful participation in all processes affecting their cultures and territories in the Arctic. Second, Indigenous Peoples have the right to have their knowledge systems recognised and respected, as well as the right to determine the ownership, transmission, and interpretation of that knowledge. These rights are increasingly being recognised through meaningful engagement and inclusion of Indigenous Peoples' research priorities and strategies in academia and beyond. Decolonial research is needed and ethically demanded as a precondition for meaningful and equitable knowledge production and high-quality research outcomes.

Key recommendations for action

- Promote the co-equal inclusion and amplification of Indigenous voices in projects and within Arctic research funding bodies, and establish forms of full Indigenous participation in decision-making and capacity building that are not based on benevolence or paternalistic attitudes, but on a clear understanding of the rights of Indigenous Peoples (Dorough, Degai, and Williams, 2023).
- Enhance the growing awareness among responsible staff at institutions funding Arctic research regarding the impact of colonialism on academic structures and institutions
- and promote a deeper understanding and acknowledgment of Indigenous lands, fostering a respectful recognition of the historical context within which Arctic research takes place.
- Deepen the understanding that transforming funding structures to advance the realisation of Indigenous Peoples' rights in funding practices (see Chapter 4) is one of many components that are necessary to foster decolonisation within academia.
- Strengthen ties among Arctic research institutions and Indigenous Peoples' organisations, Indigenous policy bodies, and knowledge producing and transferring institutions (i.e., Indigenous research and education institutions) in research funding mechanisms and structures.
- Fund targeted capacity building among all scientific fields to enhance understanding of why decolonial research promotes innovation and how decolonial research can be implemented into the specific methods of the respective disciplines (see also Chapter 4).
- Promote capacity building and training within Arctic research funding institutions to build recognition of how equitably partnering with Indigenous Peoples in all research phases, from priority identification to implementation and conclusion, contributes to high-quality research.

Example 1. The Nunavut Research Institute.

A good example of Inuit self-determination in relation to research is the Nunavut Research Institute (NRI) at Nunavut Arctic College. On the NRI website, they explain:

"The Nunavut Research Institute (NRI) is your gateway to scientific research in Nunavut! We are [...] responsible for administering Scientists Act which applies across the entire territory of Nunavut. The Act requires that anyone conducting research in the health, social sciences, or natural/physical sciences disciplines must first obtain a license from the NRI.

Through our research licensing process, we are committed to keeping Nunavummiut informed of the research being conducted in our territory, and we make sure that our residents' needs, concerns, and priorities are carefully considered before any license is approved. We provide guidance, advice and resources to researchers in multiple disciplines to improve their awareness of the rules and expectations for working in our Territory and to help foster research that is ethical, inclusive and responsible to Nunavummiut.

As the science division of Nunavut Arctic College (NAC), we also provide research support, guidance, and training for College staff, faculty, and students engaged in research, and we work to create new research projects, partnerships, and networking opportunities that will help strengthen NAC's capacity as a research leader in our Territory!" (<https://www.nri.nu.ca>, last accessed online April 6, 2024).

Ethics, methods, and methodology as key for decolonial research

Key Message

Acknowledging Indigenous Peoples' right to self-determination in research goes hand-in-hand with rethinking overall ethics in both the natural and social sciences and humanities.. Based on ethical guidelines found in Indigenous methodologies, this chapter highlights the relevance of reciprocal research relations that recognise and respect the existence of more than one way of knowing and being in this world. The chapter also emphasises that Indigenous Peoples are the stewards of their own knowledge and information, and therefore only they can decide how it is collected and used, by whom, under what conditions, and what specific parts of that knowledge are shared¹.

Key recommendations for action

- Following general ethical research guidelines and directives (institutional or national) is not sufficient; such guidelines need to be expanded to include ethical principles and accountability mechanisms established by either Indigenous Peoples or larger Indigenous bodies.
- Adhere to the principles of data sovereignty within Indigenous communities, prioritising control, interpretation, secure storage, and access to their own data.
- Research is improved when it is relevant to the Indigenous community that either is the focus of the study itself or who live on or have rights to the land and waters that are part of the research.
- There is no underlying 'licence to research'. Indigenous Peoples always have the right to refuse research projects which are considered harmful, are not a priority, or due to lack of capacity.
- Indigenous Peoples should have access to leading roles in the overall research process, with proper remuneration for all roles ensured and support for capacity building in Indigenous scholarship and institutions (see also Chapter 3 and 4). Indigenous research partners need to be in agreement about what constitutes "capacity building".
- Non-extractive research requires agreement between Indigenous people and researchers about how communities can benefit from the research.
- Embed respect for "... individual and collective ownership of ways of knowing and being in Indigenous communities... [and] all forms of Indigenous knowledge production and transmission..." in research practices by ensuring the "... return of knowledge that was historically alienated during colonisation..." and co-produced in contemporary research partnerships (Herrmann et al., 2023, p. 19).
- Return research findings to Indigenous communities (i.e., presentations, speaking in schools, speaking to leadership, etc.).
- As an integral aspect of Indigenous Peoples' right to self-determination, recognise their exclusive authority in assessing the efficacy and fairness of research collaborations and commitments. Dedicate adequate time and resources to enable Indigenous communities to thoroughly evaluate the research process, including priorities, methods, and outcomes.

