



2018 ARCUS ANNUAL MEETING

SUMMARY REPORT

The 2018 ARCUS Annual Meeting, held on Wednesday, 13 December 2018 in Washington, D.C., brought together 80 representatives and members of the Arctic research community in-person and virtually to discuss needs for Arctic research that could be addressed by ARCUS. Participants divided up into several breakout groups and discussed two key questions:

- Are there specific opportunities that ARCUS members can coordinate on (e.g., research collaborations, prioritization of research needs)?
- Are there gaps in programs, resources, or support for the Arctic research community that ARCUS could help address?

This report summarizes the main themes from the group conversations, which we have organized into the three strategic categories of I) Networking and Research Community Support & Facilitation, II) Communication, and III) Education.



ARCUS, 2019: 2018 ARCUS Annual Meeting Summary Report [Thornton, A.E. & H.V. Wiggins (eds.)]. Arctic Research Consortium of the United States (ARCUS), Fairbanks, AK, USA, 6pp.

I . Networking and Research Community Support & Facilitation

To support the research community and aid in the work of our members, ARCUS aims to lead collaborative efforts within Arctic research and apply our professional support of such partnerships. In particular, we aim to facilitate networking opportunities to create a broader, more inclusive community dedicated to Arctic research. Participants of our Annual Meeting emphasized the need for continued support in this area around several general themes, citing examples of opportunities that might be relevant:

- **Opportunities to join together for proposal and early project development:**

Members mentioned a need for proposal and early project relationship-building meetings between scientific investigators as well as scientists and community members. For example, there was a desire for an in-person meeting for those seeking collaborators to respond to funding announcements like NSF's "Navigating the New Arctic" (NNA). As well, members requested support to bring groups together akin to Research Coordination Networks around special topics (e.g., microplastics, algae blooms). Others mentioned that offering travel support might be useful on an individual level.

- **Opportunities to share resources:**

Members at our Annual Meeting reported a need for more opportunities to support the sharing of resources, such as research facilitates or data. Emphasizing the importance of these type of collaborations, they highlighted the value in having shared use of National Ecological Observatory Network's (NEON) eight Arctic facilities or ship time with the Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAiC). On a smaller scale, members reported a desire for greater access to other researchers' data or possible partnerships between individuals for, e.g., guest instrument deployment or data collection for other researchers.

- **Opportunities to network with those working in other disciplines or sectors:**

Even when there is increased recognition of the importance of interdisciplinary and/or cross-sector collaborations in international Arctic research, participants noted that it is sometimes still difficult to network and find the right people with whom to bridge those gaps. For example, members reported wanting to look outside normal university systems to, e.g., industry partners who may be able to add new perspectives to their work. Other members working in physical or natural sciences mentioned they would be interested in working with social scientists and educators. In many of these cases, members said they did not often have the chance to make those connections organically in the course of their daily activities. Beyond in-person meetings, members mentioned the need for cross-discipline training, and tools to help find each other online beyond ARCUS' Directory of Arctic Researchers (DAR). For example, one participant presented the idea of a smartphone-based application with information about Alaska Native research and community organizations so non-Indigenous researchers can more easily search by geographic location to find relevant resources on whom to contact.

- **Opportunities for greater inclusion of Indigenous community members:**

ARCUS members spoke of wanting more opportunities for greater inclusion of Indigenous community members. Some members mentioned that training workshops for non-Native researchers might help create better awareness of ethics in scientific interaction with Indigenous peoples. Other participants noted the opportunity to actively create opportunities for Indigenous community members by working with the Alaska Natives Science & Engineering Program (ANSEP) or continuing ARCUS' Indigenous Scholars program. One group noted that working with communication experts through groups like the Exchange for Local Observations and Knowledge of the Arctic (ELOKA) might be beneficial.



II . Communication

In recent strategic goal discussions, our Staff and Board prioritized development of two-way communication opportunities within the pan-Arctic research community, with an emphasis on greater inclusion of Indigenous knowledge holders.

Participants of our 2018 Annual Meeting also focused on some of these communication needs in their discussions:

- **Improve ways for research groups to communicate with each other about work:**

Timely communication about research efforts and results was important to members attending our Annual Meeting. In-person networking was noted as ideal, but that virtual networking opportunities (e.g., webinar or videoconference) were also needed. Some members also expressed interest in a dedicated web forum to facilitate dialogue without substantial moderator oversight in a less public way than, e.g., Twitter or other social media channels; one group suggested that these might be organized around dedicated working groups. As well, several participants mentioned finding value in our D.C. webinar series as a means for researchers to share research with the community.



