



SPEAKERS' AND MODERATORS' BIOGRAPHIES
NAVAL ARCTIC RESEARCH LABORATORY 75th ANNIVERSARY
ENHANCING ARCTIC SCIENCE AND ENGINEERING WORKSHOP
August 1-5, 2022, Utqiagvik, Alaska





Bridget Anderson, Vice President of External Affairs, Arctic Slope Regional Corporation

Bridget Anderson is vice president of external affairs for Arctic Slope Regional Corporation (ASRC) and is responsible for all facets of government affairs and corporate communications. Anderson has worked in the government affairs sector for more than 15 years, spending eight years in Washington, D.C. working both on and off Capitol Hill before moving home to Alaska in 2009.

She continued her work in government affairs for ASRC, departing in 2015 to work as a consultant on a variety of projects for clients in Alaska. She also served as external affairs manager for the ANCSA Regional Association. Anderson holds a Bachelor of Arts in political science from the University of Alaska Anchorage. She lives in Anchorage with her husband and two children.

Christian Andresen, Assistant Professor, Geography Department, University of Wisconsin Madison

Dr. Christian Andresen studies hydrology, ecology and biogeochemistry of Arctic aquatic systems. Particularly, his research focuses on system science applied to land-atmosphere carbon dynamics under the effects of climate change to better characterize higher-level environmental processes over spatial and temporal scales.



Christopher Baird, Field Science Manager, Arctic and Boreal Domains of the National Ecological Observatory Network (NEON), operated by Battelle

Christopher Baird first worked in the Canadian Arctic and the Great Lakes studying seabird demographics and the biomagnification of legacy contaminants in seabird populations. Baird joined NEON in 2016 during the construction phase of the Observatory, and has since led the transition to full operations for NEONs eight research sites across the State of Alaska.

Christopher came to NEON after having worked for a variety of state, federal, and private research institutions in both the United States and Canada. He received his BS (2007) from UBC in British Columbia, Canada, and his MS (2013) in Biology from Queen's University, in Kingston, Ontario. His work has taken him to remote locations in the Arctic, Patagonia, the Pacific Northwest, and the Great Lakes.



Betsy Baker, International Lawyer and Global Fellow at the Wilson Center Polar Institute and Baker Arctic Consulting

Betsy Baker is an international lawyer based in Alaska and a Global Fellow at the Wilson Center Polar Institute. Her work on ocean law and Arctic policy and science builds on 25+ years of experience as author, law professor, and most recently director of the Alaska-based North Pacific Research Board (retired). Her work has informed policymakers on issues ranging from multinational cooperation in the Arctic

Ocean to circumpolar offshore oil and gas regulation through projects for the Inuit Circumpolar Council Resource Development Summit, the PAME working group of the Arctic Council, the U.S. Department of State Office of Ocean and Polar Affairs, and others. Working in Germany for 12 years led to her ongoing work with marine scientists, policymakers, and resource managers active in the Arctic. A graduate of Michigan and Kiel law faculties, she has taught international law and organization at Minnesota, Harvard, and Vermont law schools and served on science advisory bodies in the EU, Finland, Japan, and the United States. Her community service includes board membership for Facing Foster Care in Alaska (FFCA).

Carl Benson, Retired

Professor emeritus of Geology and Geophysics at UAF's Geophysical Institute, Dr. Carl Benson has had a lifelong fascination with ice and snow, starting from his childhood in Minnesota. By the time he arrived at UAF in 1960, Benson had already done geological research for the U.S. Geological Survey on Alaska's North Slope in 1950 and spent four years doing glaciological research on the Greenland ice sheet. He later extended his work on glaciers to Alaska's Brooks Range, the Wrangell Mountains, and Antarctica. His research on the McCall Glacier and an extensive study of seasonal snow on Alaska's Arctic Slope were both based at NARL. The Wrangell Mountains added a new and long-lasting research subject that included building a "volcanically heated hut" at the rim of the North crater of Mt. Wrangell. His research on the Antarctic ice sheet was done in comparison with the Greenland studies. Other research topics have included glacier-volcano interactions, ice fog, and the freezing of turbulent streams.



Benson retired from teaching in 1987, but remained active as an emeritus professor. He was an Institute Scholar at the California Institute of Technology, and a Visiting Scholar at the Scott Polar Research Institute in Cambridge, England. He is a Fellow of the American Geophysical Union (AGU), and of the American Association for the Advancement of Science (AAAS). Benson Ridge in Antarctica is named for him.

Pearl K. Brower, President/CEO of Ukpeaġvik Iñupiat Corporation

Dr. Pearl Brower serves as the President/CEO of Ukpeaġvik Iñupiat Corporation. Prior to this, she served as the Senior Advisor for Alaska Native Success, Institutional Diversity and Student Engagement at the University of Alaska. In October 2020, Brower left the Presidency of Iļisaġvik College, where she had been in administration for 13 years, the last eight as President.



Brower grew up in both Barrow, Alaska, and northern California practicing a subsistence lifestyle in both areas. She is active around Alaska and beyond. She serves as the Alaska Native representative on the Alaska Postsecondary Access and Completion Network, on the Alaska Airlines Community Advisory Board, on the Foraker Group’s Operations Board as Chair, and a board member on the National Museum of the American Indian (NMAI) Board of Directors. She was named one of Alaska’s Top 40 Under 40 in 2015 and as the First Alaskans Institute’s Young Alaska Native Leader in 2019, the same year that she received the 2019 YWCA Women of Achievement award. She and her husband, Jesse Darling, have two daughters, Isla and Sindri.



Jerry Brown, Retired

Dr. Jerry Brown’s Arctic career started in 1957 at Barrow while an undergraduate at Rutgers University. Following completion of his dissertation related to the soils of the northern Brooks Range, he began a 25-year career at the U.S. Army’s Cold Regions Research and Engineering Laboratory (CRREL) investigating soils and permafrost with initial emphasis on Barrow and northern Alaska. These activities included the directorship of the U.S. Tundra Biome Program for the National Science Foundation. During the 1970s and into the early 1980s, Brown served on and

chaired several permafrost committees of the U.S. National Research Council.

In the formative decade of the International Permafrost Association (IPA), Brown assisted with conferences in Norway (1998) and China (1993), stimulating activities for data retrieval and preservation, and formally initiated publication of the Frozen Ground Bulletin. In 1991, he completed his formal federal government employment at the National Science Foundation as the Head, Arctic Programs. In 1993 he began a five-year tenure as IPA Secretariat and then continued as member of the Executive Committee until 2003, when he became President of IPA. During the 1990s he led the multinational effort to prepare and publish the circumarctic permafrost and ground-ice map and facilitated several international observational permafrost programs (CALM, TSP, and ACD).