¹ This is inspired by the First Nations Information Governance Centre's principles of Ownership, Control, Access, and Possession (OCAP®). OCAP® is a registered trademark of the First Nations Information Governance Centre (FNIGC). For more information about the definition of OCAP®, visit <https://fnigc.ca/ocap-training/> (last accessed online on April 6, 2024).

Example 2. Traditional Knowledge of Northern Waters.

The project "Traditional Knowledge of Northern Waters" was led by the Snowchange Cooperative and was funded by the Nordic Environment Finance Corporation (NEFCO). The project initiated the creation of a community-based monitoring (CBM) network for observing the river basins of the Ponoï and Näätämmö rivers, incorporating Traditional Knowledge, citizen sciences, and other scientific methods (Snowchange Cooperative, 2018). Collaboration formed a key element of the project's methods: "In all villages, the local people were invited to be the 'guardians' of their waters and provide new observations that they [felt were] relevant..." (Ibid., p. 6).

Example 3. Global Indigenous Data Alliance.

The Global Indigenous Data Alliance (GIDA) focuses on the rights of Indigenous Peoples to their data. GIDA "is a network of Indigenous researchers, data practitioners, and policy activists advocating for Indigenous Data Sovereignty within their nation-states and at an international level" (GIDA, n.d.).

This is their stated purpose: "GIDA's aim is to further International Indigenous Data Sovereignty and Indigenous Data Governance in order to advance Indigenous control of Indigenous Data. Objectives include:

- Advancing Indigenous Data Sovereignty and Governance
- Asserting Indigenous Peoples' rights and interests in data
- Advocating for data for the self-determined well-being of Indigenous Peoples
- Reinforcing Indigenous rights to engage in decision-making in accordance with Indigenous values and collective interests" (GIDA, n.d.)

Indigenous-led research in design and practice

Key Message

Indigenous knowledge has developed over millennia and offers invaluable insights into sustainable practices and environmental baselines and changes. Indigenous communities and researchers have always led research in which Indigenous Peoples defined their own research priorities and methodologies. Today, Indigenous-led research can be co-creative or autonomous. As part of the right to self-determination, Indigenous Peoples have the right to choose how, when, and where to share their knowledge. Indigenous communities may be wary of external researchers due to historical exploitation and a lack of genuine collaboration in the past. As some Indigenous knowledge is of economic value, and some topics are culturally sensitive and prone to misinterpretation, not all topics of research are suitable for outside researchers. Colonial hierarchies and structural racism within the Western academy hinder Indigenous leadership and recognition, and there are challenges in reconciling radically distinct value-systems, worldviews, and land-use practices. Indigenous and particularly Indigenous-led research programs face chronic underfunding and there is a systematic lack of Indigenous influence over the funding of research. Yet, Indigenous people, including youth, are well positioned to excel as leaders in Arctic research. Supporting them through paid research positions, mentorship, outreach and engagement will enhance Indigenous-led research, community wellbeing, and self-determination.

Key recommendations for action

- Provide direct funding to Indigenous researchers and Indigenous-led organizations, museums, research institutions, and heritage centres, which are undertaking research and identifying priorities both collaboratively with non-Indigenous researchers and independently. Adapt funding mechanisms accordingly, acknowledging that some projects may
- not have infrastructure for complicated administrative processes (See also: Buschman & Sudlovenick, 2022 and Reed et al., 2021).
- Support Indigenous communities in developing their own sets of guidelines and ethical principles for scientific research (see also Chapter 2).
- Build capacity at Indigenous-led organizations which provide support for Indigenous leadership in research, by providing consistent, long-term funding, rather than just project-specific funding (see Example 4) (See also: Reed et al., 2021).
- Support Indigenous, social, and scientific communication of the benefits of Indigenous-led research to overcome colonial perceptions and practices (See also: Hoffman et al., 2022).
- Support Indigenous-led assessments of the structural requirements for Indigenous-led research, to better understand barriers and policy needs, and to frame recommendations for actions to address them.
- Ensure opportunities for Indigenous Peoples to review funding proposals (see Chapter 4).
- Support Indigenous research sovereignty by following guidelines and resources developed by Indigenous organizations (see Example 5).
- Provide direct funding and establish formal guardianship programs to support Indigenous communities in leading the active management of their territories (See also: Reed et al., 2021).
- Create more opportunities to engage Indigenous youth in multiyear paid research positions (See also: Sadowsky et al., 2022, and Buschman & Sudlovenick, 2022).

