Seth Campbell, Associate Professor / Director of Research University of Maine / Juneau Icefield Research Program

scampb64@maine.edu

Professional Links:

https://alpinesciences.net/
https://umaine.edu/earthclimate/people/seth-campbell/

What possibilities do you see when you think about connecting Maine and Alaska research?

- Building collaborations and leadership for the U.S. in Sub-Arctic to Arctic Education and hands on training
- Building collaborations on Atmosphere-terrestrial-to Ocean systems research & development.

What connections already exist between Maine & Alaska within your personal and professional networks? I previously worked as Director of Academics & Research for the Juneau Icefield Research Program (JIRP) in AK and due to program growth, I am now acting as Director of Academics. The academics have been run out of UMaine for the past six years. We intend to continue this relationship but are working to build partnerships among additional UAlaska and other institutions across the country. Additionally, we have one Dept of Defense (DoD) project funded (\$1.5 million) between UMaine, UAF, UAS, and JIRP currently and are waiting to hear on a \$9 million DoD proposal currently pending with colleagues from each of these institutions focused on snowpack properties and impact of snowmelt on the surrounding terrestrial environments of Alaska and Maine. Lastly, we at UMaine just signed an MOU with Wrangell Mountain Center to be the academic host for their summer program to re-commence in 2024.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? I spend much of my time working to develop learning opportunities and real STEM experiences for students and other early career professionals. I am particularly focused on supporting and championing students who have been disadvantaged (e.g. low income, first generation college, underrepresented, etc.). I believe that our world has a small army of incredible youth who want to make a positive difference on their communities and our environment. My goal is to help harness our existing resources more effectively to help these students reach their goals. I think there are an enormous number of opportunities between Alaska and Maine which have yet to be realized for the benefit of our communities, youth, and environment, and I am keen to work on searching out those opportunities with anyone I can.

What do you think makes a good workshop? Please integrate significant time for small group discussions. Talks from professionals are fine but they don't really lead to systemic collaborations.

Tommy Sheridan, Associate Director University of Alaska Fairbanks Alaska Blue Economy Center

tmsheridan@alaska.edu

Professional Links:

https://www.linkedin.com/in/tommy-sheridan

What possibilities do you see when you think about connecting Maine and Alaska research? I am interested in connecting UAF and UMaine capacities to coastal and rural Alaskan communities that are experiencing extreme social and economic disruptions due to changing climatic conditions and other global forces (i.e., Alaskan salmon fisheries and markets have recently collapsed due to global market conditions). I have expertise in the Alaskan seafood industry, and wish to make connections to innovations and innovators in Maine that may have lessons to share with Alaska.

What connections already exist between Maine & Alaska within your personal and professional networks? I am highly connected within Alaska's seafood industry (please see LinkedIn), and am very involved with the development of Alaska's burgeoning mariculture (macroalgae and shellfish) industry...all of which has connections to Maine.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? Apart from my seafood and mariculture industry connections, I have been involved with (commercial) fishery sustainability certification processes as a consultant, and note similar conflict between fisheries and sustainability certification bodies in both Alaska and Maine: https://www.intrafish.com/shellfish/maine-lobster-fishery-withdraws-from-marine-stewardship-council-certification-process/2-1-1399034

What do you think makes a good workshop? My master's program at Oregon State University was titled "An Evaluation of Collaborative Salmon Fishery Management in Prince William Sound, Alaska." As part of this work, several constraints to collaborative salmon fishery management in PWS were identified, including a noted lack of individual and organizational capacity among the area's prospective collaborators. Our work identified several broad lessons to consider when collaborating, including: (1) the importance of selecting participants who possess relevant knowledge and who are willing to compromise, (2) an awareness and acceptance of the significant resources and time that collaborations require, (3) the availability of organizational capacity to support these endeavors, and (4) the availability of individuals with the credibility and skills required to effectively lead collaborations. I believe all of this holds true here: https://ir.library.oregonstate.edu/concern/graduate-projects/dv140022t

Paul Mayewski, Director/Professor Climate Change Institute, University of Maine

paul.mayewski@maine.edu

Professional Links:

https://climatechange.umaine.edu/people/paul-andrew-mayewski/

What possibilities do you see when you think about connecting Maine and Alaska research? Identifying areas where we duplicate and/or complement our respective capacities and capabilities.