Athena E. Copenhagen, Director, Study of Environmental Arctic Change

Athena Copenhagen serves as Assistant Director for the Study of Environmental Arctic Change. She is also a writer, editor, science communicator, and climate interpreter. Copenhagen has worked in the environmental and nonprofit sectors for nearly a decade and specializes in managing research operations and strategic communications. She holds degrees in English and environmental studies from Santa Clara University, and in 2009, she earned her Master of Art degree in culture and modernity from the University of East Anglia,

England. Copenhagen's award-winning debut novel was published in February 2022.

Ben Cook, Senior Manager, Geoscience Research and Applications

As Senior Manager of the Geoscience Research and Applications Group at Sandia National Laboratories, Ben Cook provides leadership and management direction for Sandia's earth science research and development (R&D) programs. Cook oversees six departments with over 100 researchers engaged in lab and field research, spanning subsurface geophysics to stratospheric atmospheric science. He leads Sandia's energy and climate programs funded by DOE's Office of Fossil Energy and Carbon Management and Office of Science's Biological and Environmental Research. Cook also leads Sandia's Arctic research initiative, including North Slope operations in Alaska. He serves as the senior management champion of Sandia's first Grand Challenge LDRD investment focused on climate attribution.



Before his appointment to this role, Cook was Senior Manager for Research and Academic Programs in Sandia's Chief Research Office, where he led the reengineering of Sandia's Laboratory Directed Research and Development Program and the establishment of the Labs' Academic Alliance Program. Cook was also Sandia's first Research Integrity Officer. In previous management positions, he helped establish Sandia's Cyber Engineering Research Laboratory and advance the Labs' cyber strategy. He moved into management in 2009, leading the creation of Sandia's TITANS student internship program and starting a NNSA-funded Minority Serving Institution pipeline program in cyber security.



Matthew Druckenmiller, Research Scientist with the National Snow and Ice Data Center (NSIDC), University of Colorado Boulder

Since 2004, Dr. Matthew Druckenmiller has worked within the coastal regions of Arctic Alaska, investigating the connections between changing sea ice conditions and marine mammal habitat and local Indigenous community use of sea ice for hunting and travel. Currently, he serves as Director of the Navigating the New Arctic Community Office (NNA-CO) and co-leads the Exchange for Local Observations and Knowledge of the Arctic (ELOKA).

Druckenmiller also serves as the U.S. Delegate and Vice President of the International Arctic Science Committee (IASC) and as an editor for the NOAA Arctic Report Card. Druckenmiller earned his PhD in geophysics from the University of Alaska Fairbanks (2011).



Hajo Eicken, Professor of Geophysics and Director of the International Arctic Research Center, University of Alaska Fairbanks

Dr. Hajo Eicken's research focuses on sea ice geophysics, Arctic coastal processes, and their importance for human activities and ecosystems. In Alaska, Eicken has helped lead efforts to advance collaborative research with Indigenous knowledge holders and to enhance use of scientific data by Arctic communities and government agencies. This work draws on a number of different approaches, including

participatory scenarios and community-based monitoring.

Other collaborative efforts include his involvement in helping launch the Arctic Sea Ice Outlook and Sea Ice Prediction Network, his co-leadership of the Arctic Observing Summit, service as Chair of a National Academies Standing Committee on Offshore Science and Assessment, and member of the Science Advisory Board for the 3rd Arctic Science Ministerial.



John Farrell, Executive Director of the U.S. Arctic Research Commission

Dr. John Farrell helped organize and conduct the first successful international scientific ocean drilling expedition to the high Arctic in 2004. He participated in Arctic Ocean mapping and scientific research expeditions aboard the icebreaker U.S. Coast Guard Cutter Healy in 2012 to the high Arctic and in 2021 through the Northwest Passage. In 2019 he participated in a scientific expedition to previously uncharted fjords in northern Greenland on the Swedish icebreaker Oden. In 2018 he served as an Embassy Science

Fellow in the U.S. Embassy in Berlin, Germany, to support U.S. participation in the 2nd Arctic Science Ministerial. Farrell has previously served as the Associate Dean of Research and Administration at the University of Rhode Island Graduate School of Oceanography, and as the director of the international Ocean Drilling Program that involved over 20 nations and had an annual budget of approximately \$65 million. The program was dedicated to advancing scientific understanding of the Earth.

Farrell obtained a PhD and ScM in geological sciences from Brown University and a BA in geology from Franklin and Marshall College. He was an NSF-funded postdoctoral fellow at Brown University and an NSERC-funded senior research associate at the University of British Columbia, Vancouver, Canada. In 2019 he was awarded the Presidential Rank Award of Distinguished Executive, the highest award for a career civil servant.

Craig L. Fleener, Lt. Col., Alaska Air National Guard, Deputy Advisor, Arctic Security Affairs, Ted Stevens Center for Arctic Security Studies

Lt. Col. Craig Fleener has a 35-year military career, which he began as an enlisted U.S. Marine from 1986-1990. He transitioned to the Alaska Air National Guard in 1991 where he still serves today. Fleener has participated in active deployed service in the U.S. Central Command region. He currently holds the rank of lieutenant colonel serving in the Alaska Air National Guard as an intelligence officer with the 176 Airlift Wing at Joint Base Elmendorf-Richardson, Alaska.



In his civilian career he served his community and tribe as a wildland fire fighter, wildlife biologist, climate researcher, and director of a regional tribal non-profit, providing healthcare, education, and natural resources management services. His duties include serving in elected office. Fleener was active as a Permanent Participant of the Arctic Council as the International Co-chair of the Gwich'in Council International, one of the six internationally recognized Arctic indigenous groups. Mr. Fleener has served three different governors of Alaska.

Raynita “Taquik” Hepa, Director, Department of Wildlife Management, North Slope Borough

Raynita “Taquik” Hepa has been the Director of the North Slope Borough Department of Wildlife Management since 2005 and served in other positions in the department since 1991. Having been raised in a subsistence environment, she has great respect for the traditional and cultural way of life. Participating in subsistence hunting activities with her family has taught her valuable lessons in subsistence survival skills. As an employee of the Department of Wildlife Management, she has enhanced her ability to address the public and to manage programs. This has been a real asset for understanding and communicating with local people and outside agencies regarding subsistence related issues.



Hepa has served in various organizations, including the Gates of the Arctic Subsistence Resource Commission, the Indigenous Peoples Council on Marine Mammals, the Alaska Migratory Bird Co-management Council, the Circumpolar Inuit Wildlife Management Committee, and the Alaska Nannut Co-Management Council.



Andrew Glen, Sandia National Laboratories

Dr. Andrew Glen currently serves as the manager of the Atmospheric Science department at Sandia National Laboratories. He also serves as the Sandia manager for the DOE Atmospheric Radiation Measurement (ARM) guest facilities at the North Slope of Alaska (NSA) and Tethered Balloon System (TBS). Prior to this role, Glen was a Principal Member of Technical Staff at Sandia National Laboratories, where he worked in the field of aerosol science. He holds a PhD and MSc in Atmospheric Science from Texas A&M University and University of Wyoming, respectively, and a BSc in Meteorology from the University of Reading, UK.

