

Polar Horizons 2021 Report

Huw Griffiths & Pilvi Muschitello

Executive Summary

Polar Horizons has been part of a series of activities within the [Diversity in UK Polar Science Initiative](#) that marked the 200th anniversary of the discovery of Antarctica. Conceived and funded by the [UK Foreign, Commonwealth and Development Office Polar Regions Department](#), this initiative celebrates existing diversity, and takes an important step forward to promote and enhance Antarctic science opportunities to under-represented groups, including women, people from ethnic minorities, BAME, LGBTQ+ communities and people with a disability.

Launched in March 2021 as an online programme, the Polar Horizon series of talks and webinars introduced students and Early Career Researchers (ECRs) to the breadth of opportunities in polar science.

Over 100 bright and capable STEM ECRs joined scientists and engineers from the British Antarctic Survey and seven UK universities to launch the programme. The ECRs were selected from a large field of applicants from currently under-represented groups who expressed an active interest in Polar science and engineering. Some 63 of the ECRs were also matched with one or more established UK polar researchers from their field of research for one-to-one sessions and career advice.



DIVERSITY
IN UK POLAR SCIENCE

Some of the Polar Horizons 2021 alumni during the launch week in March 2021. This report describes the four-day launch event that took place online from 2 to 5 March 2021, that will be followed up with ten months of regular seminars and discussions.

Introduction

In March a selected group of 110 students and ECRs from across the UK took part in four days (March 2nd-5th, 2021) of introductions to Polar science from a UK perspective. This event was part of the Diversity in UK Polar Science Initiative and was facilitated by Donna Frater, [Pilvi Muschitiello](#) and [Huw Griffiths](#).

Day 1:

The ECRs were welcomed by [Professor Dame Jane Francis](#), Director of British Antarctic Survey (BAS), this was followed by an overview of the scheme from [Dr Beatrix Schlarb-Ridley](#), Director of Innovation and Impact at BAS and Donna Frater of the [Diversity in UK Polar Science Initiative](#) (DiPSI). The initiative commemorates the 200 years since British explorers first sighted the Antarctic peninsula in 1820. Dr [Jane Rumble](#), Head of the Polar Regions at the UK Foreign, Commonwealth and Development Office, explained the need for UK Polar Science to reflect the social demographics of the modern United Kingdom. [Dr Mike Bentley](#), Durham University, talked about the role that UK higher education institutes had within polar research and in attracting new and diverse talent to the sector. Finally, [Dr Michael Bravo](#), of the Scott Polar Research Institute, captivated the audience with his journey through engineering into social science and the special importance of Polar Regions in regards to climate and sociology.

Some 63 of the ECRs were also matched with one or more established UK polar researchers from their field of research for one-to-one sessions and career advice. These pairings of ECRs and hosts were given an hour's introduction to the aims of the scheme, how it would work for them, and the ground rules and expected behaviours for the scheme. The pairings were given at least three hours over the launch week to meet up virtually and to discuss careers in polar research. The structure of these sessions was determined by the participants and the ECRs were encouraged to drive the direction and topics of the discussions.

The final session of the day was a whistle-stop tour of a range of themes in Antarctic research. It started with [Dr Sophie Fielding](#), BAS, talking about marine science and working on ships in the Southern Ocean as well as the changing demographics of research cruises over the years. This was followed by [Dr Pippa Whitehouse](#), Durham University, discussing glaciology and what it is like to work within UK Polar Science as a non-BAS researcher. [Nicole Logan Park](#), Facilities Engineer at BAS, took the participants on a journey through her many visits to the UK Antarctic research stations and how large infrastructure is maintained for the benefit of UK polar



research. The final speaker of day one was [Dr Steve Roberts](#), Quaternary Geologist at BAS, providing insight into living and working in the remote and hostile environment of Antarctica.

Day 2:

Day two was an Arctic themed adventure that started with a virtual tour of the NERC funded [Arctic Research Station](#) at Ny-Alesund, Spitsbergen, which provides laboratory space, equipment and field support to facilitate UK environmental research in the Arctic. [Henry Burgess](#), NERC Arctic Office, gave an overview of UK activities and opportunities in the Arctic. [Dr Michael Bravo](#) returned to talk about the history and diversity of the Arctic and how the human perspective and indigenous peoples and cultures are what make the Arctic a very different place to work than Antarctica. [Professor Dave Roberts](#), Durham University, gave a personal perspective on years of fieldwork studying the changing landscape of Greenland. [Dr Amelie Kirchgaessner](#), Atmospheric Scientist BAS, was due to talk about her experiences on the recent [Mosaic expedition](#) but due to technical difficulties this has been rescheduled as one of the monthly Polar Horizons seminar series.

The final sessions of the day began with [Dr Scott Hosking](#), BAS AI Lab, introducing the group to the use of artificial intelligence in polar science. [Ana Pereira-O'Callaghan](#), Head of Research Development and Support at BAS, gave an overview and advice on obtaining funding to undertake polar research. The theme then moved on to human networks within polar research, with talks on the European Polar Board and the Women in Polar Science network by [Dr Renuka Badhe](#), the Scientific Committee on Antarctic Research by [Dr Eoghan Griffin](#), and minorities within polar research by [Dr Huw Griffiths](#).

Day 3:

The final day of talks began with [Dr Kevin Hughes](#), Environmental Research and Monitoring Manager at BAS, describing the environmental laws and regulations that govern all activities in Antarctica under the Antarctic Treaty. This was followed by [Dr Kate Hendry](#), University of Bristol, who took the students on a whistle-stop tour of different polar committees, as well as sharing her experiences doing committee work.

Then two current Antarctic PhD students, [Anna Clark](#) and [Jamie Maxwell](#), gave an overview of their career paths to date. [Chris Aldridge](#) from BAS gave an introduction to the logistics that make polar research possible and how to plan future polar fieldwork.