What connections already exist between Maine & Alaska within your personal and professional networks? I worked closely in planning and in the field with the Polar Ice Coring Office (PICO) when it was based at UAF - albeit quite a few years ago. I am familiar with several past and current UAF researchers.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? My teams and I focus on ice core recovery and interpretation worldwide. We have extensive analytical capability re water/snow /ice chemistry. In recent years we have focused on water quality impacts of warming glaciers. We have unique climate analysis software and would like to partner this with AI investigations

What do you think makes a good workshop?

Stated products such as white papers and/or proposal plans.

Jeremy Kasper, Director
Alaska Center for Energy and Power, University of Alaska Fairbanks
jlkasper@alaska.edu

Professional Links:

https://www.uaf.edu/acep/about/our-team/jeremy-kasper.php

What possibilities do you see when you think about connecting Maine and Alaska research? Blue Economy, Fisheries, Oceanography, Marine Energy are all areas on mutual interest/expertise

What connections already exist between Maine & Alaska within your personal and professional networks? Existing joint UAF/UMaine NSF and DOE EPSCoR funded projects.

Brittany Smart, Energy Transitions Initiative Coordinator
University of Alaska Fairbanks (UAF), Alaska Center for Energy and Power (ACEP)
bsmart4@alaska.edu

Professional Links:

https://www.linkedin.com/in/brittanylsmart/

What possibilities do you see when you think about connecting Maine and Alaska research? Blue economy, arctic research, similar & changing environments, military-connected

What connections already exist between Maine & Alaska within your personal and professional networks? Unsure

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? Local government, policy development, military-community partnerships, energy transitions

What do you think makes a good workshop? I prefer hands on - think along the lines of Model UN, Mock Trial, etc.

Joshua Stoll, Associate Professor of Marine Policy School of Marine Sciences, University of Maine joshua.stoll@maine.edu

Brief Biography:

Joshua is an associate professor in the School of Marine Sciences at the University of Maine. His research focuses on questions about coastal community resilience, ocean governance, fisheries policy, and food systems. Joshua is the co-founder of the Local Catch Network and has been working to elevate the role of seafood in local and regional food systems for more than a decade. He holds a B.A. in Environmental Studies from Bates College, a Masters in Coastal Environmental Management from Duke University, and a PhD in Ecology and Environmental Sciences from the University of Maine. Prior to returning to Maine, he was an early career research fellow in the Global Economic Dynamics and the Biosphere Program at the Royal Swedish Academy of Sciences in Sweden.

What possibilities do you see when you think about connecting Maine and Alaska research? I think about the biophysical and socioeconomic similarities between Maine and Alaska and the opportunities for cross-regional research that spans both geographies. Specifically, Maine and Alaska both have strong socioeconomic ties on aquatic and marine resources (blue foods) and are uniquely rural compared to other parts of the United States.

What connections already exist between Maine & Alaska within your personal and professional networks? My connections to Alaska grow out of more than a decade of partnership building and programming in rural, coastal, and tribal communities through the Local Catch Network. Established in 2011, Local Catch Network is a hub for knowledge exchange, peer-to-peer learning, technical assistance, research, and collaboration created to strengthen local and regional seafood systems in North America. Anchored at the University of Maine, the network recognizes seafood as an important part of local and regional food systems and takes the perspective that coastal communities and small businesses play a critical role in responding to climate threats by building diverse, resilient, and prosperous food systems that support healthy people and the environments where they work and live. Today, the network is made up of more than 2,000 people, including 500 seafood businesses, technical assistance providers, researchers, and community-based organizations with long-standing partnerships and deep roots in Maine, Alaska, and beyond.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? This fall, colleagues and I launched a new National Research Traineeship program that focuses on interdisciplinary, marine-based ecosystem science. Leveraging the Gulf of Maine as an extraordinary living laboratory, our NRT, "Ecosystem science in the face of rapid ocean change: a convergence approach," aims to empower the next generation of scientists, managers, policymakers and changemakers in a new, convergent approach to marine and coastal ecosystem science. I am interested in finding ways to leverage this 5-year opportunity to build Maine-Alaska connections.

What do you think makes a good workshop? I find that the most beneficial workshops have good facilitation and a balance of activities that keep people engaged.

Brit Myers, Strategic Engagement Director Arctic Research Consortium of the U.S. (ARCUS)

brit@arcus.org

Professional Links:

https://www.linkedin.com/in/britmyers/

What possibilities do you see when you think about connecting Maine and Alaska research? I see the possibility of the collective U.S. Arctic research community having greater influence with & more ability to provide input to circumpolar/international Arctic efforts & governing bodies. Maine is more accessible to Greenland/Iceland/Europe, where a number of international Arctic activities take place. It is not always as easy for Alaskan-based researchers to travel to these locations... and I think this is at least a small part of why we see a large presence of New England organizations & researchers taking part in UArctic, for example, relative to the number of Arctic research organizations active in AK. Greater alignment of U.S. Arctic research interests across these two gateway regions has the potential to increase the

collective influence of U.S. involvement in the Arctic in many ways and I'm excited to see this group come together to explore the opportunities.