Glen’s technical background and expertise was focused on experimental and measurement techniques for aerosol and clouds with both laboratory and field components including the use of stratospheric balloons, aircraft and ground based measurements. Glen has conducted experimental field work in the Arctic, Antarctic and various locations in North America and Canada. His research spans applications across atmospheric, biological and radiological aerosol areas. Prior to joining the team at Sandia, Glen gained seven years’ experience as an environmental consultant specializing in aerosol and gaseous source and emission factor characterization, ambient monitoring and air dispersion modeling.

Roberta Tuurraq Glenn, Graduate student

Roberta Tuurraq Glenn is a graduate student in Geography at the University of Alaska Fairbanks. An Iñupiaq who was born and raised in Utqiagvik, she completed her master's thesis this summer on Documenting Coastal Change and Community-Based Observations in Alaska Communities. Glenn is interested in working with Indigenous communities to develop relevant and community-focused data products.



Richard Glenn, Retired

Richard Glenn served on the leadership team of the Arctic Slope Regional Corporation, where he was Lands Manager, Senior Vice-President of Lands, and Executive Vice-President of Government and External Affairs. Prior to working for ASRC, he worked for multiple North Slope Borough Mayors as a department director (Barrow Gas Fields and Energy Management Departments). Glenn has worked as a geologist for his Alaska Native regional and village corporation subsidiaries and has a variety of experience in sea ice research, oil, gas and mineral exploration and development projects, and permafrost, to name a few.

For many years Glenn directed his volunteer efforts at bringing visiting Western researchers and local Iñupiat subject matter experts together to share and pursue a common knowledge of the Arctic environment. While at UAF, Richard had various professional internships and scientific side jobs, and was appointed the first president of the UAF chapter of the American Indian Science and Engineering Society. In Barrow, Glenn served as crew member and co-captain of his extended family's subsistence whaling crew, performed in one of Utqiagvik's Iñupiaq dance/drum groups, and even had a side job playing keyboards in a local band.

Glenn served as chairman of the Ilisagvik College Board of Trustees, on the North Slope Borough Planning Commission, and as founding board president of the Barrow Arctic Science Commission. He was twice appointed by the U.S. President to the United States Arctic Research Commission. Glenn now lives in the hills behind Ester, Alaska.



Nagruk Harcharek, VP of Private Equity & Arctic Development, Ukpeaġvik Iñupiat Corporation

Nagruk Harcharek, an Alaskan Native, was born and raised in Utqiagvik, Alaska. He attended Honolulu Community College and Embry Riddle Aeronautical University where he attained his Associates in Science and Bachelors of Science and Commercial Pilot Certificates. He worked as a commercial pilot for 3 years in Western Alaska before joining UIC Science, LLC, as a project Manager in 2013. He is now the Vice President of Private Equity and Arctic Development for Ukpeaġvik Iñupiat Corporation in Anchorage, Alaska.

Matt Heavner, Arctic Energy Office, Los Alamos National Laboratory

Dr. Matt Heavner first joined the Los Alamos National Laboratory (LANL) in 2000. Most recently, Matt was a program manager focused on data science applied to critical national security and scientific challenges. Heavner was the Assistant Director of Global Security at the White House Office of Science and Technology Policy (OSTP) during 2014-2016, where he led OSTP efforts on topics including the Arctic, space, and a range of nuclear issues. In partnership with the National Security Council, Heavner co-chaired multiple White House restricted Interagency Policy Coordination committees. At LANL, Heavner served as the project leader for nuclear test ban verification sensors on the Global Positioning Satellite constellation. From 2003-2010, Heavner was a Professor of Physics at the University of Alaska Southeast with diverse geophysical interests. He earned his PhD in Physics from the University of Alaska Fairbanks and his bachelor degrees in Physics, Mathematics, and Philosophy from Southwestern University.



Bob Hollister, Professor, Biology Department, Grand Valley State University

Dr. Bob Hollister has decades of experience doing collaborative research in the Barrow region. He is currently co-chair of the International Tundra Experiment (ITEX) network, and he leads a collaborative multidisciplinary research project funded by the National Science Foundation as part of the Arctic Observatory Network (AON), based at sites near Utqiagvik, Atqasuk and Toolik Lake. Bob began Arctic research in 1995 working under Pat Webber at Michigan State University. He was instrumental in

establishing the ITEX sites at Utqiagvik and Atqasuk and took leadership of the sites during the International Polar Year (2007-2008).

Bob has a history of facilitating research in the Barrow region. He helped with the NARL 50th anniversary celebrations and was involved with the planning efforts that ultimately resulted in the Barrow Arctic Research Center (BARC). He helped BASC become established and was recently a Barrow-Atqasuk Science Advisor to UIC.

Mark D. Ivey, Senior Engineer, Geosciences Research and Applications Center, Sandia National Labs

Dr. Mark Ivey served as manager for the U.S. Department of Energy's North Slope of Alaska Atmospheric Radiation Measurement Facilities (arctic atmospheric observatories) for 12 years. He has worked in atmospheric science research groups at Sandia since the mid-1980s. He currently serves on program management teams developing strategies for Sandia's modeling and measurement capabilities in the Arctic, and he



also serves on the leadership team for Sandia's Climate Change Security Center. Before joining Sandia, Mark worked for technology companies in New Mexico and California. His career has been focused on environmental observations. He is a Senior Member of IEEE and served on the Board of Directors for the Arctic Research Consortium of the United States. He holds a PhD and MS in Electrical Engineering and a BS in Environmental Engineering.



Anne M. Jensen, Affiliate Research Assistant Professor, Department of Anthropology, University of Alaska Fairbanks

Dr. Anne Jensen has done archaeological and ethnographic research throughout Alaska for 39 years. From 1997 to 2022 she was employed by UIC Science LLC (formerly UIC Real Estate Science Division) as Cultural Resource Manager and Senior Scientist. She ran an active cultural resource management consulting practice, carrying out multiple research projects. She was Principal Investigator for projects at eroding coastal sites on the North Slope, including Walakpa, Nuvuk and Ukkuqsi. Currently she is a research affiliate at the University of Alaska Museum of the North and the anthropology departments of the University of Alaska Fairbanks and Bryn Mawr College.

Jensen's research focuses on Iñupiaq cultural heritage, climate change effects on Arctic cultural heritage and other infrastructure, and on human adaptation in changing Arctic and subarctic environments. All of Jensen's work involves close consultation with descendant communities, with Alaska Native organizations, and with volunteers and employees.

