

## Contact Info:

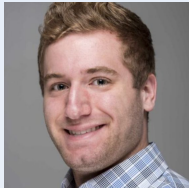


### University of Maine: Advanced Structures & Composite Center

<https://composites.umaine.edu/>

Phone: (207) 581-2123

Mailing Address: 35 Flagstaff Road  
Orono, ME 04469-5793



**Cody A Sheltra, P.E.**  
R&D Program Manager

Email:

[cody.sheltra@composites.maine.edu](mailto:cody.sheltra@composites.maine.edu)

LinkedIn: [cody-sheltra](#)

Phone: 207.400.2698

Location: Orono, ME

## About Me:

Having begun at the ASCC over a decade ago as a student himself, Cody Sheltra focuses on the development of engineering research programs with the aim of creating a cohesive and interdisciplinary environment for various staff, faculty, and students of all kinds. Cody has earned multiple engineering degrees from the University of Maine in Orono, Maine, and holds a Professional Engineer license in the State of Maine. He has contributed to numerous ASCC grants, demonstrating leadership in his research interests, which include rapidly deployable structures, forward on-site manufacturing, and advanced hybrid manufacturing process development. Beyond his work, he enjoys activities like snowboarding and rock climbing, and he actively volunteers to support college and early career individuals through a local church.

### Areas of Interest/Expertise

- **Strategic Program Development**
- **Interdisciplinary Team Development**
- **Novel Sustainable Composite Materials**
- **Hybrid Manufacturing Process Development**
- **Forward Manufacturing**
- **Rapidly Deployable Structures**

## About the ASCC:

### Our Commitment to Maine and Our Planet

Our Green Energy and Materials strategic plan focuses our eight major research areas of: *Civil Infrastructure Durability, Advanced Wood Composites, Large-scale Bio-based Additive Manufacturing, Cellulose Nanocomposites, Advanced Structural Concepts, Structural Thermoplastics & Smart Materials, Ocean Engineering & Energy, and Structural, Material, & Wind Blade Testing*, to the forefront of significant new sustainability industries. Innovations in GEM research and development position the Center to critically support the state's ambitious efforts to usher in a low-carbon economy.



## Collaboration Interests/Opportunities

- UMaine has a Multi-decade relationship with the USACE ERDC focusing on: Sustainable composite materials; Quick-deploy bridging and basing infrastructure; and Site & Structure evaluation tools.
- Current Focus for ERDC FY24 is extreme environments such as arctic, with opportunities for prototype infrastructure deployment and evaluation at Juneau Icefield Research Station.
- For ERDC Program collaboration please contact: Cody Sheltra, ERDC Program Manager, [cody.sheltra@composites.maine.edu](mailto:cody.sheltra@composites.maine.edu)
- For general ASCC research collaboration please contact: Taylor Ward, ASCC Communications Manager, [taylor.ward@composites.maine.edu](mailto:taylor.ward@composites.maine.edu)



## University of Maine Aquaculture Research Institute

<https://umaine.edu/aquaculture/>

### Contact Info:



**Adam St. Gelais**

Aquaculture Innovation Specialist

Email: [adam.st@maine.edu](mailto:adam.st@maine.edu)

Insta: Watermanfarmer

LinkedIn: adamstgelais

Cell: 207.350.6585

Location: Brunswick, Maine

### About Me:

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 macroalgae. His research and professional background is diverse, spanning coral reef ecology, fisheries, marine resource management, and graduate and undergraduate program development. 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.

Adam came to the 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 universities expertise to partners across the north Atlantic arctic region.

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. .

