



SCAR Fellowship Report



Toward an intersectional framework for understanding gender inequality in international Antarctic research

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Introduction

Researchers are increasingly highlighting gender inequality in STEM and calling for institutional change. Challenges are acute in field sciences: research suggests that over 70% of women have been sexually harassed during fieldwork and over 30% have been assaulted (Clancy et al, 2014), with challenges exacerbated for women of color and non-binary individuals (NASEM, 2018). These inequities harm both individuals and scientific progress (Campbell et al, 2013; Science Benefits, 2018). Antarctic research is not immune: women remain underrepresented and face a range of barriers to safe participation and career advancement (Nash et al, 2019; Starkweather et al, 2018). The call for gender equality in Antarctic research is growing, evidenced by numerous articles (e.g., Bell & Koenig, 2017; Starkweather et

al, 2018) and international events (e.g., SCAR Women's Luncheon, 2018; APECS, 2019; SCAR Session 45, 2020).

However, progress in Antarctic research remains hindered by a lack of intersectional analysis. This analysis is needed to understand overlapping barriers researchers face based on their gender, race, nationality, etc. (Cho, Crenshaw, & McCall, 2013), and to inform solutions that address diverse cultural norms and policies that intersect in Antarctic research. This need was underscored by ground-breaking research on gender in Australian Antarctic fieldwork undertaken by my fellowship hosts (Nash et al, 2019), and by work I co-authored outlining the value of intersectional approaches to polar research (Seag et al, 2019).

My SCAR Fellowship project addresses the need for intersectional analysis in Antarctic research by bringing together an interdisciplinary team of four researchers with particular interest and expertise in intersectional approaches to gender equity in Antarctic research (fellowship hosts Hanne Nielsen and Meredith Nash and collaborator Renuka Badhe) to explore how the intersectionality framework can be most effectively applied to the context of international Antarctic research.

Project Objectives

The project had two initial aims:

1. Collaborate with a team at the University of Tasmania (UTAS), led by Meredith Nash and Hanne Nielsen, to design and implement a survey on the experiences of women and non-binary researchers in US Antarctic fieldwork.
2. With collaborators at UTAS, draw on the US case study and collaborators' Australian case study (Nash et al, 2019) to examine variation and commonalities in gendered experiences across national Antarctic communities. This would be used to develop an intersectional framework for understanding gender inequality in international Antarctic fieldwork.

The aims and research plan evolved with shifting global circumstances, as will be discussed below.

Methods, Execution and Results

The COVID-19 pandemic had a variety of topical, logistical, and personal impacts that required the fellowship timeline to expand and the project to evolve in nature. Initially designed as a two-month full-time remote collaboration aimed at producing a discrete survey project, the project became an ongoing collaboration centered on critical discussion, extensive literature review, and the production of a peer-reviewed paper outlining the crucial value of applying an intersectional lens to gendered institutional change in Antarctic research.

My collaborators and I drew on a large multi-disciplinary body of feminist social science research over many decades that demonstrates the value of intersectional perspectives to institutional and social change, as well an emerging body of multi-disciplinary scholarship that demonstrates how intersectionality can be applied to advance gender equality in science. We extended this literature to the unique institutional, historical, and geographical contexts of Antarctic research, by exploring

the applications of intersectionality to three key sites at which Antarctic research cultures and policy are shaped: Antarctic research institutions; Antarctic field sites; and international Antarctic forums.

The publication resulting from the project will convey two key takeaways:

- 1) Efforts to advance women's equality in Antarctic research will only be inclusive and equitable if they are undertaken through an intersectional approach. Otherwise, institutional efforts will continue to leave many women behind.
- 2) By addressing the intersecting barriers that continue to marginalize women of all backgrounds and identities from Antarctic research, Antarctic researchers and institutions will necessarily contribute to the dismantling of interlinked power structures that continue to marginalize members of *all* historically excluded groups, and which hold back Antarctic research from realizing its full potential.

The paper is intended to provide a framework for understanding and action for Antarctic researchers and decision-makers, as well as to lay the groundwork for future research - including surveys - to be applied to Antarctic research through an intersectional lens.

Project Outcomes

This project has illustrated the epistemological and practical values of intersectionality as a framework both for researching human activity in Antarctica, and for impelling structural change toward gender equity in Antarctic research. Intersectionality has increasingly featured in equality, diversity, and inclusion (EDI) initiatives in Antarctic research in recent years (though still infrequently compared to other aspects of EDI); however, until now a peer-reviewed paper focused on intersectionality in the Antarctic context had not been published. The paper being published as a result of this fellowship therefore provides an essential starting point for additional literature on the subject as well as for concerted institutional discourse and action that attends to the multiple, overlapping structures that hinder gender equity in the field.

On a professional level, this fellowship has enabled me to deepen my relationships with leading experts in my field as well as peers with common interests conducting exciting research out of the University of Tasmania; and to improve my skills in leading an international research collaboration.

Publications, Presentations and Products

- Peer-reviewed paper (in preparation; title forthcoming)
- "Toward Intersectional Frameworks for Antarctic Humanities and Social Science Research," presentation at 2021 SC-HASS conference (virtual due to COVID-19), Nov 2021
- Untitled research presentation at Antarctica Day Celebration hosted by Institute for Marine and Antarctic Studies, University of Tasmania, Dec 2021
- "Historical and intersectional research on gender in Antarctica," presentation at Antarctic and Oceans Law, Politics, Policy, Humanities and Social Sciences seminar series, University of Tasmania (virtual due to COVID-19), Sept 2021

- Next steps: a “white paper” and/or outreach paper summarizing our peer-reviewed paper for interdisciplinary and non-academic audiences and highlighting action items for Antarctic institutions

Capacity Building, Education and Outreach Activities

I virtually presented my fellowship project at the public Antarctica Day event hosted by the Institute for Marine and Antarctic Sciences, University of Tasmania. The fellowship also is feeding into plans for the “Inclusive Collaborations in Antarctic Research” sessions at the 2022 SCAR OSC (one parallel session and one workshop), which aim to link research, community dialogues, and institutional initiatives around equality, diversity, and inclusion and will include intersectionality as a thematic focus. The research team further aims to produce an outreach paper summarizing our peer-reviewed paper for a wider audience, which will further highlight action items advancing gender equality in Antarctic research. Unfortunately, the nature of the remote fellowship, particularly during the COVID-19 pandemic, meant that school visits and in-person public lectures were not possible.

Future Plans and Follow-ups

I am eagerly looking forward to continuing collaborative work with the host institute, as well as with others with whom I worked through the fellowship project. We plan to produce outreach material (i.e., a white paper and/or public commentary) based on the project, and we are working together to apply the research through equity initiatives in Antarctic research, including through the “Inclusive Collaborations in Antarctic Research” sessions at the upcoming SCAR Open Science Conference as well as the SCAR Equality, Diversity, and Inclusion Action Group.

Personal Impact

A central professional impact was to enhance my skills in leading virtual international research collaborations. I am grateful to my hosts, collaborators, and others at my host institute for their guidance and mentorship in this regard. The fellowship also enabled me to strengthen my relationships with important researchers in my field, whose work I have greatly admired for several years.

Additionally, research on social inequality is both a professional and a personal endeavor, and this project has helped to deepen my understanding of intersecting structural barriers to gender equity and to further identify how I, personally, can more effectively contribute to change in the future.

Financial Statement

Because this was a remote project taking place largely after submission of my PhD thesis (and therefore after my PhD funding had expired), the fellowship provided an essential contribution to basic expenses (rent, utilities, groceries, etc.) for the full-time equivalent of two months’ research, spread over a period of approximately twelve months.

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