Cody Johnson, Director of Operations, UIC Science

Dr. Cody Johnson began his Arctic science career when he stepped off a plane in Prudhoe Bay in June 2021 as an undergraduate research assistant from the University of Kansas. A far cry from the Kansas farm where he grew up, Johnson instantly fell in love with Alaska and followed his interest in Arctic ecosystems while earning an MS from the University of North Carolina Greensboro, a PhD from Utah State University, and worked as a postdoctoral fellow at the University of Alaska Fairbanks. Transitioning from an NSF-funded researcher to managing NSF science logistics in 2010, Johnson has collaborated with research projects throughout Alaska, Canada, and Greenland. As Director of Operations at UIC Science, he works with an amazing team to facilitate the success of science in the Arctic.



Benjamin Jones, Research Assistant Professor, Institute of Northern Engineering, University of Alaska Fairbanks

Dr. Benjamin Jones is a research assistant professor at the Institute of Northern Engineering, at UAF where he combines the use of GIS and remote sensing techniques with field observations and laboratory analyses to study Arctic and Sub-Arctic Systems across a multitude of spatial and temporal scales. He is interested in present as well as past permafrost region landscape dynamics and the various landscape-level impacts to hydrological, ecological, and physical systems. Jones earned his MA in Geography in 2006 from the University of Cincinnati and his PhD from UAF in 2013 in Interdisciplinary Studies - Geosciences.

Jones has worked in Utqiagvik and across the land of the North Slope's Iñupiat people for more than 20 years. He is fascinated by the landscape, the wildlife, and the culture of this beautiful region. Since 2007, he has renovated the Old NARL cabin to develop the Teshekpuk Lake Observatory for ongoing landscape and ecosystem studies. Other current projects include investigations of thermokarst lake drainage and ice-rich permafrost systems on the North Slope. Jones coordinates an international network of researchers studying permafrost coastal systems. He owes his career to the people of Utqiagvik.



Jeremy Kasper, Interim Director, Alaska Center for Energy and Power, University of Alaska Fairbanks

Dr. Jeremy Kasper has been conducting applied research in the Arctic since starting his PhD in physical oceanography with Dr. Tom Weingartner at UAF in 2000. In addition to serving as the Director of the Alaska Center for Energy and Power, Kasper is currently a Research Associate Professor with ACEP and a Marine Scientist with the Pacific Northwest National Laboratory. His PhD work focused on ocean circulation beneath the landfast sea ice of the Central

Beaufort Sea. Since then, he has worked on a variety of research efforts ranging from the NSF-funded Beaufort Lagoons Long Term Ecological Research effort to studies of the potential for wave, tidal and river energy to meet the energy needs of Alaska communities.

Randy “Church” Kee, Major General, USAF, Senior Advisor, Arctic Security Affairs, Ted Stevens Center for Arctic Security Studies

Maj. Gen. Randy “Church” Kee, United States Air Force (retired) assists with establishing the Ted Stevens Center for Arctic Security Studies, the Department of Defense’s sixth and newest regional center and is being established in Anchorage Alaska.

Kee is responsible for supporting the establishment and early operations of the new DoD institution, with the mission to engage in regional and global security issues through research, communication, and education. The goal of the center is to build strong, sustainable, international networks of security leaders to advance U.S. national security priorities in the Arctic region. Kee will also work with partner nations to ensure a stable, rules-based order in the Arctic that will benefit the United States and all Arctic nations.

In 2020, the President of the U.S. appointed Kee as a Commissioner to the U.S. Arctic Research Commission, and from 4 January 2016 to 22 August 2021 he served as the Executive Director of the Arctic Domain Awareness Center, a U.S. Department of Homeland Security Center of Excellence in Maritime Research, hosted by the University of Alaska.





Brendan P. Kelly, Chief Scientist, Study of Environmental Arctic Change, University of Alaska Fairbanks

Dr. Brendan Kelly, Professor of Marine Biology at the International Arctic Research Center, University of Alaska Fairbanks, directs the multidisciplinary, multicultural Study of Environmental Arctic Change. He also serves as a Senior Fellow with the Center for the Blue Economy at the Middlebury Institute of International Studies at Monterey. A marine ecologist with a focus on sea ice environments, he has participated in and led collaborative research in the North Pacific Ocean, Arctic Ocean, Sea of Okhotsk, Baltic Sea, and Antarctica. His studies of ice-associated marine mammals benefitted from close collaborations with Indigenous hunters, scientific colleagues, students, and some very smart Labrador retrievers. He has led national and international efforts to understand and respond to climate change in numerous leadership roles including as Deputy Director of the Arctic Division of the National Science Foundation, Assistant Director for Polar Science in the White House Office of Science and Technology Policy, and Executive Director of the Interagency Arctic Research Policy Committee. Kelly received degrees in Biology from the University of California Santa Cruz (BA), the University of Alaska Fairbanks (MS), and Purdue University (PhD). He enjoys sailing with his son and watching for fires from a mountain lookout with his wife.

Julie E. Kitka, President, Alaska Federation of Natives

Julie Kitka serves as the President of the Alaska Federation of Natives (AFN), Alaska's largest statewide Native organization. AFN represents nearly 20 percent of the population and half of the federally recognized tribes in the U.S. Alaska Natives have deep relationships with the state and federal government. In many ways AFN is a network which has an outsized impact on policy and decisions because of its membership and organizational strength. As the largest private landowner, AFN collectively weighs critical decisions which involve use and access to a landmass one-fifth the size of the continental United States. AFN is a force for stability and harmony in Alaska during periods of rapid change. AFN works to resolve complex and seemingly intractable problems trying to balance competing demands.



As President of AFN, Kitka has successfully worked to enhance and promote the cultural, economic and political voice of the Alaska Native community. Moving beyond self-defeating strategies, dependency, or mere survival, she seeks to inspire and empower Alaska Native people to seek true self-determination and thrive. With a laser focus on ensuring those most affected have a seat at the table and are allowed to share their insights and knowledge, she works to ensure governments use the full weight of their authority and resources to respond.

Michael Kuhlman, Chief Scientist and Business Line Director, Applied Science and Technology, Battelle

Dr. Michael Kuhlman serves as the Chief Scientist of Battelle's Applied Science and Technology Group. In that role, he is responsible for ensuring the technical quality of Battelle's work and products and for advocating for the technical development of the scientific staff. He is also the business line manager for the Research Infrastructure business line, in which the NSF's National Ecological Observatory Network and Arctic Research Support and Logistics Services programs reside. Kuhlman serves on the Board of Directors and the S&T Committee of the National Renewable Energy Laboratory.



Kuhlman served for three years as the first Director of the National Biodefense Analysis and Countermeasures Center's (NBACC) Biological Threat Characterization Center, operated for the Department of Homeland Security. In that role, he was responsible for developing the research agenda and building the staff to execute the research program focused on addressing the significant knowledge gaps regarding the biothreat posed to the U.S. civilian population by potential adversaries.