### Areas of Interest/Expertise

- **Applied & participatory Aquaculture Research**
- **Ecosystem Services of Aquaculture**
- **Interdisciplinary Collaborations**
- **Marine Ecology**
- **Climate Change and Adaptation**
- **Systems Approaches to Ocean Food Systems**
- **Collaboration, Technology and Knowledge Transfer**

### About U Maine Aquaculture Research Institute:

**The mission of the Aquaculture Research Institute is to serve Maine as an objective authority on aquaculture research with the goal of advancing a sustainable aquaculture future in Maine and beyond.**

ARI works within a set of values that guide decision-making and strategic programming within four categories: research, education, services, and institutional sustainability.  
**COLLABORATIVE • PROACTIVE • RELEVANT • APPLIED • OBJECTIVE • INCLUSIVE**

ARI Conducts Applied Research Across Four Focus Areas:

- Healthy Communities
- Healthy Species
- Healthy Populations
- Healthy Ecosystems

<https://www.youtube.com/watch?v=n-QTzaOEegQ&t=117s>

### Collaboration Interests/Opportunities

- Building connections with Alaskan researchers and producers in the low trophic level aquaculture space (Shellfish, Seaweeds and emerging species)
- Collaboration to pursue and envision sustainable scaling of seaweed aquaculture across Maine and Alaska
- Establishing a learning network of high latitude marine researchers and communities focused on understanding similarities & challenges facing shellfish and seaweed production.