Before breaking up for lunch, three members of the Polar Horizons 2020 cohort returned to reflect on their experiences of Polar Horizons and how it had changed their opinion of polar science. Then [Dr Peter Fretwell](#) of the BAS Mapping and Geographic Information team introduced the world of satellite observations and monitoring of wildlife at the poles. Our final inspirational speaker of the day was [Victoria Auld](#), BAS pilot and former meteorologist: she told



her personal journey as a trailblazer who broke down barriers to be among the first British women to overwinter in Antarctica.

The third day ended with an opportunity for the ECRs to give feedback, ask questions and to be informed about what happens next in their Polar Horizons journey.

Day 4:

Day four was an opportunity for the ECRs to engage in a research project on the impact of inclusive spaces with an educational organisation called [Creative Tuition](#). Creative Tuition organised a set of confidential focus groups to create a safe space for the students to share their experiences. These discussions are being analysed and will feed into an anonymised report, to be published in summer 2021, that will help assess the impact and importance of cohort-based engagement programmes such as Polar Horizons.

POLAR HORIZONS PROGRAM 2021				
MONDAY 1st March	TUESDAY 2nd MARCH	WEDNESDAY 3rd MARCH	THURSDAY 4th MARCH	FRIDAY 5th MARCH
<p>EACH SESSION NUMBER LINKS TO ZOOM. SIMPLY CLICK ON THE SESSION YOU WANT TO JOIN AND ZOOM SHOULD LAUNCH IN YOUR BROWSER.</p>  <p>18:00-20:00 VOLUNTARY Icebreaker meeting on Gathertown</p>	<p>SESSION 1</p> <p>09:00-10:40 LAUNCH MORNING Welcome by polar research institutions and universities</p> <p>10:40 - 11:00 BREAK</p> <p>SESSION 2</p> <p>11:00-12:00 Introductions</p> <p>12:00-13:00 Potential host and student 1:1</p> <p>13:00 - 13:45 BREAK</p> <p>SESSION 3</p> <p>13:45 - 15:30 Antarctic highlights</p> <p>15:30 CLOSE</p>	<p>SESSION 4</p> <p>09:00-10:30 Arctic highlights</p> <p>10:30 - 11:00 BREAK</p> <p>SESSION 5</p> <p>11:00-11:30 Artificial Intelligence and polar research</p> <p>11:30-12:30 Potential host and student 1:1</p> <p>13:10 - 13:45 BREAK</p> <p>SESSION 6</p> <p>13:45 - 15:30 Funding and Polar communities</p> <p>15:30 CLOSE</p>	<p>SESSION 7</p> <p>09:00-10:30 Environment, logistics & committees in polar operations</p> <p>10:30 - 11:00 BREAK</p> <p>SESSION 8</p> <p>11:00-11:30 UK Polar Horizons 2020 alumni & science highlight</p> <p>11:30 - 12:30 Potential host and student 1:1</p> <p>12:45 - 13:30 BREAK</p> <p>SESSION 9</p> <p>13:30-15:30 Feedback, closing the program & what's next</p> <p>15:30 CLOSE</p>	<p>CREATIVE TUITION: Community focus groups (each student/ECR will only participate in one slot)</p> <p><u>Register for one focus group</u> <u>Eventbrite password: Polar Horizons2021</u></p> <p>09:00-10:30</p> <p>10:45-12:15</p> <p>12:30 - 14:00</p> <p>14:15 - 15:45</p> <p>16:00 - 17:30</p>

Polar Horizons 2021 Launch week schedule

Next Steps

Plans are already underway to organise a series of (at least) monthly talks and discussion sessions to continue the themes of Polar Horizons 2021. The organisers will engage with the 2020 and 2021 cohorts to help organise the speakers. This will ensure that the speakers are of interest to the ECRs, encourage them to research more polar research topics and will give them



valuable experience in organising seminars that can be added to their list of skills. Additionally, it will enable the continuity of the cohort experience.

ECR Feedback

"It's been an energizing and affirming experience!"

"A fantastic and informative experience where I felt welcomed and positive about being disabled"

"I now realise that I am able to make a difference and my sexual identity and disabilities are a positive tool to do so. It's refreshing to be part of a scheme that aims to destigmatise polar research and input diversity and inclusivity."

"I haven't experienced such a welcoming and supportive group of people before from one organisation and have nothing but good things to say about all the BAS staff I've had contact with. I've learned a huge amount this week - far beyond my expectations!"

"I've found the Polar Horizons project amazing so far. I applied because my PhD has a glaciation/polar link, but I'd never considered a job in the polar regions before. It's really opened my eyes to the opportunities out there. Additionally, I've found starting a PhD in a pandemic quite lonely so this project came at just the right time and gave me a big much needed boost!"

"I've really enjoyed the programme this year - as a 1st year undergrad, the whole experience has been really inspiring, and has made me feel that I have a space in polar science as a queer woman. Meeting with my host and hearing the experiences of all of the speakers this week have shown me how varied the routes into polar science are, and have proved that unconventional routes can even be beneficial in terms of the experience you gain!"

"Hearing from polar scientists and professionals who've come from such diverse and indirect backgrounds has really helped me to see a future for myself in polar science. As a member of the LGBTQ+ community, Polar Horizons has also helped me to realise that I'm not alone in my endeavours."

"Polar Horizons 2021 has been so inspiring and informative, but also very comforting to me as a disabled queer person to have our difficulties acknowledged and discussed as part of the community. Feel much more confident in what I have to bring to the scientific community on the whole, as well as more confident in there being a support network out there of people in similar positions, but also genuine allies putting the work in."

Report written by Huw Griffiths & Pilvi Muschitiello