Example 4. Ikaarvik.

Created by Inuit youth, Ikaarvik is an Indigenous-led organisation based in Mittimatalik (Nunavut, Canada) that develops opportunities for Northern Indigenous youth to empower themselves for self-determination in Arctic research and decision making. Combining local Indigenous Knowledge and Western science, Ikaarvik youth and mentors identify and address their communities' local research priorities and help southern-based Arctic researchers to work with both ways of knowing for better, more relevant and robust results. Youth engage in workshops to integrate Indigenous Knowledge and science, identifying local research priorities, and, with mentorship, autonomously lead projects from conception to result communication, leveraging external expertise when needed. Some examples of issues being addressed through Ikaarvik youth and community projects are local river health, invasive species, shipping impacts, salmon habitat restoration and local sea ice conditions. Despite renowned success, Ikaarvik has no core funding, making it difficult to build up sufficient capacity over time. For more information, please visit: <https://ikaarvik.org/> [last accessed online on April 6, 2024].

Example 5. Existing resources and guidelines on how to support Indigenous sovereignty.

The following list is a small sample of existing resources and guidelines on how to support Indigenous sovereignty:

- CARE principles for Indigenous Data Governance and Set of rights for Indigenous peoples' rights in data, by the Global Indigenous Data Alliance (GIDA, n.d.).
- Circumpolar Inuit Protocols for Equitable and Ethical Engagement (2022)(ICC, 2021).
- Data Governance and Management Toolkit for Self-Governing Indigenous Governments (SGIGs, n.d.).
- The First Nations Principles of OCAP® (First Nations Information Governance Centre, 1998).
- Greenland's National Research Strategy 2022-30 (Ministry for Education, Culture, Sports and Church, 2022).
- Conducting traditional knowledge research in the Gwich'in settlement area - a guide for researchers (Gwich'in Tribal Council, 2011).
- Inuit Tapiriit Kanatami (2018). National Inuit Strategy on Research (ITK, 2018).
- SciIQ (combining science and IQ) (Pedersen et al., 2020).
- Working towards ethical guidelines for research involving the Sámi (Holmberg, 2021).

Indigenous Peoples' co-equal participation in Arctic research funding structures and decision-making for securing decolonial Arctic research in practice

Key Message

In order to improve the impact and benefits of any research activities carried out on Indigenous Peoples' lands and waters, Indigenous self-determination in setting research agendas is critical. To implement decolonial research successfully, it is crucial to develop mutually beneficial Arctic research programmes and funding policies explicitly for and in formalised collaboration with Indigenous rightsholders. This requires establishing permanent formal positions for Indigenous rightsholders within the respective decision-making structures of Arctic research. These positions must be remunerated to honour and fairly compensate Indigenous Peoples and Indigenous Knowledge Holders. Such mutual involvement entails identifying local research needs and objectives—while respecting that not all research affecting Indigenous Peoples' lands and waters is appropriate for involvement of non-Indigenous researchers—as well as joint monitoring and evaluation of research proposals and projects in the natural and social sciences and humanities.

This chapter identifies the opportunities and resources needed for full partnership and participation of Indigenous rightsholders (going beyond mere consultation) in the decision-making structures on Arctic research policy development and funding structures. At the same time, we recognise that Indigenous rightsholders may refuse to take part in such decision-making processes due to lack of capacity or as an act of resistance to colonial institutions and colonial practices, to avoid giving these processes a legitimacy that some Indigenous rightsholders do not wish to recognise. Working towards decolonisation of institutions, practices and structures takes many steps.

