



Arctic Research Collaboration Workshop

Friday, April 16, 2021
9am-1pm AK/1pm-5pm ET

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UCI University of
California, Irvine

Arctic Research Collaboration Workshop Materials

Workshop Date: Friday, 16 April 2021

Time: 9-1pm AK/10-2pm PT/11-3pm MT/12-4pm CT/1-5pm ET

Zoom Virtual Meeting URL: <https://us02web.zoom.us/j/83436431164>

Zoom Virtual Meeting Password: 015155

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Workshop Goals

- Bring together an interdisciplinary group of Arctic researchers interested in finding new collaborators.
- Share examples of how other experienced interdisciplinary researchers have approached new collaborations, and discuss processes for achieving inter- or transdisciplinary integration and practical ways to overcome potential challenges.
- Provide an opportunity for people to share collaboration ideas, seek diverse feedback, and practice interdisciplinary collaboration skills.
- Encourage more social science and engineering leadership/co-leadership in Arctic interdisciplinary research projects.
- Help identify next steps for moving collaborative research project ideas forward.

Workshop Agenda

16 April 2021, 9:00 a.m. - 1:00 p.m.

All times are in Alaska timezone

Zoom url: <https://us02web.zoom.us/j/83436431164> | Password: 015155

9:00 am **Welcome & Plan for the Day**

- Zoom navigation overview - *Kuba Grzeda (ARCUS)*
- Welcome, Workshop Goals, & Plan for the Day - *Holly Hapke (UCI)*

9:10-10:10 am **Panel on Developing New Interdisciplinary Collaborations**

- Panelist Introductions - *Holly Hapke (UCI)*
- Panelist Discussion with Jennifer Brewer (UNH), Courtney Carothers (UAF), Katharine Duderstadt (UNH), Holly Hapke (UCI), and Elise Miller-Hooks (GMU)
- *Pre-Meeting Materials:*
 - Panelist Bios

10:10-10:40 am **Q&A**

10:40-11:00 am **Break**

If possible, please stay logged into Zoom as we will be assigning you to your assigned breakout group at this time.

11:00 am **Collaboration Activity Intro**

- Overview and instructions for the collaboration activity exercise - *Brit Myers (ARCUS)*

11:15-12:15 pm **Small Group Work** (Break into 8 groups)

- Each person has 2-3 minutes to briefly introduce themselves and their pre-workshop assignment idea (see pg 6 for more info)
- Each team selects 1 of the ideas outlined to explore as a group
- Each person takes 10 minutes to provide written feedback on the selected collaboration idea
 - Small group members are asked to adopt a supportive and inclusive stance toward the idea that they have selected to work on together. Each group member should take 10 minutes to develop a brief written reaction to the proposed idea. (For example, you can help elaborate on the original idea, note relevant concepts from your own discipline, pose questions, identify what you like, make suggestions for improvement, identify resources or connections that you could leverage to help support the idea, etc.) The small group facilitator will provide a link to a shared Google doc where participants can add their feedback.
- Team members regroup to talk through their written feedback, refine ideas, and explore the break-out group discussion questions:

- o Did you learn anything from each other?
- o Were any surprising connections or questions revealed?
- o How might different disciplines intersect with one another in their approach to exploring the idea?
- o How might the original idea be changed or refined based on the feedback received?
- o Is this idea something that you would like to explore further as a group? If so, are you open to other workshop participants getting involved?
- o Are there 1 or 2 people from your group willing to be a champion for this idea and help it gain some momentum?
- o What next steps might be appropriate?
- During the last 5 minutes of the breakout, be sure that you have identified someone from your group to serve as a rapporteur during the upcoming plenary.

12:15-12:30 pm **Break**

12:30-12:55 pm **Report Outs**

A rapporteur from each group will have ~2 minutes to:

- briefly describe the idea the group discussed
- highlight 1 surprising or interesting insight that came from the interdisciplinary exploration of the idea
- Share any next steps planned or ways that other workshop participants can learn more or get involved.

