

Interdisciplinary Understanding for a Changing Arctic (DurhamARCTIC)

Annual interim report for Leverhulme Doctoral Studentship programme DS-2017-070

Review period: 1 October 2022 – 30 September 2023

Because none of the four students from the first Leverhulme/DurhamARCTIC cohort (October 2018) received funding during this review period, this report only covers the records and accomplishments of the eleven students from the second and third cohorts.

The central cohort-building activity of this period was a 10-day summer school held in northern Norway (and adjacent areas of Sweden and Finland) in August 2023. The summer school was led by the DurhamARCTIC director and associate directors, as well as one of our Norway-based external advisory board members. The summer school provided students an opportunity to learn and share their observations on topics ranging from landscape ecology to Indigenous empowerment, and featured presentations by students and guest lecturers. The summer school was attended by 8 of the 11 currently enrolled DurhamARCTIC students (three had family responsibilities that they could not rearrange), and the four DurhamARCTIC alumni attended as well to lead seminars on post-PhD life. DurhamARCTIC is presently producing a film using footage from the field trip, with the intent of using the film to seed discussion on innovations in interdisciplinary training of PhD students.

The remainder of this report provides details on each of the Leverhulme-funded students enrolled in the programme and highlights some notable achievements during the review period.

Cohort 2 (entering Autumn 2019)

Eric Boyd

Thesis title: *To Resettle a Settler Mining Community: Colonialism, Recursive Discourse, and Spectres in the Deformation Zone, Kiruna, Sweden*

Primary supervisor: Professor Simone Abram (Anthropology)

Secondary supervisor: Professor Gavin Bridge (Geography)

Following successful defence of his thesis in March 2023, Eric has been an associate researcher at the School of Global Studies at the University of Gothenburg (Sweden). During the review period, in addition to presenting at the SweDev Conference (Gothenburg, December 2022), he had two publications:

- M Boyd Gillette, **E Boyd**, "Mining for tourists in China: A digital ethnography of user-generated content from coal mining heritage parks," *Journal of Heritage Studies*, 2023

- M Lilja, M Schulz, M Baaz, S Barakate, M C Medina, **E Boyd**, M Windengård, K Wiksell, T Wulia, P Wade, S Hellberg, "Power, resistance and social change," *Journal of Political Power*, 2023.

Romain Chuffart

Thesis title: *Indigenous sovereignty, self-determination, and rights: Normative agency through the rights-based approach in multilevel Arctic environmental governance*

Primary supervisor: Dr Anashri Pillay (Law)

Secondary supervisors: Dr Henry Jones (Law); Professor Philip Steinberg (Geography)

Since August 2023, Romain has served as a lecturer at the University of Akureyri (Iceland). He has submitted his thesis and will be defending it in December 2023.

Publications during the review period include:

- **Romain Chuffart**, Thaissa Almeida Meira, and Apostolos Tsiouvalas. "Hyperborean Legalities: critical approaches to Polar Law", Critical Legal Conference 2022." *The Polar Journal* 12, no. 2 (2022): 394-398.
- **Romain Chuffart**, Andreas Raspotnik, Luiza Brodt, and Peter Convey. "Dealing with insecurities and geopolitics: science diplomacy at the poles." *Antarctic Science* 34, no. 3 (2022): 205-207.

Additionally, Romain presented at conferences during the review period including the GEO-SVALBARD workshop (Longyearbyen, October 2022), Polar Law Symposium (Reykjavik, October 2022), Arctic Circle Assembly (Reykjavik, October 2022), Arctic Circle Japan Forum (Tokyo, March 2023), International Symposium on Arctic Research (Tachikawa, Japan, March 2023), PCRC International Law Seminar (Kobe, March 2023), InterArctic Knowledges (Durham, May 2023), Belgian Royal Military Academy Seminar Series (June 2023), and the Durham Critical Legal Conference (Durham, September 2023).

