



Arctic Science Summit Week 2021

19-26 March | Online, Portugal

*Theme F: Education and Capacity
Building for The Polar Regions*

Detailed session program



ID:25 - Experiences in sustaining collaborative Arctic research teams

Education and Capacity Building for The Polar Regions

25 March 2021 | 11:30 - 13:30 GMT | Room C

25 March 2021 | 15:30 - 17:30 GMT | Room C

Conveners:

Olivia Lee | University of Alaska Fairbanks, International Arctic Research Center

Christina Goethel | Chesapeake Biological Laboratory, University of Maryland Center for Environmental Science

Karen Pletnikoff | Aleutian Pribilof Islands Association, Inc

Recognition of the connected nature of the Arctic has precipitated the growth of interdisciplinary Arctic research efforts internationally. Collaborative research teams have developed from informal discussions and formal agreements of large, interdisciplinary projects. While scientific results may get a lot of exposure, the best practices for supporting the participation of diverse partners from the outset of planning proposals, and supporting research teams that cross knowledge systems are often not shared widely. This session invites contributions from researchers across career levels to share experiences from participation in interdisciplinary teams on topics such as sustaining effective communication in teams or developing long term relationships among collaborators. We welcome insight from research teams that range in size, but that cross disciplinary and institutional boundaries with projects occurring from local to international scales. Session contributors will be invited to share materials on best practices for developing and sustaining research teams to be hosted on the ARCUS website.

25 March 2021 | 11:30 - 13:30 GMT | Room C | Oral Presentations

Time	Title	Presenting author
11:30	Introduction by the conveners	
11:35	U.S. National Science Foundation Efforts to Develop and Sustain Collaborative Arctic Research Teams	Colleen Strawhacker
11:50	The EU Polar Cluster - a collaboration of projects funded by the European Commission.	Elaina Ford
12:05	AHEAD – International Arctic Station “Snowflake”	Yury Vasiliev
12:20	Open discussion on orals and posters	

E-Posters | View in the conference platform and discussion in the session

	Title	Presenting author
	Lessons Learned in Sustaining Collaborative Arctic Research Teams: Perspectives from the Arctic Research Consortium of the U.S. (ARCUS)	Helen V. Wiggins
	Institute for Atmospheric and Earth System Research (INAR) bridging research, society and international policy making	Hanna K. Lappalainen
	From basketball courts to ice camps: lessons in leadership, team work, and the human psyche	Allison A. Fong
	Knowledge transfer towards tourists safety in polar region. Guide's competences and emergency preparedness in Arctic communities.	Barbara Horyn

25 March 2021 | 15:30 - 17:30 GMT | Room C | Oral Presentations

Time	Title	Presenting author
15:30	Introduction by the conveners	
15:35	Data sharing between Community-based observing systems and scientific observations	Stein Sandven
15:50	Bering Strait Seabird Die-off: Partnering in Search of Answers	Robb Kaler
16:05	The IARPC Model: Mechanisms for large-scale collaborative efforts	Meredith LaValley
16:20	Svalbard Integrated Arctic Earth Observing System- a holistic approach	Heikki Lihavainen
16:35	Open discussion on orals and posters	

E-Posters | View in the conference platform and discussion in the session

	Title	Presenting author
	Prototyping an Arctic Practices System: a methodological knowledge base for sustainable development	Pier Luigi Buttigieg
	Changing Coastlines	APIA/absi/WALCC
	Sustaining Subsistence	APIA/absi/WALCC
	The ocean is our grocery store...	APIA/absi/WALCC

ID:80 - Cryosphere Outreach: Concepts and new Developments

Education and Capacity Building for The Polar Regions

25 March 2021 | 18:00 - 20:00 GMT | Room C

Conveners:

Stein Sandven | Nansen Environmental and Remote Sensing Center

Lisbeth Iversen | Nansen Environmental and Remote Sensing Center

Julia Olsen | Nord University

Following the 4th International Polar Year 2007-2008 (IPY), Education and Outreach (E & O) has been increasingly recognized by the polar scientific community. Since then, many initiatives and organizations such as Polar Educators International (PEI) and the Association of Polar Early Career Scientists (APECS) have been formed to foster E & O activities and many scientific institutions set up communication departments. Within cryosphere research, many new strategies of E & O have been development during the last years, including involvement of educators in polar expeditions (like MOSAiC) and closer cooperation e.g. of PEI and APECS with polar organizations like IASC and SCAR. The expansion of the spectrum by including the cryosphere of high mountains, as the third pole, is one very important step towards more effective E & O. This session welcomes contributions on outreach efforts, new ways to work with local stakeholders and discussions of ideas that make the complexity and vulnerability of the cryosphere more approachable for the broader public in order to raise awareness of the changing poles in the society. We especially encourage early careers, educators and non-scientists, and welcome alternative and interactive presenting formats.