12:55-1:00 pm **Wrap-up & What Comes Next?**

- ARCUS & IARPC support for emerging collaboration ideas
- More networking & collaboration events coming up
- Invite to the Arctic Funders Meet & Greet on Friday, 7 May 9-11am AK
- Feedback survey

1:00 pm **Workshop Adjourns - Thank you!**

Panelist Bios

Jennifer Brewer - (Jennifer.Brewer@unh.edu) Jennifer Brewer is an Associate Professor in the Department of Geography at the University of New Hampshire. She is a human-environment geographer and political ecologist whose research focuses on environmental governance, particularly relationships between formal and informal institutions. Her work asks how decision processes can simultaneously achieve environmental sustainability and strengthen democracy in multi-level social-ecological-technological commons. Projects in fisheries, climate change, and coastal management and infrastructure have spanned policy from local to international scales, including community- and market-based resource co-management and science-civic engagement. She has co-led transdisciplinary projects funded by NSF and NOAA and previously held positions at East Carolina University, the National Academy of Sciences, US House of Representatives, Alaska Department of Fish and Game, and in the nonprofit sector.

Courtney Carothers - (clcarothers@alaska.edu) Courtney Carothers is a Professor of Fisheries in the College of Fisheries and Ocean Sciences at the University of Alaska Fairbanks. She holds a Ph.D. (2008) in environmental anthropology from the University of Washington. Her research explores how fishery systems are being remade by enclosure and privatization processes. She also partners with Indigenous communities to understand social and cultural dimensions of knowledge systems, climate change, traditional hunting and fishing ways of life, and decolonizing research. Her work focuses on human-environment relationships, cultural values, equity, and well-being. Her research program has been supported by National Science Foundation, the North Pacific Research Board, NOAA Fisheries, among others, and has been reported in over 70 publications and 130 presentations in venues such as Science, Proceedings of the National Academy of Sciences, the New York Times, and the U.S. Senate. She has served/serves on a number of boards and working groups, including: the National Academy of Sciences, Committee on the Use of Limited Access Privilege Programs in Mixed-Use Fisheries; the Arctic Data Center Science Advisory Board; the SEARCH (Study of Environmental Arctic Change) Science Steering Committee; the North Pacific Research Board Science Panel; the Alaska Sustainable Salmon Fund Expert Panel; the North Pacific Fishery Management Council Social Science Plan Team; Lenfest Ecosystem-Based Fisheries Management Task Force; and the Independent Scientific Advisory Board, Northwest Power and Conservation Council.

Katharine A. Duderstadt - (Katharine.Duderstadt@unh.edu) Katharine A. Duderstadt is an Atmospheric Scientist in the Earth Systems Research Center at the University of New Hampshire. Dr. Duderstadt brings air pollution and climate expertise to a variety of diverse interdisciplinary research teams, with projects ranging from the search for signatures of historical solar storms in polar ice cores, the use of geospatial tools to study political conflict and air pollution in the Middle East, and efforts to explore research partnerships with Indigenous communities in New England. She also coordinates the UNH Arctic Network and the New England Arctic Network (NEAN) and is co-organizing an NSF Coastlines and People Workshop focused on Northern New

England. Having taught in both university and high school classrooms (including internationally as a US Peace Corps Volunteer), she maintains a strong commitment to training the next generation of environmental scientists and global leaders. Dr. Duderstadt received an undergraduate degree in English and American Literature and Language from Harvard College and a PhD in Atmospheric and Space Sciences from the University of Michigan.

Holly Hapke - (hhapke@uci.edu) Holly Hapke, PHD is a research scientist and Director of Research Development in the School of Social Sciences at the University of California, Irvine. From 2014-2017 she served as a program director at the U.S. National Science Foundation (NSF) in the Directorate for Social, Behavioral and Economic Sciences where she co-managed the Geography and Spatial Sciences program and the Dynamics of Coupled Natural and Human Systems program and co-chaired the Working Group on Navigating the New Arctic. She also represented NSF in the NORFACE-Belmont Forum's Transformations to Sustainability funding initiative. She previously was on the faculty at East Carolina University. A geographer and interdisciplinary social scientist, her research interests are in the areas of political economy, rural development, gender, fisheries and food production systems, livelihoods, migration, and ecological conflict. In her research development role, Hapke facilitates the development of inter- and transdisciplinary team science research projects.