# COLLABORATIONS *of* CONSEQUENCE

NAKFI'S 15 YEARS  
IGNITING INNOVATION  
AT THE INTERSECTIONS  
OF DISCIPLINES

15 YEARS



PORTLAND GATEWAY

1865 THE UNIVERSITY OF

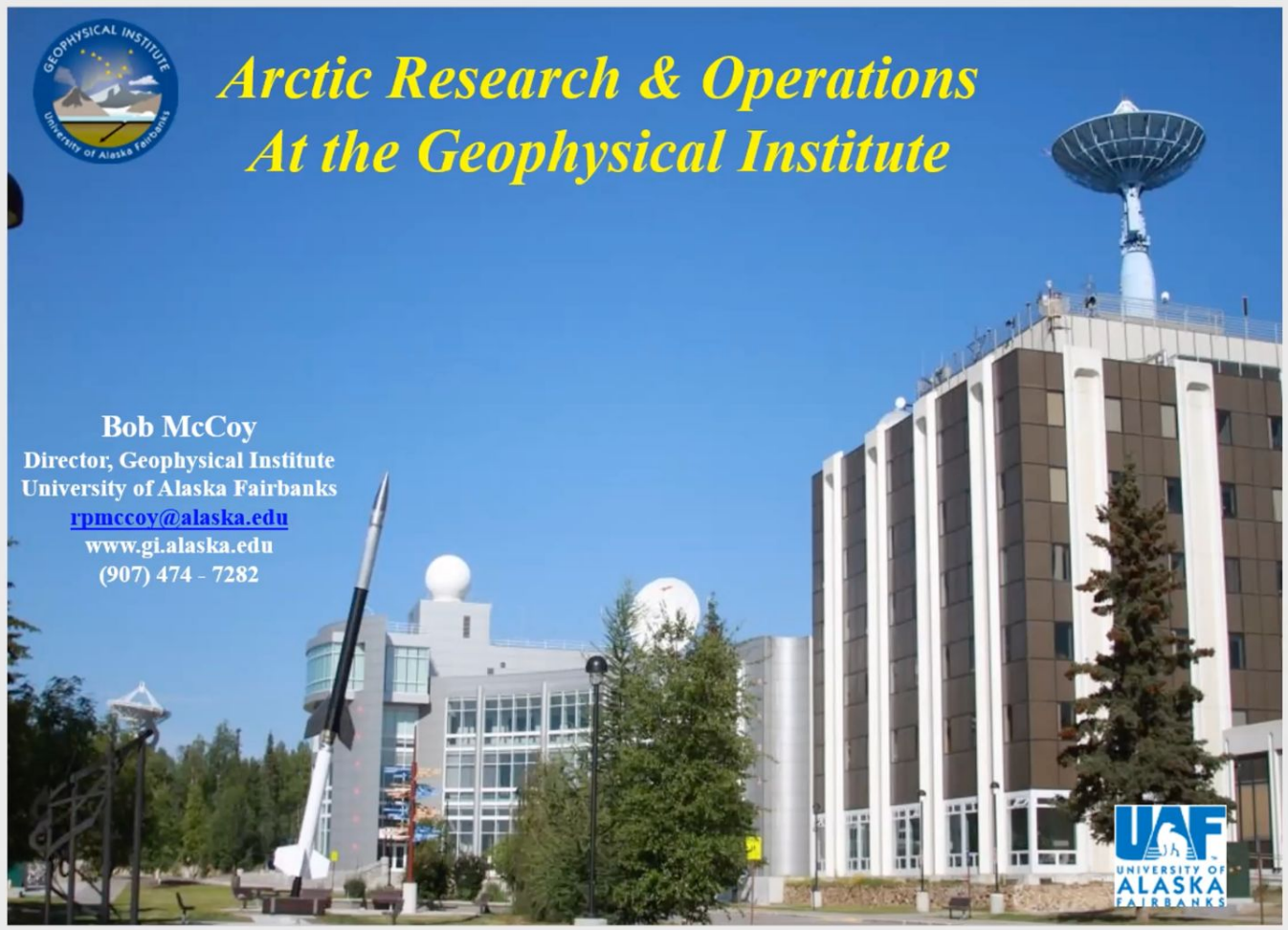






# Arctic Research & Operations At the Geophysical Institute

**Bob McCoy**  
Director, Geophysical Institute  
University of Alaska Fairbanks  
[rpmccoy@alaska.edu](mailto:rpmccoy@alaska.edu)  
[www.gi.alaska.edu](http://www.gi.alaska.edu)  
(907) 474 - 7282



Click to add notes

**Aurora &  
Geomagnetic  
Storms**

# Geophysics in Alaska

**Coastline  
46,000 mi**

**54 Active  
Volcanoes  
3 Eruptions/yr**

*Arctic warming  
3-4 times the rest  
of the planet*

**Arctic Weather**

**50,000 Earthquakes/yr  
>M7 Every 2 Years**

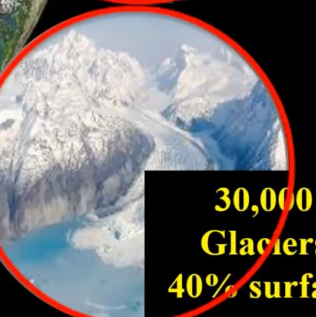
**~ 1M sq mi  
Sea Ice**

**90% Permafrost**

**M 7.0  
Nov 30, 2018**

**ICEX 2018**

**30,000  
Glaciers  
40% surface  
water**

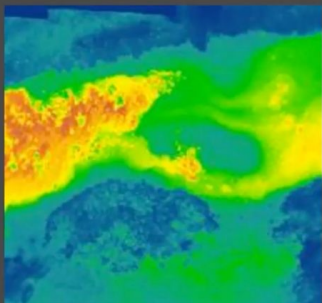


# GEOPHYSICAL INSTITUTE

## RESEARCH GROUPS



Atmospheric Science



Remote Sensing



Seismology



Snow, Ice & Permafrost



Space Physics &  
Aeronomy



Tectonics &  
Sedimentation



Volcanology

Physics in Alaska

Arctic warming 3-4 times the rest of the planet

Arctic Weather

Arctic Warming 3 Years

30,000 Chukchi and other vessels enter

GEOPHYSICAL INSTITUTE

SEARCH GROUPS

Geology

Hydrology

Permafrost

Seismicity

Alaska

GEOPHYSICAL INSTITUTE

Key Operational Programs

Climate Cooperative

High Frequency Active Auroral Research Program

GDNP UARC

Wilson Alaska Technical Center

Alaska Space Grant

Advanced Instrumentation

Research Technology Lab

Other GI Facilities

Alaska Space Grant

Advanced Instrumentation

Research Technology Lab

UNAF UNIVERSITY OF ALASKA FAIRBANKS

GEOPHYSICAL INSTITUTE

MAJOR FACILITIES/OPERATIONAL PROGRAMS

Alaska Volcano Observatory

Alaska Earthquake Center

Alaska Satellite Facility

Geodata Cooperative

Poker Flat Research Range

Alaska Center for Unmanned Aircraft System Integration

Geographic Information Network for Alaska

Wilson Alaska Technical Center (Infrasound)

GDNP UARC

High frequency Active Auroral Research Program

Click to add notes



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Bob McCoy BM

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Record Present in Tear

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Font Paragraph Drawing Editing Voice Sensitivity Add-ins