What connections already exist between Maine & Alaska within your personal and professional networks?

- ARCUS includes member organization from both Alaska (U AK Fairbanks, U AK Anchorage, U AK Southeast, ABR, Alaska Ocean Observing System, Kawerak, NREL's CCHRC, NOAA GML's Barrow Observatory, Sitka Sound Science Center, Ted Stevens Center, UIC Science, WWF US Arctic Program) and Maine (University of Maine & University of Southern Maine).
- University of the Arctic includes members from both Alaska (AK Pacific U, Anchorage Museum, CCHRC, Ilsiagvik College, Institute of the North, U AK Anchorage, U AK Fairbanks, U AK Southeast,) and Maine (UMaine, UMaine Fort Kent, U Southern Maine). ARCUS is also a UArctic member. Interactions occur via various UArctic thematic networks. Notably, however, exchanges between AK & ME schools are NOT enabled by the UArctic North2North program, which only facilitates international exchanges.
- The Arctic Education Alliance also brought University of Southern Maine participants to UAF in 2022 for knowledge exchange activities: https://www.aea.uaf.edu/alaska-usgreenland-knowledge-exchange-2022
- Bigelow Lab is partnering w/ UAF on deep sea exploration https://www.bigelow.org/science/lab/deep-biosphere/cobra.html .
- Ocean Renewable Power Company's Next-Generation River Power System Project (UAF is a Partner w/ the Maine based company) https://www.energy.gov/eere/water/articles/river-currents-power-remote-alaskan-village "ORPC's Maine Tidal Energy Project is "the first commercial, grid-connected tidal power project in the country, and the first ocean energy project in all of the Americas to deliver power to a public grid," and is actively pursuing project development in Alaska."
- Senate Arctic Caucus: https://www.legistorm.com/organization/summary/128934/Senate_Arctic_Caucus.html
- UMaine Hudson Museum's recent work to repatriatie Alaska Indigneous artifacts
- Maine & AK Researchers Involved in the National Science Foundation's Navigating the New Arctic Program (& who may cross paths through NNA Investigator meetings):
 - UMaine researchers are involved in the NNA "Systems Approaches to Understanding and Navigating the New Arctic (SAUNNA)" project https://www.arcus.org/nna/projects/2021713
 - Ralph Pundt from the Maine Maritime Academy involved in the NNA "Arctic Impacts and Reverberations of Expanding Global Maritime Trade Routes" project which also includes Thomas Ravens from UAA as a team member: https://www.arcus.org/nna/projects/1927785
 - Nicholas Record. David Emerson, Alex Michaud from Bigelow Laboratory have been involved in the NNA project "Interactions of the Microbial Iron and

Methane Cycles in the Tundra Ecosystem" which has a field site in AK at Toolik Field Research Station: https://www.arcus.org/nna/projects/1754379

- Phylogeneticists & Ecologists who study species ranges across AK and ME. For example,
 Marine biologists who study species like the Arctic char which have wide circumpolar
 Arctic distribution or Ornithologists who track the migration routes of birds like the
 Blackpoll Warbler through flyways that come up along the US East Coast from South
 America and then head NW to AK or entomologists who study the expansion of tickborne diseases and their impact on other species such as moose.
- Daniel Hayes & Wouter Hantson (UMaine) involved with NASA's Arctic-Boreal Vulnerability Experiment (ABoVE), DOE's Next Generation Ecosystem Experiment (NGEE-Arctic) and the NSF Permafrost Carbon Network.
- David Reidmiller (Gulf of Maine Research Institute) involved with the Permafrost Carbon Network.
- Peary-MacMillan Arctic Museum and Arctic Studies Center at Bowdoin College
- Michael Retelle (Bates College) former ARCUS Board Chair
- Anne Henshaw Former Programme Officer for the Oak Foundation & lead for the Arctic Funders Collaborative
- Jennifer Heidrich & Erin Towns former PolarTrec program teachers from Edward Little
 High School in Auburn, Maine
- University of New England (UNE) North program- https://www.une.edu/UNE-North
- Maine's Biodiversity Research Institute's research program on mercury found in Arctic shorebirds Program - https://briwildlife.org/where-we-work/

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? ARCUS has a keen interest in understanding who is taking part in various Arctic research communities (and who is not). I have quite a bit of information/social network data on who engages with ARCUS programs, current NSF Investigators, Navigating the New Arctic project teams, participants in research communities like IARPC Collaborations, the Permafrost Carbon Network, the Sea Ice Prediction Network (etc). I'd love to put this kind of data to use in identifying ways to bring different segments of the U.S. Arctic research community together in new and helpful ways.