25 March 2021 | 18:00 - 20:00 GMT | Room C | Oral Presentations

Time	Title	Presenting author
18:00	Introduction by the conveners	
18:05	Engaging scientists, educators and policy makers into Education and Capacity Building of the Polar Regions: Portugal as a case-study	Hugo R. Guímaro
18:20	Including innovative methods and new tools: PEI is collaboratively republishing the Polar Resource Book - Polar Science and Global Change IPY 2010	Sophie Weeks
18:35	Inspiring Excitement for Science, Exploration, and the Arctic: Lessons learned from education and outreach during the yearlong MOSAiC Arctic expedition	Lynne Harden
18:50	MOSAIC Education – Taking the Chance (Multidisciplinary drifting Observatory for the Study of Arctic Climate)	Rainer Lehmann
19:05	Student field courses for studying permafrost in the Arctic	Vladimir Fedin
19:20	The Quiet - A Different View on Polar Research	Thea Schneider
19:35	Open discussion on orals and posters	

E-Posters | View in the conference platform and discussion in the session

	Title	Presenting author
	Deepened connection to environment for youth after interacting with a climate change-impacted glacier landscape	Joanna Young
	Dissemination and outreach of geotechnical aspects of permafrost science to secondary education students in Greenland	Sonia Tomaskovicova
	Enjoy the Melting Ice - an analysis of selected artworks that educate about climate change and earn corporate support	Paul Rosenbaum

ID:86 - Education, Equity and Inclusion: Teaching and Learning for a Sustainable North

Education and Capacity Building for The Polar Regions

26 March 2021 | 11:30 - 13:30 GMT | Room A

26 March 2021 | 15:30 - 17:30 GMT | Room A

Conveners:

Diane Hirshberg | University of Alaska Anchorage

Tuija Turunen | University of Lapland

Mitdlarak Lennert | University of Greenland

Across the circumpolar north, there are challenges facing education. These include preparing, recruiting, supporting, and retaining teachers who are effective in the rich ethnic, cultural, and linguistic diversity of northern classrooms. Moreover, while Arctic schools enjoy a wealth of languages from the many cultures of the north, challenges exist around educating in and maintaining heritage languages as well as in providing second language instruction to new residents. Also, many northern schools confront issues due to the remoteness and rurality of their region, and even urban Arctic schools face challenges unique to the north, and many still are affected by the history of colonization. This session addresses equity, access, and success in education in the north. Topics include teacher education and professional development around culturally responsive and intercultural teaching practices in the North; challenges and innovations in heritage language teaching and second language instruction; and innovative practices to support student learning and experiences, such as new digital pedagogies and place-based and Indigenous methodologies.

26 March 2021 | 11:30 - 13:30 GMT | Room A | Oral Presentations

Time	Title	Presenting author
11:30	Introduction by the conveners	
11:35	Arctic Education Alliance - Vocational education capacity building for land and fisheries management, sustainable tourism, and hospitality in Greenland.	Nathan Reigner
11:50	Reasons for dropout and long completion times of students at the Arctic Civil Engineering program at the Technical University of Denmark	Pernille Erland Jensen
12:05	Innovations in instruction through "Problem Based Learning" that is local, equitable and relevant	Margie Turrin
12:20	Education for all in Iceland: Agenda for future actions	Edda Óskarsdóttir
12:35	Responding to growing numbers of students with immigrant background in Iceland. Perspectives of municipalities, students and parents.	Hermína Gunnþórsdóttir
12:50	Teaching Endangered languages: Strengthening Sámi language didactics	Erika Katjaana Sarivaara
13:05	Open discussion on orals and posters	

E-Posters | View in the conference platform and discussion in the sessions

	Title	Presenting author
	Educational program CORELIS (Cold Region Landscapes Integrated Sciences)	Irina Fedorova
	Educational Technologies as a Driver of Changes in Arctic Regions	Marina Belonozhko
	Gender in polar research	Gertrude Saxinger

26 March 2021 | 15:30 - 17:30 GMT | Room A | Oral Presentations

Time	Title	Presenting author
15:30	Introduction by the conveners	
15:35	Integrating indigenous cultures in English language teaching: the affordances of visual and translingual mediation of a bilingual Sami-Norwegian picturebook	Nayr Ibrahim
15:50	Distant learning : the teacher's new tasks	Tatiana Kuzmicheva
16:05	Bullying intervention and teacher education. Research amongst teachers in Iceland 2003 and 2019.	Vanda Sigurgeirsdóttir
16:20	Professional development in a rural community in Iceland: A collaborative action research	Anna Katarzyna Wozniczka
16:35	The tundra doesn't grow trees or teachers: Solving the teacher supply crisis in Rural Alaska	Douglas Cost
16:50	Open discussion on orals and posters	

E-Posters | View in the conference platform and discussion in the session

	Title	Presenting author
	POLAR STAR kits of activities to inspire students' interest in STEAM	Agata Goździk
	The Capacity Building on Climate Change Adaptation and Polar Regions: Teaching and Learning	Deniz Vural
	The role of teacher education in preparing pre-service teachers for teaching in compulsory schools in The Faroe Islands to ensure equity and social justice in education	Kalpana Vijayarathan