Christian Drury

Thesis title: *"Semi-Professional Polar Explorers": Empire, Modernity, and Temporality in British Arctic Travel Narratives, 1875-1940*

Primary supervisor: Dr James Koranyi (History)

Secondary supervisor: Dr Abbie Garrington (English)

Christian successfully defended his thesis in June 2023. In addition, during the review period he had a number of solo-authored publications, including:

- "Alfred de Quervain, Across Greenland's Ice Cap: The Remarkable Swiss Scientific Expedition of 1912", H-Environment, H-Net Reviews (November 2022)
- "Nordic Travels by Janicke S. Kaasa, Jakob Lothe and Ulrike Spring", *Scandinavian Studies*, vol. 95, no. 2 (Summer 2023)
- "Salmon in Sápmi: John Francis Campbell's Scandinavian Journals", National Library of Scotland blog, August 2022 (<https://blog.nls.uk/salmon-in-sapmi-john-francis-campbells-scandinavian-journals/>)

- “A British mountaineer's notebooks”, Collecting Norden virtual exhibition, November 2022 (also in Norwegian) (<https://www.uio.no/english/research/strategic-research-areas/nordic/research/research-groups/collecting-norden/collecting-norden-virtual-exhibition/objects/a-british-mountaineer-s-notebooks.html>)
- “Norwegian Mountain Lithographs: Mapping the Nation and Guiding the Tourist”, NiCHE : Network in Canadian History & Environment, February 2023 (<https://niche-canada.org/2023/02/09/norwegian-mountain-lithographs-mapping-the-nation-and-guiding-the-tourist>)

He also had presented at a number of conferences including the Collecting the North Conference (Oslo, October 2022), Cultural Representations of the Region in Transnational Contexts, 1840-1940 (Nijmegen, January 2023), NTNU Anglophone Political Cultures Research Group Seminar (Trondheim, April 2023), InterArctic Knowledges (May 2023), Borders and Crossings (Łódź, July 2023), and the European Society for Environmental History (Bern, August 2023).

Greta Ferloni

Thesis title: *Cryomobilities: Vessel mobilities amidst the ice-prone waters of the Bering Strait*

Primary supervisor: Professor Philip Steinberg (Geography)

Secondary supervisors: Dr Jeremy Schmidt (Geography); Professor Chris Stokes (Geography)

During the review period, Greta co-organised (together with DurhamARCTIC student Danae Kontou and former student Laura Seddon) the workshop on “InterArctic Knowledges and Uncertainties” (Durham, May 2023) as well as co-organising and chairing the session on “Colonial oceans: Critiquing environmental narratives of ocean governance” at the International Geographical Union’s Oceans Conference (Milan, June 2023).

She is preparing a return trip to her field site in Fairbanks, Alaska (December 2023) to present findings from her research, and is planning on submitting her PhD early in 2024.

Katy Ivison

Thesis title: *The impact of climate change and biotic interactions on non-native plants in Norway*

Primary supervisor: Dr Wayne Dawson (Biosciences)

Secondary supervisors: Dr Lisa Baldini (Environmental Science, Teesside University); Dr James Speed (Natural History, NTNU (Norwegian University of Science and Technology))

Katy successfully defended her thesis in March 2023 and since January 2023 she has been a postdoctoral researcher at the University of Birmingham.

During the review period, she presented papers at the Natural History Museum (London, February 2023) and the British Ecological Society’s Marcoecology Conference (Birmingham, July 2023).

David Jarrett

Thesis title: *Monitoring breeding productivity of shorebirds using acoustic recorders, sound localisation and machine learning*

Primary supervisor: Professor Stephen Willis (Biosciences)

Secondary supervisors: Dr Sally Street (Anthropology); Dr Aleksi Lehikoinen (Ornithology, LUOMUS (Finnish Museum of Natural History))

David completed his placement at the Finnish Museum of Natural History and is preparing his thesis for submission and defence in 2024.

Cohort 3 (entering Autumn 2020)

Paul Burgum

Thesis title: *Investigating Resilience in Extreme Environments Using Broad Theories in Psychological Science*

Primary supervisor: Dr Thuy-vy Nguyen (Psychology)

Secondary supervisors: Dr Daniel Smith (Psychology); Dr Sally Street (Anthropology)

From June through September, 2023, Paul undertook his placement at the British Antarctic Survey, where he presented to the BAS' Psychosocial Risk Group. Through his affiliation with BAS, he also appeared on an EDI panel at the UK Polar Science Conference (September 2023).

He intends to defend his thesis early in 2024.