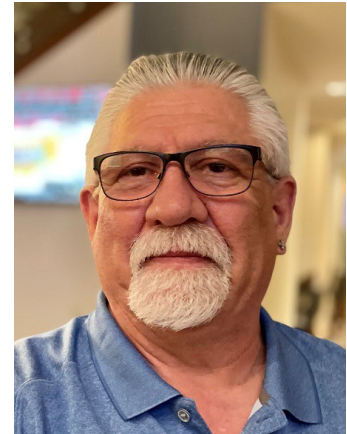
Nettie La Belle-Hamer, Vice Chancellor for Research, University of Alaska Fairbanks

Dr. Nettie La Belle-Hamer was named UAF's vice chancellor for research in January 2022, following her interim service in the position since May 2020. The vice chancellor's role is to build capacity and depth in UAF's research and development efforts. In becoming vice chancellor, La Belle-Hamer stepped down as director of UAF's Alaska Satellite Facility, a position she held since 2002. Under her leadership, the satellite facility grew into a highly successful program providing remote-sensing data access. She brings the same passion for science and the faculty, staff, and students engaged in research to her new role as UAF vice chancellor.

La Belle-Hamer served as the UAF Geophysical Institute's deputy director from 2015-2020 and the UAF associate vice chancellor for research from 2011-2015. She managed the ASF Science Center from 2000-2002 and was employed by a private company working with ASF in the 1990s. A lifelong Alaskan, La Belle-Hamer received her Bachelor's in Physics from the University of California at Berkeley in 1985 and her Master's degree in Space Physics at UAF in 1988.

Morrie Lemen Jr., Executive Director, Inupiat Community of the Arctic Slope

Morrie Lemen, Jr., a Tlingit Indian, is the Executive Director of the Iñupiat Community of the Arctic Slope, serving in this role since 2020. A long-life resident of Utqiagvik, he has filled many roles across the North Slope. His expertise is in village rural development services including municipal, water/sewer and power generation. From 2013-2017, Lemen served as Director of North Slope Borough Public Works.



He is the former President of the Friends of National Rifle Association for the Arctic, a title Lemen held for seven years. His personal life includes actively hunting and fishing and serving on his family's whaling crew. He is a father of six and a grandfather of 24, who has instilled the Iñupiaq way of life in his career and personal life.



Edna Ahgeak MacLean, Retired

Edna Ahgeak MacLean has been a teacher, scholar, community leader and policymaker whose work in education and the documentation of her Iñupiaq language continues to create opportunities and cultural connection for Alaska's Iñupiaq people.

In 1976, with a bachelor's degree and teaching credential, MacLean was hired to develop and teach Iñupiaq language courses at UAF. A fluent speaker, she had to read and write the language for the first time and often found herself learning along with her students. She discovered a passion for the work and a love of research as she began documenting the Iñupiaq language and how best to teach it.

In 1987, MacLean became the state's Special Assistant for Rural Education. Here, she began to see the effect of Alaska's education practices on the success of Alaska Native students. Wanting a deeper understanding of the problem, she returned to school to study the impact of the student and teacher relationship, particularly when they are of different cultures. Eventually, she earned an MA from the University of Washington and a PhD from Stanford University. In 1995, MacLean was recruited to be the first president of Iñisaġvik College, Alaska's only fully accredited tribal college. There, she fulfilled the institution's mission to train and educate residents for the jobs and opportunities in the region.

Andy Mahoney, Sea Ice Geophysicist, University of Alaska Fairbanks

Dr. Andy Mahoney first visited Utqiagvik and NARL in 2000 as a graduate student. Since then, he has traveled over, sailed through, and camped on sea ice in both Polar Regions, but he continues to visit Utqiagvik regularly. A sea ice geophysicist, Mahoney now leads UAF's sea ice research group, which maintains a webcam and coastal radar system that keep watch on sea ice near Utqiagvik 24 hours a day.



John Malueg, PE, Vice President, Stantec

John Malueg is Stantec's Manager of Resilience Programs. Malueg is an expert in critical infrastructure vulnerability and risk analyses, including resilient design and implementation. He assists Stantec's clients in leveraging federal grant programs to advance their strategic projects. Malueg's knowledge and expertise stems from a 35-year career holding leadership and management positions in government and private consulting. He is a graduate of the University of Wisconsin-Madison.

James H. Mather, Technical Director for the U.S. Department of Energy Atmospheric Radiation Measurement (ARM) user facility

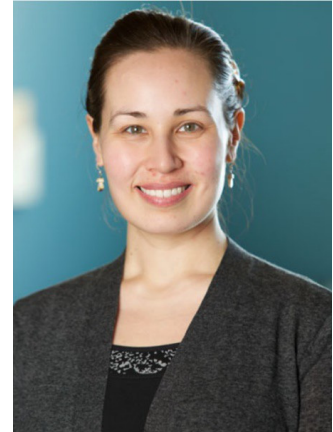
Since 2007, Dr. James Mather has led the world's premiere ground-based observations facility advancing atmospheric and climate research, which spans nine national laboratories and serves over 1,000 users. As Technical Director, he is responsible for ARM's day-to-day technical activities, including planning, budgeting, contracting, and interactions with the science community. Mather sets the scientific direction of ARM through his engagement with the scientific user community and by chairing the Infrastructure Management Board. He recently led the development of the facility's next decadal vision, which lays out how ARM plans to address increasingly complex science challenges related to its mission.



Mather received a PhD in Meteorology from Pennsylvania State University in 1994, and began his postdoctoral work with ARM the same year, serving as the associate site scientist of the Tropical Western Pacific (TWP) site science team. Mather continued that role at Pacific Northwest National Laboratory in 2001. As part of his responsibilities on the TWP site science team, Mather conducted research with ARM data with an emphasis on the analysis of cloud remote sensing and atmospheric radiation measurements.

Martha Monnin, President and CEO, Arctic Slope Native Association (ASNA)

Martha Monnin began her employment with ASNA in 2016 as Human Resources Director and served as the Vice President of Administration prior to being appointed President/CEO by ASNA's Board of Directors. In this role, Monnin is responsible for the effective management of all affairs of the Association; she plans, directs, and coordinates the programs and activities of the Association for the effective utilization of human and financial resources to accomplish the goals established by the Board of Directors. Prior to joining ASNA, she worked at Iñisaġvik College as the Human Resources Director.



Monnin was born and raised in Utqiagvik and is a tribal member of the Native Village of Barrow. She holds a BS in Business Administration.