# Other GI Facilities

### Alaska Climate Research Center

### Research Computing Services

### Alaska Space Grant

### Advanced Instrument Lab

### Lidar Research Lab

+ Airborne Lidars

### Geochronology Lab

### Hyperspectral Lab

### Petrology Lab

### Machine Shop

### College International Geophysical Observatory

Click to add notes

Accessibility: Investigate

Notes Display Settings

## Contact Info:



<https://www.alaska.edu/epscor/>



COLLEGE OF FISHERIES  
AND OCEAN SCIENCES

University of Alaska Fairbanks



**Brenda Konar**

Professor Marine Biology  
Director Alaska EPSCoR

College of Fisheries & Ocean  
Sciences  
University of Alaska Fairbanks  
Email [bhkonar@alaska.edu](mailto:bhkonar@alaska.edu)

## About Me

UAF College of Fisheries and Ocean Sciences  
faculty since 1999

Large research programs around Alaska: Beaufort,  
Chukchi, and Bering Seas, Aleutians, and Gulf of  
Alaska

AK EPSCoR Director since 2021 (Co-PI since  
2019)

Associate Dean of Research, CFOS, UAF; 8 yrs.

Academic Program Head for the Graduate  
Program in Marine Science & Limnology; 3 yrs.

University of Alaska Statewide Diving Program  
(current Dive Safety Officer, past Chair of the Dive  
Control Board)

## Areas of Interest/Expertise

Nearshore ecology

- Environmental processes impacting fish,  
invertebrates, and seaweeds
- Ecosystem responses to top-down drivers

Mariculture

Long-term coastal monitoring programs

Scientific diving

## About Alaska EPSCoR



2019-present; in NCE year

Examining climate-driven changes to wildfires in  
Alaska boreal forests and glacial influences on  
coastal ecosystems in the Gulf of Alaska.

Proposal pending

# IoC

Interface of Change: Building collaborations to  
assess harvested and farmed marine species  
prioritized by Gulf of Alaska communities  
facing environmental shifts

## Collaboration Interests/Opportunities

- Connecting with others on issues related to
- Mariculture,
- Harvesting wild marine species
- Land-ocean connections in nearshore waters

## Contact Info:



### Arctic Research Consortium of the U.S. (ARCUS)

[www.arcus.org](http://www.arcus.org)

Phone: 907-474-1600

Mailing Address: PO Box 81310  
Fairbanks, AK 99708-1310



**Brit Myers**

Strategic Engagement Director

Email: [brit@arcus.org](mailto:brit@arcus.org)

Twitter: [quixoticroads](https://twitter.com/quixoticroads)

LinkedIn: [britmyers](https://www.linkedin.com/in/britmyers)

Cell: 206.697.2822

Location: Vashon, WA

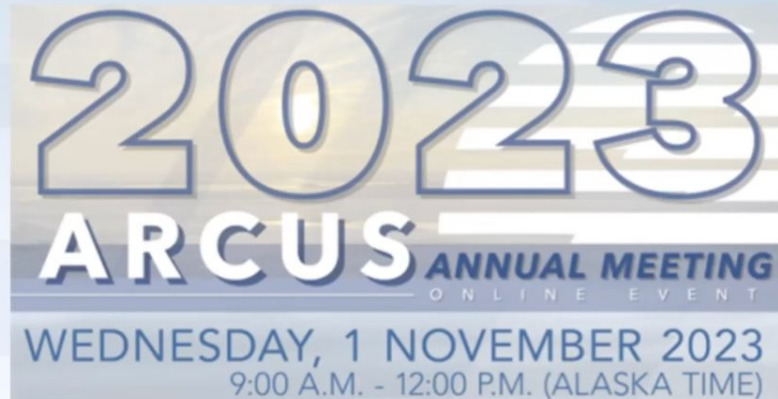
## About Me:

Brit works with ARCUS to build Arctic research community connections between networks of interdisciplinary researchers, educators, Indigenous partners, policymakers, funders, and the broader public. She is a former Community Engagement Fellow with the American Association for the Advancement of Science/Center for Scientific Collaboration and Community Engagement and an Arctic Research Fellow with the University of Washington. Prior to joining ARCUS in 2015, Brit supported large ecosystem research, planning, policymaking, and conservation activities with organizations such as the Brainerd and Campion Foundations and Washington Sea Grant. She holds a Master's degree in Marine & Environmental Affairs from the University of Washington and another in Arts Administration and Non-Profit Management from the University of Oregon.