Key recommendations for action

- Indigenous rightsholders must be fully included and equally represented in the decision-making processes of Arctic research programming and funding.
- Binding inclusion of Indigenous Peoples in Arctic research funding infrastructures should be achieved by securing decision-making roles and by establishing permanent, remunerated formal leadership positions for Indigenous rightsholders within the structures of Arctic research funding bodies. This inclusion is particularly critical in the panels, committees, and teams drafting and evaluating research calls.
- Indigenous rightsholders must have a full say in all decisions of Arctic research funding mechanisms. This includes the development of Arctic research policies and grants, research calls, review of research proposals, participation in project funding decisions, monitoring the implementation of collaborative and decolonial methods in the implementation of research projects by consortia, and mid-term and final evaluation of project outcomes.
- Funding calls for Arctic research must be co-developed with Indigenous rightsholders.
- Two-way capacity building, as agreed upon by Indigenous research partners, should be the norm: Arctic research institutions should provide resources for long-term capacity building within Indigenous institutions. This will support Indigenous experts and build a larger pool of future Indigenous leaders in Arctic research

- funding bodies. On the other hand, the capacity on decolonial Arctic research, co-creation methods, and Indigenous epistemologies must be built within Arctic research institutions through training courses for staff.
- To build cohorts of future Indigenous leaders in the decision-making structures of the Arctic research funding system, academic institutions must take measures to inspire young Indigenous people to engage in research, promote young Indigenous scientific talents by offering targeted funding, and provide mentorship for Indigenous early-career scholars.
- The inclusion of Indigenous rights in the structures of Arctic research funding must not lead to a system of tokenism.

Example 6. Coming of Age in Indigenous Communities.

Coming of age in Indigenous communities: Ageing, quality of life and homebased elderly care in Sápmi and Atayal region (Taiwan) (Munkejord et al., 2021) is an example of a decolonial project. The project was built from the Sámi and Tayal understanding of the elderly as an important resource for conveying "... knowledge, wisdom of life, language and culture to the younger generations" (Ibid., p. 9). Using Sámi and Tayal knowledge systems, the project followed the Two-Eyed seeing approach and contributed to cultural exchange between Elders in Sápmi and Atayal. The project team of Indigenous researchers from both Atayal and Sápmi invited and established cooperations with the Elders Council of the Sámi Parliament of Norway and organisations in Atayal and established an international scientific advisory group with Indigenous members. The project used Photovoice, which is considered a decolonial method by many Indigenous voices since the participating Elders decided what to take pictures of and then shared their stories about the photos. The project's findings have been published in multiple scientific articles, masters theses, and digital exhibitions. Additionally, as a way of returning research results and supporting cultural exchange, a published photobook was given to all participants and contributors, as well as health and social workers who work with elders.

Funding for co-creative and Indigenous-led Arctic research

Key Message

Funders play an important role in research and have the power to make possible and encourage Indigenous-led and co-creative research. Yet funding structures continue to create barriers to ethical and equitable research relationships. To overcome exploitation in research, funders can take important steps by continuing to revise their mechanisms and programmes.

Key recommendations for action

- Recognise that there is a wide range of capacity and ability of circumpolar Indigenous organisations, communities and individuals and that care must be taken to ensure that funding is accessible and reporting requirements are not barriers.
- Advertise calls for funding well in advance of submission deadlines or without specific deadlines.
- Use clear and straightforward language in calls for funding, acknowledging the linguistic diversity amongst different Indigenous communities, thereby facilitating better understanding and improving accessibility.
- Establish Indigenous-specific calls for funding proposals (see Chapter 3).
- Provide funding for a scoping or planning phase of at least one year to enable relationship building and co-development of research proposals. Funding should include “travel, salaries, honoraria, meeting spaces, interpretation, and translation services” (Doering et al., 2022, p. 9).
- Revise application requirements to ensure that potential applicants with limited resources are not excluded and Indigenous Peoples’ organisations, institutions, museums, small businesses, knowledge centres, and experts without formal academic degrees are eligible to apply and serve as project leads and principal investigators.
- Ensure that funding can be allocated to all positions and activities involved in co-creative research projects. Support projects that generate financial benefits to the community in which the research occurs—beyond those who are participating directly. Adapt funding structures and processes to minimise barriers for the Indigenous Peoples affected by the research process and outcomes.
- Allow for flexible project schedules and extended project duration (e.g., enable for funds to be moved from one year to the next) to accommodate 1) Indigenous subsistence practices and work schedules; 2) allow for time-intensive co-production/ co-creation of project objectives, methods, and deliverables; and 3) to allow for return of research results to communities.
- Allow for non-traditional research outputs defined and designed by Indigenous Peoples, including multimedia, film, performance, creative writing, and website design.
- Select project proposals and evaluate projects across the natural and social sciences and humanities based on criteria and procedures co-developed with Indigenous partners and give priority to Indigenous-led research.
- Provide funding after the main project period has ended to enable maintenance of research relationships, co-authorship, dissemination of results, and continued storage of and access to data (see Chapter 2).