Elise Miller-Hooks - (miller@gmu.edu) Elise Miller-Hooks holds the Bill and Eleanor Hazel Endowed Chair in Infrastructure Engineering in the Sid and Reva Dewberry Department of Civil, Environmental, and Infrastructure Engineering at George Mason University. She is also an advisor to the World Bank Group and the founding Editor-in-Chief of Elsevier's Sustainability Analytics and Modeling journal. Prior to this, Dr. Miller-Hooks served as Program Director of the U.S. National Science Foundation (NSF) Civil Infrastructure Systems Program, lead Program Officer for the Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP) solicitation, and a cognizant program officer on CMMI's Smart and Connected Communities initiative. She served on the faculties of the University of Maryland, Pennsylvania State University and Duke University. Her expertise includes: disaster planning and response; multi-hazard civil infrastructure resilience quantification and infrastructure protection investment; mathematical modeling and optimization; transportation systems engineering; intermodal passenger and freight transport; workforce deployment; mobility; and collaborative and multi-objective decision-making.

Pre-Workshop Assignment

Before the Arctic Research Collaboration Workshop takes place on Friday, 16 April, we ask that all workshop participants complete the following pre-workshop assignment:

- 1) Please watch the first four videos in [this YouTube playlist](#). These videos, produced by Dr. Deanna Pennington for the National Socio-Environmental Synthesis Center (SESYNC), provide a helpful orientation to the team science theory, vocabulary, and collaborative process that we will be exploring together during the Arctic Research Collaboration workshop. The total run time for all four videos is 58 minutes. If you are short on time and can only watch two of them, we encourage you to focus on the 2nd and 3rd videos!

If you are interested in the topics addressed in the first four videos, we have also included in the playlist a few additional recordings from [a longer 2-day workshop on transdisciplinary Arctic research collaboration hosted by UC Irvine in 2019](#). These videos are optional viewing and are intended to serve as extra resources

- 2) The second part of the pre-workshop assignment is to briefly outline one issue, problem, &/or research question that you would be interested in exploring with a team of interdisciplinary collaborators. Please create a document or diagram (no more than 1 page or 2 slides) that can be shared electronically with other workshop participants that includes:
 - a) A general description of the issue, problem, or question that interests you.
 - b) 2-3 concepts that you think are important for others to know about the issue based on your own discipline, perspective, or experience.
 - c) Your contact information

During the workshop's breakout group activity, you will have 2-3 minutes to screen share your document or slides and talk through your ideas. The workshop facilitation team will also collect and share the documents and slides we receive with all workshop participants to encourage additional networking beyond your small group. If you would like to take part in this exchange, please send your file to Brit Myers at brit@arcus.org by COB Friday, 16 April.

Because we have such a limited amount of time together during the online workshop, taking the time to complete this assignment will help make the breakout discussions more interesting and meaningful for everyone! Thinking through this contribution to the small group discussions in advance is strongly encouraged.

Workshop Participants & Small Group Assignments

Small group assignments were made to help foster productive interactions between social scientists, engineers, physical scientists, natural scientists, and other types of collaborators. Meeting organizers looked for opportunities to encourage connections around synergistic topics of interest while promoting a diversity of institutional affiliations, research methodologies, and geographic areas of interest within each group.

Workshop staff will make sure each participant finds their way into their pre-assigned breakout room during the virtual meeting. You can support our effort by adding your breakout group number to the beginning of your Zoom name and staying logged into Zoom during the workshop's break from 10:40-11:00am AK.