### Areas of Interest/Expertise

- Science of Team Science
- Interdisciplinary Collaborations
- Arctic Research Network Analysis
- Enabling Broader Impacts
- Marine Ecology
- Marine Affairs & Environmental Policy
- Human Dimensions of Natural Resource Management

## About ARCUS:



### Collaboration Interests/Opportunities

- Building more meaningful connections between ARCUS Member Institutions as well as with others involved with U.S. Arctic Research.
- Working to strengthen Arctic research connections to communities in Western Alaska (see [NSF DCL 20-112](#))
- Building support for U.S. Arctic Research Social Scientists (see [Arctic Horizons Final Report](#))
- Establishing a community of practice for Arctic researchers that work with Northern community members or citizen scientists in their research.







# Requirements for a Heat Project to Succeed



## Contact Info:

# Sea Grant

MAINE MAINE



<https://seagrants.umaine.edu/>

Phone: 207-581-1435

Mailing Address: 5741 Libby Hall  
Suite 110

University of Maine  
Orono, ME 04469-5741



## Gayle Zydlewski

Director

& Professor of Marine Sciences

Email:

[gayle.zydlewski@umaine.edu](mailto:gayle.zydlewski@umaine.edu)

Phone: 207-581-1422

Location: Orono, ME

## About Me:

Gayle is the Director of the Maine Sea Grant program and a Professor of Marine Sciences. She has been at the University of Maine since 2007 and Director of Sea Grant since 2018. Maine Sea Grant's mission is to *support the responsible use and conservation of coastal resources in order to sustain thriving coastal communities and ecosystems*. She helped establish the UMaine **Marine Aligned Research, Innovation and Nationally-recognized Education** initiative which is a transdisciplinary effort to that brings together university, industry, government, and community collaborators who through integrated and innovative transdisciplinary marine research, education, and outreach are dedicated to the enhancement of social and economic wellbeing in Maine and beyond.



### Research

To expand knowledge and answer critical questions



### Extension

To connect science to those who can use it



### Education

To train a coastal and marine workforce

## Areas of Interest/Expertise

- Extension of Marine Science
- Environmental Literacy
- Transdisciplinary Collaborations
- Diadromous species
- Renewable Energy, fisheries, & wildlife
- Marine Debris, alternatives for plastic

## About Maine Sea Grant:



### Healthy

Coastal Ecosystems

### Resilient

Communities and Economies



### Sustainable

Fisheries and Aquaculture



### Environmental

Literacy and Workforce Development



## Collaboration Interests/Opportunities

- Building deeper connections with researchers and extension professionals already working together on coastal resilience, seaweed and shellfish aquaculture.
- Sharing 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 community-led relocation / managed retreat / site expansion
- Comparative mariculture development landscape opportunities and challenges
- State-tribal fisheries management dynamics in research and extension



## Contact Info:



Helen Wiggins  
Executive Director,  
ARCUS  
helen@arcus.org



Arctic Research  
Consortium of the  
U.S. (ARCUS)  
www.arcus.org

## About Me:

- Background/education — biogeography/forest ecology (University of Maryland then University of Georgia)
- Started with ARCUS in 2002 in Fairbanks office – lucky to found a great organization where I could stay in science but also broad and interdisciplinary
- Live and work outside of Wasilla, AK
- My “happy place” at work:
  - Building, strengthening, and sustaining connections between people & projects
  - Creating spaces where people can bring their authentic selves and have a seat at the table, no matter what their educational background, discipline, organizational affiliation, career level, etc.
- Exploring specific Arctic themes around which the research community can focus, organize, and make progress





## Contact Info:



## Institute of Agriculture, Natural Resources and Extension (IANRE)

[www.uaf.edu/ianre/](http://www.uaf.edu/ianre/)