- Revise reporting requirements to decrease the overall pressure on Indigenous peoples' organisations, institutions, knowledge centres, and researchers.
- Resources and mechanisms should be provided to offer training and consulting initiatives to natural scientists — who receive the largest share of Arctic research projects — on how to implement co-creative and decolonial research in practice.

As we drew upon the Roadmap to Decolonial Arctic Research: Policy Brief for the European Commission (Herrmann et al., 2023, pg. 49), sections of this chapter closely follow the structure and content of an academic research paper on funding in Arctic research (Doering et al., 2022).

Example 7. U.S. National Science Foundation.

The U.S. National Science Foundation's Arctic Research Opportunities (NSF 21-526) program is an example of a funding program with no deadline. Applications are accepted at any time and with broad eligibility criteria. For more information, see <https://new.nsf.gov/funding/opportunities/arctic-research-opportunities/nsf23-572/solicitation> [last accessed online on April 6, 2024].

Example 8. The Canada-Inuit Nunangat-United Kingdom (CINUK) Arctic Research Programme 2021 – 2025.

The CINUK programme is a funding initiative set up in partnership between Inuit Tapiriit Kanatami (ITK), United Kingdom Research and Innovation (UKRI), Polar Knowledge Canada (POLAR), the National Research Council of Canada (NRC), Parks Canada (PARKS), and Fonds de recherche du Quebec (FRQ), and emphasises co-creative and Indigenous-led research to address the impacts of rapid climate change in Inuit Nunangat (the Inuit homeland in Canada) (CINUK, 2024a). The initiative "is guided by the National Inuit Strategy on Research and seeks to fund projects that feature strong Inuit involvement and are meaningful for Inuit Nunangat communities" (CINUK, 2024b). In May 2022, 13 projects secured funding, showcasing interdisciplinary collaboration, Inuit leadership, and direct relevance to Inuit Nunangat (CINUK, 2024a).

Literature

We provide a list of references below from which we learned in the process of writing this policy brief. Many of these references are also listed in the Roadmap to Decolonial Research (Herrmann et al., 2023) upon which the policy brief draws. We therefore also list them here. References cited in-text in this document are marked below in bold.

Arctic Council Indigenous Peoples' Secretariat. (2015). *Ottawa Traditional Knowledge Principles*. Retrieved December 22, 2023, from <https://www.arcticpeoples.com/knowledge#indigenous-knowledge>

Asmar, C., Mercier, O., & Page, S. (2009). You do it from your core: priorities, perceptions and practices of research among Indigenous academics in Australia and New Zealand universities. In A. Brew & L. Lucas (Eds.), *Academic research and researchers* (pp. 128-142). Open University Press.

Bartlett, C., Marshall, M. & Marshall, A. (2012). Two-eyed seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences*, 2, 331-340. <https://doi.org/10.1007/s13412-012-0086-8>

Bowman, N. R., Francis, C. D., & Tyndall, M. (2015). Culturally responsive Indigenous evaluation: a practical approach for evaluating Indigenous projects in tribal reservation contexts. In S. Hood, R. Hopson, & H. Frierson (Eds.) *Continuing the journey to reposition culture and cultural context in evaluation theory and practice* (pp. 335-359). Information Age Publishing.

Buschman, V. Q., & Sudlovenick, E. (2022). Indigenous-led conservation in the Arctic supports global conservation practices. *Arctic Science*, 9(3), 714-719. <https://doi.org/10.1139/as-2022-0025>

Carjuzaa, J., & Fenimore-Smith, J. K. (2010). The give away spirit: reaching a shared vision of ethical Indigenous research relationships. *Journal of Educational Controversy*, 5(2), 5.

Castleden, H., Morgan, V. S., & Lamb, C. (2012). "I spent the first year drinking tea": exploring Canadian university researchers' perspectives on community-based participatory research involving Indigenous peoples. *The Canadian Geographer/Le Géographe canadien*, 56(2), 160-179.

Chanteloup, L., Joliet, F., & Herrmann, T. M. (2019). Learning and insights from a participatory photography project with Cree and Inuit about the land (Nunavik, Canada). *Polar Geography*, 42(2), 125-143.