What do you think makes a good workshop? Activities to help people see one another more clearly, build trust, and connect as complete human beings (PPTs alone don't do this). Skilled facilitation that can take groups from expansive discussions to concrete action plans and work activities. Participants willing and inspired to invest their time, leadership capabilities, and intellectual energy in developing meaningful products together.

Brenda Konar, Director Alaska EPSCoR and Professor of Marine Biology University of Alaska Fairbanks

bhkonar@alaska.edu

Professional Links:

https://www.uaf.edu/cfos/people/faculty/detail/brenda-konar.php https://www.alaska.edu/epscor/

What possibilities do you see when you think about connecting Maine and Alaska research? I think both states have strong mariculture interests that could be complimentary.

What connections already exist between Maine & Alaska within your personal and professional networks? I work with a researcher at Bigelow.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? Because of my EPSCoR hat, I am very interested in connecting UA researchers with Maine researchers, even outside of my area of expertise.

What do you think makes a good workshop?

A solid agenda that results with action items.

Cameron Carlson, Dean College of Business and Security Management University of Alaska Fairbanks

cdcarlson@alaska.edu

Brief Biography:

This is a second career after retirement from the Army in 2006. I have been a program director, associate dean and now serve as the Dean for CBSM. My research interests are primarily focused on homeland defense/security and emergency management, arctic security, irregular warfare, human security, climate security and resilience.

What possibilities do you see when you think about connecting Maine and Alaska research? That is what I would like to explore.

What connections already exist between Maine & Alaska within your personal and professional networks? I know Pips Veazey...

What do you think makes a good workshop?

The ability to develop some collaborative relationships for future work.

Adam St. Gelais, Aquaculture Innovation Specialist University of Maine Aquaculture Research Institute adam.st@maine.edu

Professional Links & Brief Biography:

https://www.researchgate.net/profile/Adam-St-Gelaishttps://www.linkedin.com/in/adam-st-gelais-18b6394b/

Adam St. Gelais is a marine ecologist and aquaculture scientist based at the Aquaculture Research Institute at the University of Maine. Adam's research is highly applied and collaborative with a broad focus on the ecology and economy of low trophic level aquaculture, most recently with a particular focus on seaweed farming. His research and professional background is diverse, spanning coral reef ecology, fisheries, marine resource management, and graduate and undergraduate program development. Adam came to the U Maine Aquaculture Research Institute from the University of New England (UNE) where he served as an Aquaculture Research Scientist, Graduate Faculty in Ocean Food Systems, and as the Assistant Director for Science at the UNE Institute for North Atlantic Studies (UNE North). At UNE North, he helped to launch a transdisciplinary Institute recognizing Maine's connection and integration with other arctic nations, and focused on linking the universitie's expertise to partners across the north Atlantic arctic region. Adam is interested in exploring avenues to achieve triple bottom line sustainability in low trophic level aquaculture, and understanding how aquaculture environment interactions framed by a changing climate can impact this goal. When not in the lab or in the field, you can find Adam outside with his partner and two young daughters, probably surfing or boating to a new island to explore.

What possibilities do you see when you think about connecting Maine and Alaska research? I see key parallels between Maine and Alaska in ocean foods production; in fisheries and perhaps even more so in aquaculture/mariculture. Despite our great geographic separation and disparities in scale between the two locations, there are great biophysical and cultural similarities that should serve as a foundation for collaborative research. Moreover, the divergences between our two states may be areas where even more can be gleaned from working closely.

What connections already exist between Maine & Alaska within your personal and professional networks? In recent years my research focus has centered on seaweed farming. I have worked on several large scale research projects focused on this, including a DoE funded MARINER project in Maine. Several other MARINER projects were also funded in Alaska. Over the years I have made connections with growers in Southeast Alaska (Craig) and Growers, researchers and extension professionals working in seaweed based in Kodiak.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? I am particularly interested in issues of scaling and climate in extractive (low trophic level) Aquaculture. Both of these I feel will be key areas of collaboration between ME and AK with regards to ocean farming.