Phone: 907-474-5807

Mailing Address: PO Box 756180  
Fairbanks, AK 99708-6180



### Jodie Anderson

Director

Email: [jmanderson@alaska.edu](mailto:jmanderson@alaska.edu)

Cell: 907.355.3031

Location: Palmer, AK

## About Me:

Jodie is the director of IANRE that is the programmatic unit of the Alaska land-grant university mission: through research, education, and outreach we work to improve the lives of Alaskans. She is also the director of the Agricultural and Forestry Experiment Station in Alaska. Her diverse training began with a BS in Science Education Biology from the University of North Carolina at Chapel Hill and a MAT in Science Education from Brown University. She taught chemistry and many life sciences at the high school and college levels for 11 years in North Carolina. She moved north in 2003 and worked for UAF where she began and managed the Alaska Community Horticulture Program as well as research that focused on potato virus studies, citizen science projects, soil building, organic nitrogen soil supplements, compost development, and community gardening. Her work throughout Alaska afforded many opportunities to travel around rural Alaska and develop collaborations and relationships with many teachers, growers, and communities.

## Areas of Interest/Expertise

- Soil Biochemistry
- Soil Health in Cold Soils
- Composting
- Food Systems
- Circumpolar Agriculture
- Community Development
- Experiential Education

## About IANRE:



## Collaboration Interests/Opportunities

- Building meaningful connections between IANRE AFES researchers and others involved with U.S. Arctic Agricultural and Forestry Research.
- Collaborating with other like-sized land-grant universities to solve similar issues regarding funding, human capital, and other common concerns.
- Working to strengthen Arctic agricultural and forestry research connections to communities throughout Alaska.
- Creating opportunities for research success while remaining relevant to the needs of Alaskans.
- Establishing trust between the university and communities after years of funding and staffing decreases where help is needed most.

## Contact Info:

Phone: 207 581 3019  
 Mailing Address:  
 Climate Change Institute  
 University of Maine  
 Orono, Maine 04469



**Paul Andrew Mayewski**

Director/Professor

Email:

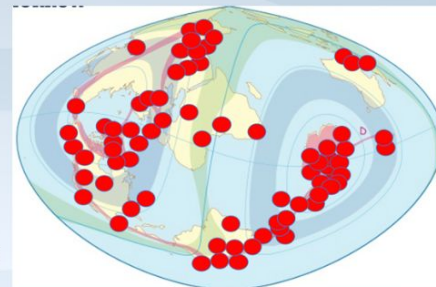
[paul.mayewski@maine.edu](mailto:paul.mayewski@maine.edu)

## About Me:

Paul Andrew Mayewski is a glaciologist, climate scientist and polar explorer. He is the Director of the interdisciplinary Climate Change Institute and Distinguished Professor in the School of Earth Sciences, School of Marine Sciences, School of Policy and International Affairs, Business School and Law School, all at the University of Maine. He has thus far led more than 60 expeditions to the remotest polar and high elevation reaches of the planet and has received several prestigious national and international awards. His contributions to science include: the discovery of abrupt climate change driven by atmospheric circulation; human impacts on the chemistry of the atmosphere; impacts of climate change on humans and the ecosystem; new methods for ultra-high resolution ice core sampling; pioneering ice core-climate calibration techniques; the history of human source toxic metal emissions; and the application of past and present climate research to modern day challenges such as health, climate prediction and climate education. His achievements in exploration include leading teams into uncharted regions of Antarctica, many thousands of kilometers of polar surface traversing, and numerous first ascents of mountains all to gain scientific knowledge. Paul has started and led several large multi-disciplinary, multi-national, prominent research projects. Notably he is the first person to develop and lead highly successful, interdisciplinary climate research programs at the three poles (NSF supported Greenland Ice Sheet Project Two (GISP2) and International Trans Antarctic Scientific Expedition (ITASE) and the National Geographic and Rolex Mt. Everest Expedition). He has more than 500 scientific publications, hundreds of popular and scientific lectures worldwide, two popular books “The Ice Chronicles” and “Journey Into Climate” and has appeared hundreds of times in media such as: the New York and LA Times, NOVA, NPR, BBC, multiple CBS 60 Minutes shows and the Emmy Award Winning “Years of Living Dangerously”.