Daphne Mueller, UAF Graduate Student

Daphne Mueller grew up in Utqiagvik, Alaska, where she discovered an interest in science during a middle school lecture on human anatomy and knew she wanted to study biology in college. She participated in science fairs and Science Olympiad in high school. During her senior year of high school, Mueller joined Dr. Linda Nicholas-Figueroa's lab at Iñisaġvik College on the Arctic microbe project. Working in her hometown on her first research project eased her anxieties about the scientific world. She worked alongside classmates and was able to relate the project to topics relevant to Utqiagvik, such as climate change. Mueller gained many lab skills that she brought with her to the University of Alaska Fairbanks. She also picked up communication skills through mentoring, writing scientific papers, and problem-solving. Nicholas-Figueroa introduced her to the Biomedical Learning and Student Training (BLaST) program at UAF and with her aid, Mueller applied and was accepted as a BLaST scholar in 2018. She will graduate in December 2022. Mueller continued to work with Nicholas-Figueroa for several years, doing lab work while home for summers and Christmas break.

Through the UAF BLaST program, Mueller has participated in a cell culture, dendrology, and fish genetics lab. Last summer, she was awarded an internship with Alaska IDeA Network of Biomedical Research Excellence (INBRE). Through this internship, she was able to start research for her capstone senior thesis. This past spring, she was awarded the Dan Glass Memorial Award for her presentation at the Midnight Sun Science Symposium.



Lisa Murkowski, U.S. Senator for Alaska

Since joining the Senate in 2002, Senator Murkowski has worked tirelessly for Alaskans and earned a reputation in the Senate for her ability to work collaboratively to reach common sense solutions. This includes playing a key role in drafting, negotiating and securing passage of the bipartisan *Infrastructure Investment and Jobs Act*, which will invest in modernizing U.S. roads, bridges, ferry systems, ports, broadband, and other similar projects.

Murkowski is considered the leading Congressional expert on Arctic issues and is dedicated to helping America lead as an Arctic nation. Murkowski supports those who call the Arctic home by addressing challenges such as climate change, food security and infrastructure needs.

Linda Nicholas-Figueroa, Associate Professor of Biology and Chemistry, Iñisagvik College

Dr. Nicholas-Figueroa is committed to place-based, culturally sensitive research and scholarship. She has been the principal investigator and/or co-investigator on grants totaling nearly \$1 million. Her projects focus on collaborative research opportunities with other institutions, faculty, and Iñisagvik undergraduate students. Funding from UAF's Biomedical Learning and Student Training (BLaST) program helped launch Nicholas-Figueroa's undergraduate research program at Iñisagvik.



Nicholas-Figueroa received her BS in Biochemistry, her MA in Chemistry, and her PhD in Science Education from the University of Alaska Fairbanks. Since 2010, she has instructed or co-instructed science courses, including chemistry, anatomy and physiology, microbiology, Indigenous science, and a special topics course centered on climate change. She has directed 17 summer science camps since 2011 for rural and Alaska Native middle and high school students. Several of the camps offer college credit. She is a 2020 Fellow with the American Association for the Advancement in Sciences for 20 years of excellence in teaching and mentoring Native Alaskan students.



Dave Norton, Retired

Dr. Dave Norton became a lifelong Arctophile in May 1968, upon starting the first of five seasons of research on the physiology of shorebirds breeding on the tundra near NARL. From 1974 through 1988, various tasks of conducting, managing and interpreting ecological research in the Arctic brought Norton back to Utqiagvik many times. From 1989 to 1999, Dave and his family lived in the community, while he worked for Ilisaġvik College and the Barrow Arctic Science Consortium (BASC), before he retired and moved to Fairbanks.

Lynn Palensky, Executive Director, North Pacific Research Board

Lynn Palensky joined the North Pacific Research Board as Executive Director in 2020. She moved to Anchorage from Portland, Oregon, where she had worked 19 years for the Northwest Power and Conservation Council, coordinating science reviews for funding \$250 million in projects and programs under the Columbia River Basin Fish and Wildlife Program, and leading the development of sub-basin plans. Prior to that she worked for the Washington Department of Fish and Wildlife as both a shellfish and riparian habitat biologist.



Palensky serves on the AOOS Board and on the Water Watch of Oregon Board of Directors. She holds a BS in Fisheries Science (University of Washington) and a Master of Public Administration (Troy University). She grew up in Washington and Oregon salmon fishing and harvesting shellfish. Lynn is a SCUBA Dive Master and fly fisher. She lives in South Anchorage with her husband, dog, and cat, and is enjoying adventuring in Alaska.



Representative Josiah Aullaqsruaq Patkotak, Alaska State Legislature

Josiah Aullaqsruaq Patkotak was born and raised in the North Slope community of Barrow, Alaska. His service to the community began in high school, when he served as an Alaska Federation of Natives youth delegate for the Arctic Slope Region. Since then, Patkotak has served as a councilmember for the Iñupiat Community of the Arctic Slope (the regional Native tribal government), a board member of the Ukpeaġvik Iñupiat Corporation, a board

member of the Barrow Utilities & Electric Cooperative, and a North Slope Borough Assembly member. He currently represents the Arctic Slope and Northwest Arctic in the Alaska State Legislature House of Representatives. Patkotak and his wife Flora are raising their three children to be deeply rooted in Iñupiaq culture and the traditions of hunting, gathering, and whaling, while also encouraging a mindset that will allow them to succeed in a modern, resource-driven economy.

Kimberly Pikok, UAF Graduate Student

Kimberly Kivvaq Pikok is the daughter of Lloyd Pikok Sr. and the granddaughter of Rhoda and Tommy Pikok Sr. She grew up in Utqiagvik and graduated from Barrow High School (BHS) in 2016. During her junior and senior years at BHS, she took dual-credit Iñupiaq courses to get a jump-start on her undergraduate degree. Pikok graduated with a BS in Wildlife Biology from the University of Alaska Fairbanks in May 2021. Since 2018, Pikok has been a college intern at the North Slope Borough Department of Wildlife Management. Her time at NSB Wildlife inspired her to further her education and helped her discover what she is passionate about. Now she is a second-year graduate student at UAF earning an MS in Interdisciplinary Studies.



David Prusak, Principal Engineer, Stantec Consulting

David Prusak has led and managed projects in Alaska since 2007, including infrastructure, geotechnical and permafrost investigations, and permitting. His work has included remote village experience in preparing sanitation facilities master plan updates, conceptual designs, preliminary engineering reports, environmental reviews, and design analysis reports for upgrading water, sewer, and solid waste facilities in Kiana, Tununak, Platinum, and Eek. He has also served as contract project manager, from the design phase through completion, for utility projects in Alaska.

Prusak has been active in the Cold Regions engineering area, having served as the Chair of the American Society of Civil Engineers, Technical Council on Cold Regions Engineering (TCCRE). He has focused his career on combining his technical and regulatory expertise with projects challenged by cold regions engineering impacts.