Gayle Zydlewski, Director Maine Sea Grant & Professor of Marine Sciences University of Maine

gayle.zydlewski@maine.edu

Brief Bio:

Dr. Zydlewski received a bachelor's degree in biology and marine biology from the University of Massachusetts, Dartmouth, a master's degree in zoology from the University of Rhode Island in Zoology, and a PhD in Oceanography from the University of Maine. She served as a National Research Council postdoctoral research fellow at the USGS Conte Anadromous Fish Research Center and was a Supervisory Fisheries Biologist at the USFWS Abernathy Fish Technology Center. She started as research faculty in the School of Marine Science, studying and working with graduate students on diadromous fish science as it relates to their management on the east coast of the US as well as alternative energy/fish interactions, as well as teaching vertebrate biology and fisheries oceanography at the University of Maine since 2007. Gayle has been the Director of the Maine Sea Grant Program since 2018 and is currently serving as the cochair of the UMaine MARINE Initiative steering committee. As Sea Grant Director she supports a program of 20 professionals working to meet the program's mission to support the responsible use and conservation of coastal resources in order to sustain thriving coastal communities and ecosystems by funding and supporting research relevant to the state's needs.

What possibilities do you see when you think about connecting Maine and Alaska research? Coastal community resilience and climate adaptation: Approaches for co-producing knowledge / conducting participatory research or community-based monitoring with Indigenous and/or rural communities Knowledge exchange / collaboration around coastal resilience capacity building, technical assistance, planning, policy, and decision-making, including on communityled relocation / managed retreat / site expansion Malinda leads the Alaska Tribal Resilience Learning Network, would be interesting to explore possible applications of this model in Maine Exploring and incorporating social dimensions (including social vulnerability / resilience) in climate research, assessments, and planning Searun Fish Approaches for AK Sea Grant to support research and management of diadromous species at state and tribal jurisdictions. Seaweed - Projects/collaborations with AK that I'd like to work on and see a potential need for-Infrastructure and working waterfronts - similar to ME, AK's kelp industry is reliant on existing working waterfront and fisheries infrastructure, however AK is set up for different operational scales and models. There's a lot ME could learn from how AK is approaching/prioritizing incorporating kelp into working waterfronts, particularly how they envision and are planning for scale and how they plan to match this with processing. (Currently, there are minimal processing opportunities for kelp in AK, but the supply is quickly growing. With the slow leasing process, we're looking at the possible opposite scenario in ME.) Adam (ARI) is interested in this work as well and also has connections in AK that we've discussed could be helpful. Harvest equipment/vessels tech transfer/development - In the past few years, AK has been leading the way on developing low-tech/high-volume harvest vessels and fisheries vessel modifications to allow for more efficient harvest. With harvest effort/labor as the #1 cost driver for kelp farming in ME, collaboration to learn from these efforts may have significant benefit to the sector in

ME, where the industry is currently utilizing existing fishing vessels for harvest but with minimal efficiency/efforts around modifications. Further - how can equipment/gear modifications target both efficiency and increase accessibility/safety for different body types on the water, as we think about a more diverse sector. I'm not sure if this second bit factored into AK efforts, but I'd be curious to learn more and collaborate on this. Generally - distributions/markets for kelp. Also, I've heard lots of enthusiasm from AK and ME farmers around electrification. Also, I'd love to understand the mariculture development landscape playing out in Alaska right now - there seems to be lots of significant state support going toward developing seaweed/shellfish farms. How does this support/funding work? Who is it benefitting? What are the long term goals and how does this relate to our sector in ME? Shellfish and Fisheries AK has done tons of work in fisheries and aquaculture safety. If we are going to do any of this work in the future, they'd be great to learn from. Shellfish production systems, particularly longlines and suspended cages for oysters and scallops....to include bioeconomic analyses of different production systems. Fabrications, vessels, shipboard equipment, processing equipment, including solar-driven systems. The integration of farming and fishing: especially how these are presented to the public as simply tools in the toolbox to produce seafood. AK always seems to do a great job of summarizing and documenting their research and development work: manuals and other products to really lead a prospective farmer or fisherman into a new venture. These are really nice examples to pay attention to. Stock enhancement. Salmon is the big example: are there lessons learned that might be applied to Maine? Connections between average, everyday citizens and seafood: it's so common for people in AK to know how to process and prepare fisheries products, but even here in Maine - where that knowledge was traditionally strong - it seems to be getting weaker and weaker as fewer people have connections to the coast and to seafood. Programming to help Maine citizens to get comfortable again, and even find joy in preparing seafood. AK Sea Grant and their partners in developing and implementing programs for young fishermen and for safety at sea, both of which have a lot of potential to grow here. For ex: Alaska's Young Fishermen's summit coming up in December. Also their FishBiz program is a great model Maine Sea Grant has established connections that could be strengthened and built upon (see question 8). We also have a network of research we fund that may be natural fits for further connectivity and opportunity.