CINUK. (2024a). About. Retrieved April 6, 2024, from <https://www.cinuk.org/about/>

CINUK. (2024b). Science. Retrieved April 6, 2024, from <https://www.cinuk.org/science/>

Cooke, S. J., Nguyen, V. M., Chapman, J.M., Reid, A. J., Landsman S. J., Young, N., Hinch, S. G., Schott, S., Mandra N. E., & Semeniuk C. A. (2020). Knowledge co-production: a pathway to effective fisheries management, conservation, and governance. *Fisheries*, 46(2), 89-97.

Coulthard, G. S. (2014). *Red skin, white masks: rejecting the colonial politics of recognition*. University of Minnesota Press.

Doering, N. N., Dudeck, S., Elverum, S., Fisher, C., Henriksen, J. E., Herrmann, T. M., Kramvig, B., Laptander, R., Milton, J., Omma, E. M., Saxinger, G., Scheepstra, A. J. M., & Wilson, K. (2022). Improving the relationships between Indigenous rights holders and researchers in the Arctic: An invitation for change in funding and collaboration. *Environmental Research Letters*, 17(6), 065014.

Dorough, D. S., Degai, T., & Williams, V. K. (November 10, 2023). [Letter titled "Indigenizing Arctic Research" from Dalee Sambo Dorough, Tatiana Degai, and Varvara Korkina Williams to the ICARP IV International Steering Committee, 2023]. Retrieved from Dalee Sambo Dorough.

Escobar, A. (2020). *Pluriversal politics: the real and the possible*. Duke University Press.

EU-PolarNet. (2020). Integrated European Polar Research Programme (Eds. D. Velazquez, M. N. Houssais, & N. Biebow). Alfred Wegener Institute. Retrieved December 22, 2023, from <https://eu-polarnet.eu/wp-content/uploads/2020/11/EPRP.pdf>

First Nations Information Governance Centre. (1998). *The First Nations principles of OCAP*. Retrieved December 22, 2023, from <https://fnigc.ca/ocap-training/>

Finbog, L. R. (2020). It speaks to you – making kin of people, duodji and stories in Sámi museums. Department of Culture Studies and Oriental Languages, Faculty of Humanities, University of Oslo.

Fjellheim, E. M. (2022). *Green colonialism, wind energy and climate justice in Sapmi*. Retrieved December 22, 2023, from <https://debatesindigenas.org/pdfeng/191-Green-colonialism-wind-energy-climate-justice-Sapmi.pdf>

The Global Indigenous Data Alliance (GIDA). (n.d.). *Purpose*. Retrieved April 6, 2024, from <https://www.gida-global.org/purpose>

Guttorm, H. E., Kramvig, B., & Kantonen, L. (2019). Pluriversal stories with Indigenous wor(l)ds creating paths behind the next mountain. *Dutkansearvvi dieđalaš áigečála*, 3(2), 149-162.

Gwich'in Tribal Council. (2011). *Conducting traditional knowledge research in the Gwich'in settlement area - a guide for researchers*. Retrieved December 22, 2023, from https://nwtresearch.com/sites/default/files/gwich-in-social-and-cultural-institute_0.pdf

Hoffman, K. M., Christianson, A. C., Dickson-Hoyle, S., Copes-Gerbitz, K., Nikolakis, W., Diabo, D. A., McLeod, R., Michell, H. J., Mamun, A. A., Zahara, A., Mauro, N., Gilchrist, J., Ross, R. M., & Daniels, L. D. (2022). The right to burn: barriers and opportunities for Indigenous-led fire stewardship in Canada. *Facets*, 7(1), 464-481.

Holmberg, A. (2018). *Bivdit Luosa – to ask for salmon. Saami traditional knowledge on salmon and the river Deatnu: in research and decision-making* [Master's thesis, UiT Norges arktiske universitet]. UiT Munin open research archive. <https://hdl.handle.net/10037/12868>

Holmberg, A. (2021). *Working towards ethical guidelines for research involving the Sámi - A Discussion paper on the work done so far and considerations on a process to develop common Sámi guidelines*. Retrieved December 22, 2023, from <https://www.saamicouncil.net/documentarchive/working-towards-ethical-guidelines-for-research-involving-the-smi>

Ministry for Education, Culture, Sports and Church. (2022). *Research – the road to progress: Greenland's national research strategy 2022 – 2030*. Naalakkersuisut (Government of Greenland). Retrieved April 6, 2024, from <https://nis.gl/wp-content/uploads/2023/01/english-book.pdf>

Interagency Arctic Research Policy Committee (IARPC). (2018). *Principles for conducting research in the Arctic*. Retrieved December 22, 2023, from https://www.iarppcollaborations.org/uploads/cms/documents/principles_for_conducting_research_in_the_arctic_final_2018.pdf