- **Improve ability to share information with decision-makers:**

Participants discussed the need for opportunities to engage with decision-makers (e.g., politicians, NSF program managers) about their research to both help translate the science and also shape the priorities of those decision-makers. For example, in regards to NSF's "Navigating the New Arctic" (NNA) funding opportunity, some researchers wanted to better understand the types of networks the NSF ultimately hoped to create. Other members mentioned the need to include policy research in interdisciplinary efforts, and having ongoing dialogue with decision-makers to help develop a roadmap for their project.

- **Help with "broader impacts":**

Participants suggested that ARCUS could facilitate the communication of research findings back to relevant stakeholders or communities (and communicating the successes and stories of efforts in northern communities), as well as help researchers with their broader impacts and outreach plans.

III . Education

ARCUS recognizes the need to educate K-16 students as well as both formal and informal educators about the Arctic, connect them to the Arctic and its research community.

- **Improve educational opportunities for K-16 students:**

The need for improved outreach to and educational opportunities for K-16 students was mentioned to both increase STEM literacy and to educate the next generation about the importance of Arctic research in their own lives, even if they will never step foot in the region. Members suggested that to reach a wider and more diverse K-12 audience, we look at partnerships with the National Ocean Sciences Bowl or, for slightly older students, collaborate with groups like the Alaska Native Science and Engineering Program (ANSEP).

- **Increase involvement of teachers:**

Recognizing the importance of reaching educators, who each reach many students, some members also highlighted the need to train teachers through, e.g., ARCUS' PolarTREC program or partnerships with Polar Educators International (PEI). One group noted that better education and outreach amongst K-16 students could increase diversity in STEM at the professional level later down the road.

- **Education in northern communities:**

In addition to K-16 and teacher education, some participants discussed the need for education and capacity building in northern communities, so that community members could do research on their own.



2018 ANNUAL MEETING ATTENDANCE

ARCUS was thrilled to host 80 individuals at our 2018 Annual Meeting either in-person or online. In attendance were individuals from the following groups (an ❁ indicates ARCUS organizational member while a ❀ indicates event sponsors):

ABR, Inc. ❁
A.L. Parlow & Associates, LLC
Alaska Native Science and Engineering Program
Alaska Ocean Observing System ❁❀
Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research
Applied Physics Laboratory University of Washington
Association of Polar Early Career Scientists ❀
Battelle
Canadian Studies Center at Michigan State University ❁
City University of New York - City College
Climformatics
Coastal Carolina University
Cold Climate Housing Research Center ❁
Consortium for Ocean Leadership ❁
Dartmouth College
Eagle Community School
Environmental Investigation Agency
Fairweather Science, LLC ❁
Geo-Watersheds Scientific
George Washington University ❁
Heidelberg University
Ice911 Research Corporation
Institute for China - America Studies
International Arctic Research Center
International Arctic Science Committee ❀
Kansas State University
Massachusetts Maritime Academy
National Academies of Sciences
National Geospatial Intelligence Agency
National Snow and Ice Data Center
New Mexico Bureau of Geology and Mineral Resources
Northwest Institute of Eco-Environment and Resources (Chinese Academy of Sciences)
Oak Ridge National Laboratory ❁
Oregon State University
Polar Educators International
QED Enterprises, Inc
Red Mountain Consulting LLC
Russian State Hydrometeorological University ❁
Sandia National Laboratories ❁
TAG LLC
The Arctic Studies Center ❁
The Arctic Institute
U.S. Arctic Research Commission ❁
U.S. Department of Homeland Security, Science and Technology Directorate
U.S. National Committee of the Association of Polar Early Career Scientists ❀
U.S. National Oceanic and Atmospheric Administration
U.S. National Science Foundation ❀
U.S. Navy
Ukpeaġvik Iñupiat Corporation Science ❁
University Maryland Baltimore County
University of Alaska Anchorage ❁
University of Alaska Fairbanks ❁❀
University of Amsterdam
University of Colorado, Boulder
University of Georgia
University of Illinois - Urbana Champaign
University of Maine
University of Northern British Columbia
University of Toronto
University of Virginia ❁
University of Washington
Woods Hole Oceanographic Institution ❁
Woods Hole Research Center ❁