Elizabeth Gillie

Thesis title: *Biodiversity Colonisation of the Arctic under Climate Change: Impacts on Land, Sea and People*

Primary supervisor: Professor Stephen Willis (Biosciences)

Secondary supervisor: Dr Sally Street (Anthropology); Dr Aleksi Lehikoinen (Ornithology, LUOMUS (Finnish Museum of Natural History))

From April-July 2023, Beth undertook her placement at the Marine Institute at Memorial University (St John's, Newfoundland, Canada). In addition to presenting her work there, she also made presentations at the Durham Department of Biosciences Postgraduate Conference (June 2023, which won the best presentation award) and the International Congress for Conservation Biology (Kigali, Rwanda, July 2023).

She is presently preparing a publication – “Scenarios for North Water Polynya ecosystem changes informed by species distribution modelling” – for submission to *PLOS Climate*.

Beth intends on defending her thesis in March 2024.

Sal Kellett

Provisional thesis title: *The Impact of Human Agriculture on Pristine Arctic Landscapes: A Multi-Isotope Investigation into the Environmental Impact of Norse Landnam in Iceland Using Archaeobotany and Zooarchaeology*

Primary supervisor: Professor Mike Church (Archaeology)

Secondary supervisor: Dr Darren Gröcke (Earth Sciences)

Sal is completing analysis of her data, with a view toward submitting and defending her thesis in 2024. She has three articles presently under review:

- The influence of manuring on stable isotopes ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) in Carlin peas (*Pisum sativum* L.): archaeobotanical and palaeodietary implications (**Sal Kellett**, Darren R. Gröcke, Edward R. Treasure, Rosie R Bishop & Mike J Church)
- Pigs, Pasture and Partying: A Multi-Isotope Approach to Investigating Potential Ritual Feasting and Pig Husbandry at High Pasture Cave, Skye, Using Incremental Dentine Sampling of Pig Teeth (**Sal Kellett**, Cyrus Edgcombe, Janet Montgomery, Darren Gröcke, Peter Rowley-Conwy and Steven Birch)
- Diet and Mobility in Hispania Tarraconensis: A Multi-Isotope (C, N, O, Sr) Study of the Santa Caterina and PERI 2 Skeletal Assemblages (Joanna Moore, Brett Ostrum, **Sal Kellett**, Anna Winton, Elizabeth Byron, Darren R. Gröcke, Jane Evans and Janet Montgomery)

Danae-Maria Kontou

Thesis title: *Spatiotemporal analysis and mapping of environmental change in the Arctic*

Primary supervisor: Professor Philip Steinberg (Geography)

Secondary supervisors: Dr Paul Harrison (Geography), Dr Danny McNally (Geography, University of Teesside)

Danae is completing her placement at the Nordland Research Institute (Bodø, Norway), October-December 2023 and intends to defend her thesis early in 2024.

During the review period, she had a publication – “Arctic Cartographic Uncertainties: A cARTographic Atlas in Progress...” – in *Abstracts of the International Cartographic Association* 5(6) (2022), and she also held a solo art exhibition called ‘Uncertain Arctic’ in Athens, November 2022.

She gave presentations to the Greek National Conference in Geography (Athens, November 2022) and INTERGEO (Essen, Germany) as well as to department seminars at Aegean University and the University of Crete and to the ‘Pint of Science’ public event in Durham. At Durham, she co-organised the ‘InterArctic Knowledges’ conference (May 2023, with DurhamARCTIC student Greta Ferloni and former DurhamARCTIC student Laura Seddon) and the ‘Inverting Colonial Worlds’ conference (February 2023).

Ellie Ward

Thesis title: *Predicting risk against regional impacts from climate change on populations of Arctic charr (*Salvelinus alpinus*)*

Primary supervisor: Prof Rus Hoelzel (Biosciences)

Secondary supervisor: Dr Martyn Lucas (Biosciences); Prof Erin McClymont (Geography)

During the review period, Ellie presented a poster at the Durham Department of Bioscience Research Away Day (January 2023), which won the best poster presentation award. He also presented to the Bioscience Department's Molecular Ecology Lab (May 2023) and gave a presentation at the International Arctic Charr Symposium (Nikko, Japan, May-June, 2023).

Ellie intends on submitting her thesis and defending it in 2024.