Breakout Group 1	Breakout Group 5
Advisor/Facilitator: Olivia Lee/UAF	Advisor/Facilitator: Courtney Carothers/UAF
Mikhail Latonin/SPSU	Emily Huff/MSU
Lara Mengak/AK Dept Fish & Game	Elchin Jafarov/LANL
Mike Steele/UW	William Armstrong/Appalachian State
Paul Berkman/Harvard & PanArctic Options	Otis Crandell/ArchaeoCafé
Julio Postigo/Indiana University	Kate Hohman Billmeier/UAA
Laura Landrum/NCAR	Jason Clark/UAF
Brian Vasel/NOAA ESRL	Elizabeth Fine/WHOI
Oleg Pokrovsky/RSHU	Lawrence Vulis/UCIrvine
Breakout Group 2	Breakout Group 6
Advisor/Facilitator: Holly Hapke/UCI	Advisor/Facilitator: Pips Veazey/UAF
Sarena Stein/Wageningen University	Lorene Lynn/Red Mountain
Hannah Bradley/Princeton	Jessica Garron/UAF
Dina Brode-Roger/KU Leuven	Neil Gardner/Health Consultant
Dele Raheem/ULapland	Magdalena Muir/U Calgary
Efi Foufoula-Georgiou/UCI	Adelheid Herrmann/UAF
Eric Goddard/UAF Bristol Bay	Ingrid Verstraeten/USGS
Kathryn Lavelle/CWRU	Ranjani Kulawardhana/Jackson State University
Martin Miles/CU Boulder	Karen Endres/NOAA NWS

Breakout Group 3	Breakout Group 7
Advisor/Facilitator: Elise Miller Hooks/GMU	Advisor/Facilitator: Liz Weinberg/IARPC
Simon Pendleton/WHOI	Margaret Rudolf/UAF
Jaylene Wheeler/Kawerak	Anne Garland/ARIES
Augusto Cannone Falchetto/UAF	Olga Lauter/EHESS
Mark Seefeldt/CU Boulder	Véronique Dubos/INRS
Joshua Young/UCAR	Joel Rowland/LANL
Vera Kuklina/GWU	Robert Newton/Columbia
Andrew Strumpf/UIUC	Corrie Whitmore/UAA
Tugce Baser//UIUC	Inci Güneralp/TAMU
Breakout Group 4	Breakout Group 8
Advisor/Facilitator: Katharine Duderstadt/UNH	Advisor Facilitator: Jennifer Brewer/UNH
Michelle Ritchie/UGeorgia	Sabina Palinkas/UIT
Holly Parker/UNE	Anatoliy Ivakin/UW
Sasha Leidman/Rutgers	Marya Rozanova-Smith/GWU & RSHU
Lauren Zamora/NASA	Elizabeth Nyman/TAMU
Patrizia Duda/Univ College London	Jenna Lamphere/TAMU
Jennifer Campos Ayala/UCI	Isabela Le Bras/WHOI
Murat Aydin/UCI	Gisele Arrruda/ANVIVO
Helen Glazer/Artist	Merrick Haller/OSU

Additional Resources

The following resources may also be helpful for researchers interested in developing new collaborative Arctic research projects:

- [Website of the 2-Day workshop “Transdisciplinary Research on the Changing Arctic and its Global Impacts: Enhancing Capacity for Convergence Science” hosted by UC Irvine School of Social Sciences in 2019](#)
- [Interagency Arctic Research Policy Committee \(IARPC\) Collaboration Teams](#)
- [Arctic Research Consortium of the U.S. \(ARCUS\) Resources for Conducting Research with Northern Communities](#)
- [International Network for the Science of Team Science](#)
- [Profiles of the projects previously funded through the National Science Foundation’s Navigating the New Arctic program](#)

Making A Commitment to Active Online Participation

Hosting a research collaboration workshop using a virtual format means that each participant must make an extra personal commitment to play an active and productive role during the online meeting.

Respect the Meeting - Please treat this online gathering with the same respect that you would an in-person event. Come prepared, show up on time, stay for the duration of the event, and commit to being fully present and attentive to your colleagues.