What connections already exist between Maine & Alaska within your personal and professional networks? The following are areas where Maine Sea Grant staff connect with others in Alaska. Sea Grant Focus Area: Resilient Communities and Economies Colleagues and projects include: Malinda Chase, Tribal Climate Liaison, AK Climate Adaptation Science Center, UAF Elena Sparrow, Education Outreach Director International Arctic Research Center, UAF I worked with Malinda and Elena on the Reaching Arctic Communities Facing Climate Change project, which was part of the PoLAR Partnership - we are in communication regularly and have talked about finding ways to continue collaborating on climate adaptation and coastal resilience in Indigenous communities Katie Spellman, Research Professor, IARC-UAF Katie works closely with Malinda and Elena and leads really cool projects called Winterberry and Alaska Berry Futures (maybe opportunities to do similar work in Maine?) Syverine Bentz, Coastal Training Program Coordinator, Kachemak Bay NERR Syverine is co-leading a project on Cultural Ecosystem Services that includes Chris Feurt at the Wells NERR - I contributed to a

project presentation during my time at Wells and think their framework could tie into a lot of our work (more of a would like to work on) Tourism - I used to connect a lot with Terry Johnson (he retired a few years ago and has since passed away)- his work was at the intersection of fisheries, tourism, and recreation and he helped me think through a lot of stuff for our programming in this area. I am not sure who replaced him in this work but AK SG continues to have great models in supporting the business and technical boating sides of these types of businesses. Lots of potential for collaboration on this front. Sea Grant Focus Area: Sustainable Fisheries and Aquaculture: fostering connections and knowledge exchange between AK and ME producers in aquaculture (recent MAIC Farmer to Farmer grants, partially Hub-funded, sent David Leith and Kristin Isfeld to AK). Strong and developing connections between AK and ME exist within the growing seaweed sector. AK and ME are uniquely positioned as the only two states currently producing farmed seaweed at commercial scale (500,000+ lbs annually) - there is increasing interest in knowledge sharing and technical transfer opportunities between the two states around nursery technology, farming and harvest equipment, processing and product development, infrastructure/distribution and market opportunities, and more. Currently, ME-based processors are working with and purchasing kelp from AK to increase supply to meet ME processing capacity, solidifying supply chain relations between the states. More on future opportunities under the next question. Colleagues and past/current projects (Seaweed) include: (Current) The Seaweed Hub AKSG: Melissa Good, Aaron Jones, Quentin Fong. I've worked with Melissa, Aaron, and Quentin on the Seaweed Hub Phase I and Phase II. Melissa has provided perspectives from AK and has facilitated connections to AK stakeholders. Outside of the Hub, I've worked with Aaron on farm equipment/design/harvest when he was at NHSG. (Past) Market Opportunities workgroup The following AK stakeholders were participants in the Seaweed Hub market opportunities workgroup, which I facilitated and met continuously from 2020-2022 Marcos Sheer, Kelp Farmer, Sea Grove Kelp Erik Obrien, The Denali Commission Weatherly Bates, Kelp/Oyster Farmer, Alaska Shellfish Farms (Current): Business and Economic Planning for Seaweed Aquaculture Systems in the United States. Melissa Good, AKSG. Worked together on developing business planning tools for multiple scales of seaweed businesses (nursery to harvest), and will be piloting these tools in 2023/2024. (Past): Proposal for Sea Grant Early Stage Propagation RFP: "Sustainable, Speedy Seeding and Optimizing Propagation of East and West Coast Kelp Species". This proposal was not successful, but a major activity of the work was to develop connections between ME and AK around emerging nursery practices and technologies. I worked closely with the project team (including AK-based members below) to develop the proposal and extension activities, and submitted the proposal through MESG. Schery Umanzor, University of Alaska Michael Stekoll, University of Alaska Lexa Meyer, Blue Evolution Alf Pryor, Alaska Ocean Farms (Past) 2023 National Seaweed Symposium - AK-based participants and speakers that were invited and I made connections with through the symposium. In some cases, we worked with WWF to fund their travel to the event, and all were speakers. During and after the symposium, I heard a lot of enthusiasm from AK participants around hosting events like this more often/regularly and about possibilities to have a national event in Alaska. Keolani Booth, Tribal Councilman, Metlakatla Indian Community. Keolani is working with the Southeast Sustainable Partnership on a nursery project to diversify seaweed species farmed to include black seaweed (nori/Pyropia) which has significant importance to