Martin Robards, Regional Director, Arctic Beringia Program, Wildlife Conservation Society

Dr. Martin Robards is Regional Director for the Wildlife Conservation Society's Arctic Beringia Program – spanning the Russian Far East, northern Alaska, and the Inuvialuit Settlement Region in Canada. He is an accomplished ecologist and policy analyst who has worked extensively with Indigenous communities and their representatives in the Arctic. His goal is to encourage the development and implementation of conservation policies that are more responsive to new scientific understandings, transboundary and cross-cultural needs, and the rapid changes in ecological, social, and economic conditions of the Arctic.



While Robard's experience reflects three decades of living and working in Alaska, he also worked at the Marine Mammal Commission for two years in Washington D.C. He has published numerous peer-reviewed scientific articles, op-eds in outlets such as the New York Times, and is affiliate faculty with the University of Alaska.



Cheryl Rosa, Deputy Director, Anchorage-based Alaska Director, United States Arctic Research Commission

Dr. Cheryl Rosa is trained as a Wildlife Veterinarian and Wildlife Biologist and has worked with subsistence communities on the North Slope and in the Russian Far East on a wide range of studies involving wildlife health and zoonotic disease, marine mammal stranding response, subsistence food safety, and oil spill/offshore discharge research. She is a member of the International Whaling

Commission's Scientific Committee, as well as numerous other federal and non-federal boards and steering committees.

Presently, Rosa is involved in leading USARC's Alaska Rural Water and Sanitation Working Group and the Arctic Renewable Energy Working Group. She received a PhD in Biology from the University of Alaska Fairbanks, a Doctorate in Veterinary Medicine from Tufts University, and a BS in Animal Science and BS in Zoology from the University of Massachusetts Amherst.

Jackie Qataliña Schaeffer, Community Development Manager, Alaska Native Tribal Health Consortium

An Iñupiaq from Kotzebue, Alaska, Jackie Qataliña Schaeffer is the Community Development Manager at the Alaska Native Tribal Health Consortium under the division of Community Environment and Health. For decades Qataliña has worked across Alaska holistically infusing indigenous knowledge into a variety of sectors, including comprehensive planning, energy, housing, water security, sanitation and climate change adaptation for rural communities. Her passion is to serve the Indigenous people of Alaska and provide an Indigenous perspective to her work, including the importance and recognition of traditional philosophies, knowledge and world views. Her current work includes climate change assessments, community engagement, relocation and in-home solutions for water and sanitation.



Qataliña has co-authored six regional Energy Plans for the State of Alaska, the Oscarville Tribal Adaptation Plan (2019), and currently works with Newtok and Kivalina on community relocation due to climate change. She serves as a Board Director on the Arctic Encounter Symposium, Koahnic Broadcast Corporation (KNBA Radio), and Rural Community Assistant Corporation. She is also a Co-PI on the Human Wellbeing team for the Study of Environmental Arctic Change, an NSF funded project through UAF.



Todd Sformo, Wildlife Biologist (Physiologist), North Slope Borough Department of Wildlife Management

For the past 13 years, Dr. Todd Sformo has been working on topics ranging from fish, freshwater mold, PFAS, temperature-related concerns related on bowhead whales, and studies on cold fishes in a warming world, in support of the North Slope Borough Department of Wildlife Management’s goal of maintaining subsistence activities for the communities of the North Slope. As a Research Scientist II, Institute of Arctic Biology, University of Alaska Fairbanks, Sformo works on antifreeze proteins and ice-nucleating activity in plants and insects.

From 1994-1998, Sformo served as an Assistant Professor of Adult Education at Iḷisaḡvik College. He was awarded a Fulbright Scholarship (Fulbright Arctic Initiative, 2018-2019), and holds a PhD and MS in Biology, an MFA in Creative Writing, an MA in Art History, and a BA in Philosophy.

Michael Sfraga, Founding Director, Polar Institute, Woodrow Wilson International Center, Chair, U.S. Arctic Research Commission

Dr. Michael Sfraga served as the director of the Global Risk and Resilience Program at the Woodrow Wilson International Center for Scholars in Washington, DC. He currently serves as chair and distinguished scholar in the Polar Institute, where his scholarship and public speaking focus on Arctic policy. An Alaskan and a geographer by training, his work focuses on the changing geography of the Arctic and Antarctic landscapes, Arctic policy, and the impacts and implications of a changing climate on political, social, economic, environmental, and security regimes in the Arctic.



Sfraga served as distinguished co-lead scholar for the U.S. Department of State's inaugural Fulbright Arctic Initiative from 2015 to 2017, a complementary program to the U.S. Chairmanship of the Arctic Council; he held the same position from 2017 to 2019. He served as chair of the 2020 Committee of Visitors Review of the Section for Arctic Science (ARC), Office of Polar Programs, National Science Foundation, and he currently serves on the Scientific Advisory Council of the Finnish Institute for International Affairs. Sfraga previously served in several academic, administrative, and executive positions at the University of Alaska, including vice chancellor, associate vice president, faculty member, department chair, and associate dean.



Joyce Stotts, Ilisaġvik College Student

Joyce Stotts was born in Anchorage, but raised in Utqiagvik, Alaska. She graduated high school from Kiita Learning Community and is a current student at Ilisaġvik College in Utqiagvik. Stotts acquired a certificate of Allied Health from Ilisaġvik in spring 2022 and expects to complete her Associate of Science degree in Allied Health in spring 2023. Joyce also has an interest in environmental science. She has worked with Professor Kerri Pratt of the University of Michigan collecting snow from the tundra and analyzing its chloride ion content.

She is currently working with the Ukpeaġvik Iñupiat Corporation on the National Observatory Ecological NEON project, assisting with plant identification.

Stotts has pursued these pathways not only because they are of interest to her, but because she loves and wants to support the community and the people of Utqiagvik.



Inuuteq Stotts, Stakeholders Relations and Community Coordinator, ASRC Consulting & Environmental Services, LLC

Inuuteq Stotts is the son of Jimmy and Karoline Stotts and grew up in Anchorage and Greenland. Prior to joining ASRC Consulting and Environmental Services (ACES), Stotts worked with First Alaskans Institute and Voice of the Arctic Iñupiat. Prior to returning to ACES, he worked as an Anthropologist for ACES doing archaeology research and documentation and stakeholder engagement in various parts of Alaska. Stotts holds Bachelor's and Master's degrees

in Applied Anthropology with experience in qualitative research, cross-cultural communication, and advancing cross-cultural communications through facilitating public and leadership information sessions.

Ana Stringer, Graduate Student, University of Washington, Seattle

Ana Fonongava'inga Stringer is an incoming graduate student at the University of Washington, currently living in Utqiagvik, Alaska. She recently graduated from Vanderbilt University with majors in Earth & Environmental Science and Environmental Sociology. In May 2018, she graduated from Barrow High School and Iñisaġvik College with her Associates in Liberal Arts. While a student at Iñisaġvik College, she conducted research as a part of the Arctic Microbe project and first authored an article that was published in the Native Science Report. This is her third summer interning at the North Slope Borough Department of Wildlife Management. This fall, she will be pursuing her Master's in Marine Affairs.