Be an Active Listener - When you are on your computer, it's super easy to multi-task. It's up to you to do what you can to minimize distractions and remain focused on the workshop when we are in session. A great way to keep focus is by taking notes!

Be Inclusive - Be curious, considerate, respectful, and inclusive of diverse views and opinions. Use the meeting to actively seek input from your fellow attendees—particularly during breakout discussions!

Complete the Pre-Workshop Assignment - Please join your colleagues in completing the pre-workshop assignment. By making a commitment to thoughtfully reviewing the assigned videos and thinking through your research issue, challenge, or question in advance, you are helping to elevate the quality of break-out discussions and workshop outcomes.

Test Your Technology - Please [test Zoom](#) out in advance—especially if you have never used it before. In addition to making sure your audio/video settings are working correctly, we also want you to feel comfortable with your Zoom controls so you can easily share your thoughts and ask questions!

When In Doubt, Ask - Whether it's technical troubles, uncertainty around agenda activities, or some other issue that might be getting in the way of a productive meeting, please speak up! Using the private chat feature on Zoom to communicate with the meeting host is always a great way to get info and help whenever you need it.

Create a Safe Place for Sharing - Throughout the meeting, please help us create a safe space for sharing by honoring the idea that, “what is said here, stays here; what is learned here, leaves here”.

Code of Conduct

Workshop Host Commitment

The Arctic Research Consortium of the U.S. (ARCUS), the University of California Irvine, and the Interagency Arctic Research Policy Committee are all committed to maintaining a safe, welcoming, and trusted meeting environment capable of supporting meaningful community dialogue and the professional exchange of information and ideas. To help promote these conditions, all meeting participants are expected to adhere to the meeting Code of Conduct. The purpose of this Code of Conduct is to communicate that sexual harassment, other forms of harassment, and sexual assault will not be tolerated, and every meeting participant is expected to conduct themselves in a professional, respectful, and responsible manner at all times. This Code of Conduct applies to all affiliated people and events relating to the Arctic Research Collaboration Workshop, including those sponsored by other organizations.

What is Harassment?

Harassment includes speech or behavior that is not welcome or is personally offensive, whether it is based on ethnicity, gender, religion, age, body size, disability, veteran status, marital status, sexual orientation, gender identity, or any other reason not related to scientific merit. It includes stalking, unnecessary touching, and unwelcome attention. Behavior that is acceptable to one person may not be acceptable to another, so use discretion to be sure that respect is communicated. Harassment conveyed in a joking manner still constitutes unacceptable behavior. Retaliation for reporting harassment is also a violation of this policy, as is reporting an incident in bad faith.

Expected Behavior

- Treat all meeting participants, staff, and vendors with respect and consideration, valuing a diversity of views and opinions.
- Communicate openly and thoughtfully with others, being considerate of viewpoints different from your own and critiquing ideas rather than individuals.
- Avoid personal attacks directed toward other attendees, participants, staff, and vendors.
- Be mindful of your surroundings and of your fellow participants. Alert staff if you notice a dangerous situation or someone in distress.

Prohibited Conduct

- Harassment and intimidation, including any verbal, written (including via texts, online chat, or social media), or physical conduct designed to threaten, intimidate, humiliate, or coerce another participant.
- Discrimination or other actions based on race, ethnicity, gender, gender identity or expression, sexual orientation, physical ability, nationality, age, socioeconomic status, or belief.
- Stalking or unwelcome or surreptitious photography or recording.
- Disruption of talks at any session of the online meeting.
- Unwelcome sexual attention, including but not limited to sexualized comments or jokes, displaying sexually explicit material, inappropriate touching, groping, or sexual advances.

How to Report & How Complaints Will Be Addressed

Anyone who feels unsafe or threatened is encouraged to seek immediate assistance from meeting staff, trusted colleagues, friends, or allies. To report a serious crime, please call 911.