Metlakatla people. Opportunities here for connection to the species diversification work being done in the Northeast, and of particular interest because of past nori work. Alicia Bishop, NOAA Fisheries Aquaculture Coordinator Alaska Regional Office. Nick Mangini, Kelp Farmer, Kodiak Island Sustainable Seaweed. Nick has been involved in a number of R&D projects, specifically around equipment and gear modifications. He's hosted a number of ME based farmers in AK on exchange trips and has been very supportive of Sea Grant work and collaboration. Lia Heifetz, Kelp Harvester/Product Producer, Co-Founder, Barnacle Foods. Shellfish & Fisheries - Sea Grant connections: Sunny Rice and Gabe Dunham (fisheries related topics: markets, products, safety etc.) Melissa Good, Aaron Jones and Quentin Fong: mariculture of shellfish, mariculture products and processing, marketing. Greg and Weatherly Bates: shellfish and seaweed production, equipment/processing/products, etc. Eric Wyatt: Blue Starr Fisheries: shellfish production. Rod Jensen: Safety Cove Shellfish: shellfish production/equipment, fisheries. Kate Sullivan: Director, Southeast Alaska Regional Dive Fisheries Association (SARDFA)

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? The Maine Sea Grant program has cross-cutting principles that guide our work and may not be obvious in the previous answers: Center and Prioritize Efforts to Address the Impacts of Climate Change by leveraging and integrating climate-related expertise, resources, and partnerships in every aspect of our research, extension, community engagement, and education programming. Champion Diversity, Equity, Inclusion, Justice, and Accessibility (DEIJA) by seeking and engaging diverse perspectives to enhance understanding and enable our program to pursue its vision and mission with equity and integrity. Enhance coastal community resilience by fostering the ability of coastal communities to effectively respond to economic, social, and environmental change.

What do you think makes a good workshop? Plenty of small group discussion time to find similar values and interests in building opportunities.

Daisy Huang, Associate Professor, College of Engineering and Mines, Department of Mechanical Engineering Alaska Center for Energy and Power University of Alaska Fairbanks

dhuang@alaska.edu

Professional Links:

https://www.uaf.edu/experts/daisy-huang.php https://www.uaf.edu/acep/about/our-team/daisy-huang.php

What possibilities do you see when you think about connecting Maine and Alaska research? Commonalities with cold weather, dispersed communities, rural challenges

What connections already exist between Maine & Alaska within your personal and professional networks? Pips. :) And Reinaldo, kind of.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? I have a broad range of interests. :) I am more interested in overall community security rather than specific technologies. Different communities may have different solutions.

What do you think makes a good workshop?

Establishing sustained connections among people and research groups.

Matthew Balazs, Deputy Director, Alaska Coastal Cooperative University of Alaska Fairbanks

mbalazs@alaska.edu

Professional Links:

https://www.linkedin.com/in/matthew-balazs-07a0b64b/https://acgl.community.uaf.edu/

What possibilities do you see when you think about connecting Maine and Alaska research?

I see many areas where we can connect the research in both states, specifically related to coastal processes, and Arctic research. Our group is working with communities that are experiencing fisheries collapse and struggling with the associated socioeconomic impacts. There are undoubtedly similarities to the collapse of Atlantic fisheries which can help inform some strategies here. Other areas are within the realm of physical processes and climate change.

What connections already exist between Maine & Alaska within your personal and professional networks? Members in our group, including myself, have been involved with Arctic research through organizations like the University of the Arctic, which I know the University of Maine is also a part of. I am looking forward to making more connections.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? The Alaska Coastal Cooperative is a new organization formed to develop synergistic partnerships that accelerate actionable coastal resiliency science and technology, contribute towards workforce development and regional capacity building, and advances actionable multidisciplinary applied research on coastal hazards. We are interested in engaging with all stakeholders interested in research along the coasts of Alaska, and are strong advocators for principles of co-production of knowledge, and co-management of projects.

What do you think makes a good workshop?

A good workshop balances the need for relaying information from all parties with the flexibility to engage with others informally to build new relationships or strengthen others.

Bill Schnabel, Dean, UAF College of Engineering and Mines University of Alaska Fairbanks

weschnabel@alaska.edu

Professional Links:

https://www.uaf.edu/cem/

What possibilities do you see when you think about connecting Maine and Alaska research? Joint field work/trips

What connections already exist between Maine & Alaska within your personal and professional networks? Basically, it's Pips.