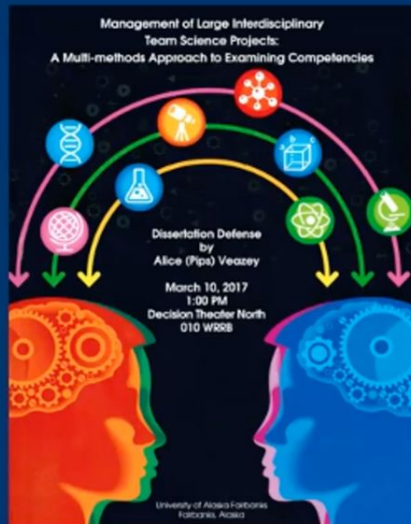
## Areas of Interest/Expertise

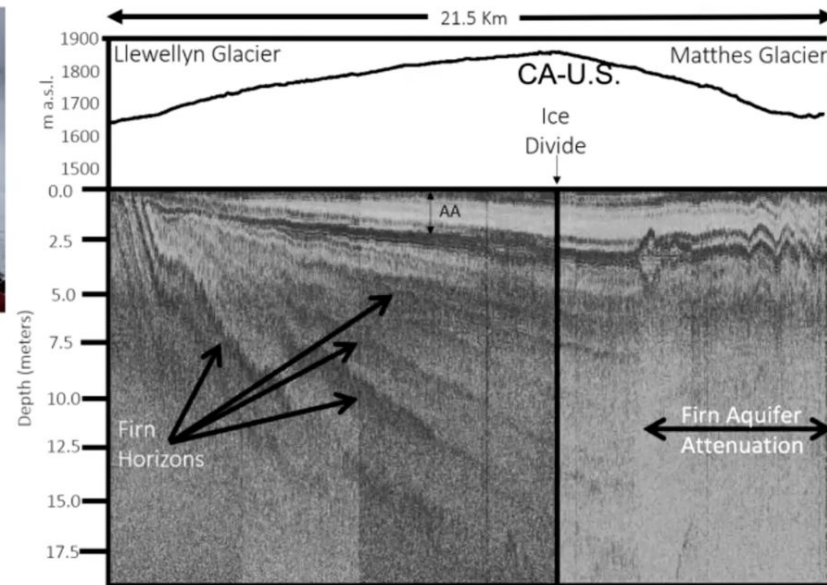
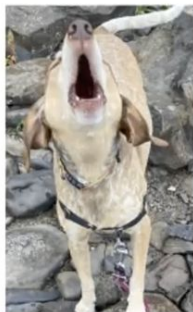
- Glaciology
- Past, present future climate using ice cores, modern climate reanalysis and plausible scenario planning
- Abrupt climate change
- Climate impacts (e.g., water quality, health, geopolitics, water resources)



## Collaboration Interests/Opportunities

- Building national and international research based partnerships
- Software and hardware advances in ice core research, data synthesis, and recent era physical and chemical climate change
- Monitoring the human and ecosystem impacts of glacier melt on water quality and availability
- Interdisciplinary complex problem-solving methods and applications related to major environmental challenges
- Reducing uncertainty in climate prediction
- Climate change outreach for local to international venues





### Juneau Icefield Research Program

ABOUT STUDENTS FACULTY + RESEARCHERS STAFF ALUMNI JIRP 2019 SUPPORT US CONTACT BLOG



Unrivaled expedition-based Earth science education, training, and research in the Coast Mountains of Alaska and British Columbia.

Geophysics

### Interests:

- Glacier & Ice Sheet Change
- Permafrost Distribution & Change
- Paleoclimate and Glacier Reconstruction
- Erosion & Deposition Processes
- Icy Planets (e.g., Mars & Europa)
- Education & Outreach



Andrew Opilia



Andrew Opilia



# My why

Sheridans, est. 2009

Cordova, since 2010

Wesley, age 10

Celia, age 6

Eyak, *time immemorial*