If you are the subject of unacceptable behavior or have witnessed any such behavior during meeting events, please contact one of the virtual meeting planning team members listed below to report your concerns:

- Brit Myers, ARCUS Project Manager – brit@arcus.org or 206.697.2822
- Holly Hapke, UCIrvine School of Social Sciences Director of Research Development – hhapke@uci.edu or 949.824.3183

Meeting officials will consult privately with the individual filing the complaint prior to taking any action.

To address complaints of inappropriate conduct, meeting officials may take any action deemed necessary and appropriate, including verbal warnings, immediate removal from the meeting, and the notification of appropriate authorities (e.g., employers or police).

Anyone requested to stop unacceptable behavior is expected to comply immediately. Retaliation toward complainants of inappropriate conduct will not be tolerated.

For any questions about this Code of Conduct policy, please contact ARCUS Executive Director Helen Wiggins at helen@arcus.org.

Zoom Login Details

Joining the Meeting

<https://us02web.zoom.us/j/83436431164>

Passcode: 015155

Or One tap mobile

US: +12532158782,,83436431164# or +13462487799,,83436431164#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 646 558 8656
or +1 301 715 8592 or +1 312 626 6799 or 855 880 1246 (Toll Free) or 877 369 0926
(Toll Free)

Meeting ID: 834 3643 1164

Passcode: 015155

International numbers available: <https://us02web.zoom.us/u/kdeGvYBI73>

Before the Meeting Begins

Before the meeting, we encourage you to take the following steps:

- [Download the Zoom app](#) in advance of the meeting.
 - The web browser client will download automatically when you start or join your first Zoom meeting, and is also available for manual [download here](#).
 - Although you can participate in the Zoom meeting using a Smartphone, we encourage you to join the meeting using a laptop, as Smartphone connections may limit the options you have available to see and share information.
- [Join a test meeting](#) to test out your audio/video settings, internet stability, and to familiarize yourself with the Zoom user controls.
 - If you have a slow internet connection or are experiencing other network issues, you may want to join the meeting audio by phone. If you choose this option, make sure both your Zoom mic and laptop audio are muted (otherwise you may end up with audio feedback!).
- For better audio quality, consider using a headset/headphones.
- Look for a place to connect that has good lighting and where you will not be back-lit. This will make it easier for other participants to see your video image.
- If you are interested in learning more about Zoom, a visit to the [Zoom help website](#) may also be helpful!

During the Meeting

During the meeting, the following details and “how-to” instructions may be useful:

- When you enter the meeting, your video will be switched off and your audio will be muted by the Host.
- You may turn on your video or mic at any time. However, we do ask you to keep your microphone muted when you are not speaking to help prevent disruptions and background noise. If you are joining the meeting audio by phone you can unmute and mute yourself by pressing *6.
- Your Zoom controls (video, mic, chat, etc) can be found by hovering your mouse over the bottom of your Zoom window.
- In the upper right-hand corner of your Zoom window, there are also tools that will allow you to toggle your screen between the Speaker View (which focuses the video on the person speaking) and Gallery View (so you can see multiple people at the same time).
- During the meeting, we invite you to chat with the hosts and other participants by using the “Chat” feature found in your control bar.
 - You will have the option to chat with “Everyone” who is participating in the meeting or you can chat privately with the Host or other meeting participants by selecting their name from the drop-down menu accessed through the chat panel.
- If you would like to alert the Host to the fact that you have a question or comment, you will also have the option to “raise your hand”. To raise your hand, click the “Participants” icon on your control panel. On the bottom right side of the Participants screen, click the “Raise Hand” button. To lower your hand, click the same button (now labeled “Lower Hand”). People calling into the meeting can also use the raise hand feature by dialing *9 on their phone.

Consent to Be Recorded

The meeting organizers do plan to record and share the workshop’s panel discussion as well as the final report out on the breakout group discussions. Breakout sessions, however, will not be recorded. The Zoom Video Conferencing service also allows chat messages sent during the session to be downloaded by other Zoom participants. By joining this meeting, you automatically consent to such recordings. If you have any concerns about being recorded, please contact Brit Myers at brit@arcus.org.