What do you think makes a good workshop?

Lots of interaction, and lots of contributions from the participants

Cody Sheltra, R&D Program Manager, Advanced Structures and Composites Center (ASCC) University of Maine

cody.sheltra@composites.maine.edu

Professional Links:

https://www.linkedin.com/me?trk=p_mwlite_my_network-secondary_nav https://composites.umaine.edu/

What possibilities do you see when you think about connecting Maine and Alaska research?

The UMaine ASCC is committed to innovating advanced solutions for complex infrastructure issues. Part of our expertise focuses in rapidly deployable lightweight composite applications for both emergency and permanent infrastructure needs in many different applications. With a recent emphasis sponsor emphasis on Arctic climates, we are excited by the opportunity to extend our development of dual-use infrastructure and advanced field-adaptable manufacturing methods to this new environment. To effectively employ the "Materials by Design" approach, understanding the unique challenges of this environment is crucial, emphasizing a strong need for collaboration with experts at UAK.

What connections already exist between Maine & Alaska within your personal and professional networks? The connection between the ASCC and UAK directly is in need of development. The University of Maine, however, has an existing relationship with Alaska through UMS members attending this workshop.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? Our commitment to empowering Arctic researchers goes beyond what's in my bio. With work spanning from creating nanocomposites derived from forest products, to autonomously manufacturing full-

scale housing units and naval vessels, the ASCC is a facility that must be viewed in person to truly appreciate. Please consider yourselves welcome to visit our facility first hand anytime.

What do you think makes a good workshop?

A successful workshop hinges on clear objectives, engaging content and discussions with a diverse audience, and excellent organization. I am pleased to say that from what I have seen so far, these boxes are checked.

Cheryl Rosa, Attending Veterinarian/Deputy Director (on detail to UAF)
US Arctic Research Commission on detail to the University of Alaska Fairbanks
crosa@alaska.edu

Professional Link & Brief Bio:

https://www.linkedin.com/in/cheryl-rosa-81a03a61/

Dr. Cheryl Rosa is the Deputy Director of the US Arctic Research Commission (USARC) currently on detail to the University of Alaska Fairbanks, serving as their Attending Veterinarian and Director of UAF's Animal Resources Center. She received a Doctorate in Veterinary Medicine from Tufts University and a Doctorate in Biology from the University of Alaska Fairbanks. She was formerly a Research Biologist and Wildlife Veterinarian for the North Slope Borough in Utqiagʻvik, Alaska and the University of Alaska Fairbanks and has been active in a wide range of subsistence, wildlife health and marine mammal research. She is the former coordinator of USARC's Alaska Rural Water and Sanitation Workgroup and Arctic Renewable Energy Working Group.

What possibilities do you see when you think about connecting Maine and Alaska research? I think that there are a lot of overlaps in interest--

What connections already exist between Maine & Alaska within your personal and professional networks? We had a USARC Commission meeting planned for the University of Maine. We did many weeks of research into the work the U of ME was doing --- please ask me for a copy of this, as it really is a great summary of overlaps that were valid in 2020.

What do you think would be helpful for other workshop participants to know about you and the work you are involved with that may not be obvious in your bio? I am involved in wildlife work and would like U of ME to know that we have facilities here that can serve as resources for both direct and partnered research.

What do you think makes a good workshop?

Getting to know people/making in-person contacts is very important. Unstructured social contact is best for this kind of thing. I think it is a great strategy to share formalized information during the day program, but meeting to discuss in a less formal setting will be very helpful to developing relationships.

Adam Low, Director Upward Bound and T3 Alliance, College of Engineering and Mines University of Alaska Fairbanks

alow@alaska.edu

Brief Bio & Professional Links:

I have a background as a geologist and a high school science teacher. I oversee two Upward Bound grants and serve as the director of the Alaska T3 program and UAF Makerspace. The Alaska Teaching Through Technology (T3) program, housed at the University of Alaska Fairbanks, has established long-term partnerships with schools and communities to develop T3 sites that engage the growth mindset framework to empower students to strengthen their communities, creating the next generation of innovators and leaders. The Alaska T3 program focuses on long-term relationships with students, schools, and communities.

https://www.linkedin.com/in/adam-low-2b3268193/ T3.alaska.edu makerspace.alaska.edu https://www.youtube.com/watch?v=Qyo53si4RMo

What connections already exist between Maine & Alaska within your personal and professional networks?

STORM - NSF Trak II Galena and Kotzebue working with UMaine + ACEP + IARC Juneau Icefield Research Program TRIO programs