International Arctic Science Committee (ICARP). (n.d.). About. Retrieved April 6, 2024, from <https://iasc.info/about>

Inuit Circumpolar Council (ICC). (2021). *Ethical and Equitable Engagement Synthesis Report: A collection of Inuit rules, guidelines, protocols, and values for the engagement of Inuit Communities and Indigenous Knowledge from Across Inuit Nunaat*. Synthesis Report. International. Retrieved December 22, 2023, from <https://www.inuitcircumpolar.com/project/icc-ethical-and-equitable-engagement-synthesis-report/>

Inuit Tapiriit Kanatami (ITK). (2018). *National Inuit Strategy on Research*. Retrieved December 22, 2023, from <http://dx.doi.org/10.25607/OBP-1673>

Kovach, M. (2021). *Indigenous methodologies: characteristics, conversations, and contexts*. 2nd Edition. University of Toronto Press.

Kulturdepartementet (Ministry of Culture). (2021). *Regeringens proposition 2021/22:19. En konsultationsordning i frAgor som rör det samiska folket*. Sveriges Riksdag (The Parliament of Sweden). Retrieved December 22, 2023, from <https://www.regeringen.se/contentassets/cdff655ac2ed4b5885a00ae8fa82154c/en-konsultationsordning-i-fragor-som-ror-det-samiska-folket-prop.-20212219.pdf>

Kuokkanen, R. (2000). Towards an "Indigenous paradigm" from a Sami perspective. *The Canadian Journal of Native Studies*, 20(2), 411-436.

Latola, K., Scheepstra, A., Pawlak, J., Saxinger, G. (2020). White paper on status of stakeholder engagement. EU-PolarNet. Retrieved December 22, 2023, from https://repository.oceanbestpractices.org/bitstream/handle/11329/2039/EU%20PolarNet%20Stakeholder_final.pdf?sequence=1&isAllowed=y

Marsden, N., Star, L., & Smylie, J. (2020). Nothing about us without us in writing: aligning the editorial policies of the Canadian Journal of Public Health with the inherent rights of Indigenous Peoples. *Canadian Journal of Public Health*, 111(6), 822-825. <https://doi.org/10.17269/s41997-020-00452-w>

Munkejord, M.C., Hætta, S., Eira, J. B., Giæver, A., Henriksen, J. E., Mehus, G., Ness, T. M., & Silan, W. (2021). *Coming of Age in Indigenous Societies*. Susannefoto Forlag. <http://hdl.handle.net/10138/570981>

Normann, S. (2021). Green colonialism in the Nordic context: exploring Southern Saami representations of wind energy development. *Journal of Community Psychology*, 49(1), 77-94. <https://doi.org/10.1002/jcop.2242>

Pedersen, C., M. Otokiak, I. Koonoo, J. Milton, E. Maktar, A. Anaviapik, M. Milton et al. "SciQ: an invitation and recommendations to combine science and Inuit Qaujimaqatugangit for meaningful engagement of Inuit communities in research." *Arctic Science* 6, no. 3 (2020): 326-339. <https://doi.org/10.1139/as-2020-0015>

Porsanger, J. (2004). An essay about Indigenous methodology. *Nordlit*, (15), 105-120. <https://doi.org/10.7557/13.1910>

Reed, G., Brunet, N. D., Longboat, S., & Natcher, D. C. (2021). Indigenous guardians as an emerging approach to indigenous environmental governance. *Conservation Biology*, 35(1), 179-189. <https://doi.org/10.1111/cobi.13532>

Reid, A. J., Eckert, L. E., Lane, J. F., Young, N., Hinch, S. G., Darimont, C. T., Cooke, S. J., Ban, N. C., & Marshall, A. (2021). 'Two-eyed seeing': an Indigenous framework to transform fisheries research and management. *Fish and Fisheries*, 22(2), 243-261. <https://doi.org/10.1111/faf.12516>

Retter, G. B. (2021, November 25). Indigenous cultures must not be forced to bear the brunt of global climate adaptation. *Arctic Today*. Retrieved December 22, 2023, from <https://www.arctictoday.com/indigenous-cultures-must-not-be-forced-to-bear-the-brunt-of-global-climate-adaptation/>

Ryder, C., Mackean, T., Coombs, J., Williams, H., Hunter, K., Holland, A. J., & Ivers, R. Q. (2020). Indigenous research methodology—weaving a research interface. *International Journal of Social Research Methodology*, 23(3), 255-267. <https://doi.org/10.1080/13645579.2019.1669923>

Sadowsky, H., Brunet, N. D., Anaviapik, A., Kublu, A., Killiktee, C., & Henri, D. A. (2022). Inuit youth and environmental research: exploring engagement barriers, strategies, and impacts. *Facets*, 7(1), 45-70.

