

Addressing Gaps and Barriers in International Arctic Science Research Workshop

As part of the 3rd Arctic Science Ministerial (ASM3) process, we will be hosting a special workshop on the gaps and barriers in international Arctic research. The workshop will be opened with a summary of the feedback received from ASM3 participating countries and organizations covering international research gaps, opportunities and challenges as part of the ASM3 Science Process. Next on the agenda will be a panel of speakers presenting recent synthesis reports on research gaps and lessons-learned from projects that have navigated many international barriers. After the panel, participants will have the opportunity to participate in breakout sessions addressing a) data management and research infrastructure, b) education and capacity building, c) sustained observations, d) societally relevant research and e) visas, permits and bureaucratic hurdles. The breakout sessions aim to develop and prioritize actions needed to more effectively address challenges and barriers to international Arctic research efforts. The resulting prioritized actions will form the basis for recommendations in the final ASM3 Report.

Relevant Materials

- [IASC 2020 State of Science Arctic Science Report](#)
- [Sámi Arctic Strategy 2019: Annex: Building Knowledge in Sápmi, A List of Knowledge Gaps and Research Needs](#)
- [UArctic Report on Scientific Cooperation within the Arctic: Understanding Bottlenecks in Cross-Border Research](#)
- [MOSAIC Expedition](#)
- [INTERACT Publications](#)

Workshop Program

11 November 2020

Start Time: 13:00 UTC

Housekeeping remarks

Review of the Program

Lindsay Arthur, Icelandic Ministry of Education, Science and Culture

Opening Remarks

ASM3 Science Advisory Board members Embla Eir Oddsdóttir and Hiroyuki ENOMOTO

Panel on research gaps and lessons-learned from projects that have navigated many international barriers.

Moderator: Renuka Badhe, Executive Secretary of the European Polar Board

1. IASC State of the Arctic Science Report 2020
Panelist: Hiroyuki ENOMOTO, IASC Executive Committee
2. Saami Council Arctic Strategy: Building Knowledge in Sápmi, A List of Knowledge Gaps and Research Needs
Panelist: Elle Merete Omma, Head of EU Unit, Saami Council
3. UArctic Report on Scientific Cooperation within the Arctic: Understanding the Bottlenecks in Cross-Border Research.
Panelist: Lars Kullerud, President of UArctic
4. Lessons Learned from the MOSAiC Expedition
Panelist: Anja Sommerfeld, Project Manager MOSAiC, AWI
5. Methods Used by INTERACT to Overcome International Barriers
Panelist: Terry Callaghan, Founder and Science Coordinator of INTERACT

(Short Question and Answer Session with Panelists)

(10 mins) Health Break

(30 mins) **Breakout sessions**

1. Data Management and Research Infrastructure
2. Education and Capacity Building
3. Sustained Observations
4. Societally Relevant Research
5. Visas, Permits and Bureaucratic Hurdles

(25 mins) Report back

Wrap-up and explanation for where results will be published

End: ~15:00 UTC – 15:15 UTC



Details on Breakout Sessions

The goal of the breakout sessions is to develop a list of specific actions that would help to reduce gaps and barriers. Each breakout group will have a moderator and a reporter. The reporter will share the list of actions in the report back after the breakout groups. Potential actions need to be added to suggested discussion topics.

Data Management and Research Infrastructure Moderator: Henry Burgess / Reporter: Peter Pulsifer

Suggested discussion topics:

- We have been discussing the issue of data sharing for a long time – the interest from most scientists is there, why isn't it happening? In detail, what is needed to make data sharing easier?
- What steps can be taken to implement ethical data sharing, especially with Indigenous Peoples?
- Programs like INTERACT are doing a great job of helping to increase access to field stations. ARICE is helping to coordinate research opportunities on ships. What lessons can we learn from the obstacles they have overcome? Are there still barriers that these programs have not been able to tackle that the ASM3 process could help with?

Education and Capacity Building Moderator: Mia Bennett / Reporter: Louise T. Huffman

Suggested discussion topics:

- UArctic and APECS are important mechanisms to help build research capacity and training opportunities. Are there more these groups could do to reach out to non-Arctic countries?
- Besides higher education, are there other training opportunities that could be created to help build capacity in the Arctic?
- Polar Educators International is working to try to connect educators around the world to inspire the next generation to be Arctic knowledgeable. What can be done to help this organization grow? Are there lessons from EDU-Arctic that can be learned?

Sustained Observations Moderator: Karin Lochte / Reporter: Rodica Nitu

Suggested discussion topics:

- SAON has been around for a while and is often looked to as the 'solution' for long-term sustained observations, yet we still don't seem to be making fast enough progress in this area. SIOS is one of the more productive observation systems. What does SIOS have that SAON needs to be successful? What specific actions are needed?
- On an international level, what steps can be taken to build capacity for equitable engagement of Indigenous Peoples in Arctic observing activities?
- Besides the major observing systems, how can individual science projects contribute to long-term observations? Is there a mechanism to submit datasets somewhere?

Societally Relevant Research Moderator: Embla Eir Oddsdóttir / Reporter: Andrey Petrov

Suggested discussion topics:

- Are current research foci addressing the needs of society? Are there areas where more knowledge would help with adaptation strategies? What would be needed to get that research done in an expedited manner?
- How can co-design of research be improved? Are there mechanisms that exist that can serve as model for how co-design can and should be done? If not, what would such a mechanism look like and would it vary by country? Geographic location? Science topic?

- Often societally relevant research needs collaboration between natural and social sciences. How can these relationships be created and nurtured?

Visas, Permits and Bureaucratic Hurdles *Moderator: Fran Ulmer / Reporter: Hugues Lantuit*

Suggested discussion topics:

- Securing visas and exporting samples are a major hurdle in international science collaborations. Are there examples of how this has been expedited? Do bi-lateral or other multi-level MOUs help? Are there other things that could be done as an international community to help reduce these barriers?
- For a scientist not involved in large international projects, figuring out how to navigate the practicalities of creating an international partnership can be a hindrance. Are there resources to help? If not, what would such a resource look like?
- What steps can the ASM participants take to support the need for Indigenous Peoples to move across the national borders of their homelands in order to meet and collaborate freely?