Samediggi. (2021). *Sakkyndig etisk komite for samisk helseforskning*. Retrieved December 22, 2023, from <https://sametinget.no/barnevern-helse-og-sosial/etiske-retningslinjer-for-samisk-helseforskning-og-kollektiv-samtykke/sakkyndig-etisk-komite-for-samisk-helseforskning/>

Saxinger, G., & First Nation of Na-Cho Nyäk Dun. (2018). Community based participatory research as a long-term process: reflections on becoming partners in understanding social dimensions of mining in the Yukon. *Northern Review*, (47), 187-207. <https://doi.org/10.22584/nr47.2018.009>

Secretariat of the Convention on Biological Diversity. (2011a). *The Tkarihwaié:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities Relevant to the Conservation and Sustainable Use of Biological Diversity*. Retrieved December 22, 2023, from <https://www.cbd.int/traditional/code.shtml>

Secretariat of the Convention on Biological Diversity. (2011b). *The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*. Retrieved December 22, 2023, from <https://www.cbd.int/abs/>

Self-Governing Indigenous Governments (SGIGs). (n.d.). Data Governance and Management Toolkit for Self-Governing Indigenous Governments. Retrieved April 6, 2024, from <https://indigenousdatatoolkit.ca>

Simpson, A. (2007). On ethnographic refusal: Indigeneity, 'voice' and colonial citizenship. *Junctures: the journal for thematic dialogue*, (9).

Smith, L. T. (2021). *Decolonizing methodologies: research and Indigenous Peoples* (3rd ed.). Bloomsbury.

Smith, L. T., Maxwell, T. K., Puke, H., & Temara, P. (2016). Indigenous knowledge, methodology and mayhem: what is the role of methodology in producing Indigenous insights? A discussion from Mātauranga Māori. *Knowledge Cultures*, 4(3), 131-156.

Snowchange Cooperative. (2018). Traditional knowledge of northern waters. Retrieved April 6, 2024, from <http://www.snowchange.org/pages/wp-content/uploads/2018/12/TraditionalKnowledge.pdf>

- Spivak, G. C., & Harasym, S. (2014). *The post-colonial critic: interviews, strategies, dialogues*. Routledge. <https://doi.org/10.4324/9780203760048>
- Tuck, E., & Yang, K. W. (2014). Unbecoming claims: pedagogies of refusal in qualitative research. *Qualitative Inquiry*, 20(6), 811-818. <https://doi.org/10.1177/1077800414530265>
- United Nations General Assembly. (2007). *Declaration On the Rights Of Indigenous Peoples*. Retrieved December 22, 2023, from <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>
- United Nations. (n.d.). *Decolonization*. Retrieved December 22, 2023, from <https://www.un.org/en/global-issues/decolonization>
- Veran, H. (2018). The politics of working cosmologies together while keeping them separate. In M. de la Cadena & M. Blaser (Eds.), *A world of many worlds* (pp. 112-130). Duke University Press.
- Wheeler, H. C., Berteaux, D., Furgal, C., Cazelles, K., Yoccoz, N. G., & Grémillet, D. (2019). Identifying key needs for the integration of social-ecological outcomes in Arctic wildlife monitoring. *Conservation Biology*, 33(4), 861-872. <https://doi.org/10.1111/cobi.13257>
- White, M. (2006). *Narrativ Teori*. Hans Reitzels Forlag.
- Wilson, K. J., Bell, T., Arreak, A., Koonoo, B., Angnatsiak, D., & Ljubicic, G. (2020). Changing the role of non-Indigenous research partners in practice to support Inuit self-determination in research. *Arctic Science*, 6(3), 127-153. <https://doi.org/10.1139/as-2019-0021>
- Wilson, S. (2008). *Research is ceremony. Indigenous research methods*. Fernwood.
- Wong, C., Ballegooyen, K., Ignace, L., Johnson, M.J., & Swanson, H. (2020). Towards reconciliation: 10 Calls to Action to natural scientists working in Canada. *Facets*, 5(1), 769-783. <https://doi.org/10.1139/facets-2020-0005>
- Wright, A. L., Gabel, C., Ballantyne, M., Jack, S. M., & Wahoush, O. (2019). Using two-eyed seeing in research with Indigenous people: an integrative review. *International Journal of Qualitative Methods*, 18. <https://doi.org/10.1177/1609406919869695>

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