Matthew Sturm, Professor of Geophysics, Geophysical Institute, University of Alaska

Dr. Matthew Sturm is the leader of the Snow-Ice-Permafrost Group at UAF's Geophysical Institute. He came to the Arctic in 1973 aboard the U.S. Coast Guard Icebreaker *Northwind*, and served as navigator aboard the USCGC *Ironwood* in the Aleutians for 18 months. After completing an undergraduate degree in Geology at New Mexico Tech (1978), he returned to Alaska in 1981 to study snow metamorphism and heat transfer in snow for his PhD (1989). Since that time, he has

split his time between studying snow on the tundra and on sea ice, often in Utqiagvik, Alaska. He was employed by the U.S. Army Corps of Engineer's Cold Regions Research and Engineering

Laboratory-Alaska from 1989 to 2012, serving as Chief Scientist during his last five years at the station. He has led over 35 expeditions in the Arctic and Antarctic and is the author of four books, over 150 technical papers, holds two patents for snow measuring devices, and is a Fellow of the American Geophysical Union. His latest book, *Field Guide to Snow* (University of Alaska Press), is for people who want to know a little more about “how snow works.”



Garrett Taylor, UAF Undergraduate Student

Garrett Taylor moved to Utqiagvik, Alaska, six years ago. He graduated from Barrow High School and attended Iñisaġvik College as a dual-credit student. During high school, Taylor participated in the Science Olympiad and loved all of his science classes. In his senior year, he joined his first lab at Iñisaġvik College with Dr. Linda Nicholas-Figueroa working on an Arctic Microbe research project. Along with gaining hands-on lab experience, Taylor assisted with mentoring incoming students to the lab. He attended and presented his research results at conferences across the country, including

the American Society of Microbiologists meeting in San Francisco (2019).

Taylor is currently in his fourth year at the University of Alaska Fairbanks. He was awarded a UAF Biomedical Learning and Student Training (BLaST) scholarship in his first year and worked in a microbiology lab. He is excited to join another microbiology lab and use his research to complete his capstone project for graduation in spring 2023. Taylor plans on pursuing a master’s degree in microbiology in the future.

John Thornley, PhD, PE, Senior Geotechnical Engineer at WSP (formerly Golder Associates)

Dr. John Thornley has over 16 years of geotechnical, cold regions, and permafrost engineering experience and has worked on infrastructure projects across the Arctic. Recent projects in the Arctic include thermal modeling of the Utqiagvik shore protection revetment for the U.S. Army Corps of Engineers, the bridge foundation design for the Kivalina evacuation road, and geotechnical support for the Newtok Village relocation to Mertarvik. Thornley is the President of the U.S. Permafrost Association and the chair of the Structures and Foundations Committee under the Cold Regions Engineering Division of the American Society of Civil Engineers.





Craig Tweedie, Ecosystem Ecologist, Technologist, and Professor, University of Texas El Paso

Dr. Craig Tweedie studies terrestrial and coastal ecosystems in the Arctic, how they are changing over space and time, and then assesses what the likely consequences of these changes are to the Arctic and Earth Systems. Much of his research uses a ‘back to the future’ approach whereby he relocates and rescues historical sites and data formerly collected at these sites and then resamples them to assess how the ecosystem has changed over time. His research has spanned northern Alaska, the Canadian High Arctic, and Eastern Chukotka in the Russian Arctic. He uses traditional ecological research methods, satellite and air-borne remote sensing, and a range of other new and developing technologies. Tweedie also conducts research in Borneo, Indonesia, and in the U.S. Desert Southwest, and he directs the Environmental Science and Engineering doctoral program at the University of Texas at El Paso.

Brian Vasel, Director of Observatory Operations for the NOAA Global Monitoring Laboratory

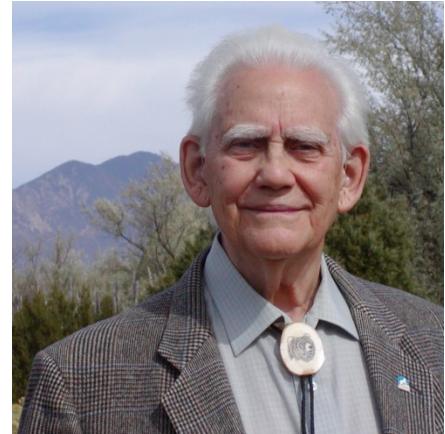
At NOAA’s Global Monitoring Laboratory, Brian Vasel represents operational requirements on the Executive Team and assists with NEPA, safety, congressional affairs. He also serves as the ESRL Radiation Safety Officer (RSO) and co-leads the Global Monitoring Annual Conference (GMAC) each May. Vasel has made 10 trips to Antarctica including “wintering-over” twice at the South Pole as the technician to maintain GML’s instrumentation for climate research. He has deployed to Summit, Greenland numerous times and visited other international field sites in Antarctica, Australia, Canada, Russia, South Africa, and Switzerland. He also created the GML tropospheric aircraft ozone program working with a private-sector instrument manufacturer to develop a specialized and robust instrument that was then deployed on over a dozen small aircraft across the United States.



Vasel has served on the Inter-Agency Arctic Research Policy Committee (IARPC) Field Operations Working Group, as a member of the 2020 Antarctic Treaty Inspection Team with the U.S. State Department, South Pole User Committee (SPUC), and the OAR NEPA Compliance Team. He was previously a member of the NOAA Green Team, Deep Water Horizon Response Team, Summit Greenland Long-Range Planning Team, and the NOAA Polar Committee. Vasel was also a participant and a coach in the OAR Leadership Effectiveness and Advancement Program (LEAP).

Patrick Webber, Retired

Patrick Webber began his interest in ecology while hiking across the mountains and moorlands of his native Britain. During his graduate studies in 1963, he was invited to be the botanist on an expedition to central Baffin Island. It was there that he first became familiar with periglacial geomorphology and its intersection with vegetation succession. His first visit to Utqiaġvik was in 1971 as a member of the U.S. Tundra Biome Program which ran until 1974. This was followed by studies with his students across the entire Arctic Slope. He has held professorships at York University, University of Colorado, and Michigan State University, where he enjoyed teaching botany and ecology. His former graduate students are among the current leaders in Arctic plant science.



Webber served as director of the Institute of Arctic and Alpine Research at the University of Colorado from 1980 to 1986. He was twice a program director at the U.S. National Science Foundation. In 2010, he was awarded the Arctic Science Medal from the International Arctic Science Committee, and in 2020, he received an honorary Doctor of Science degree from the University of Alaska.



Justina Wilhelm, President, Iḷisaġvik College

A lifelong resident of Utqiaġvik, Iḷisaġvik College President Justina Wilhelm is a first-generation college student and graduate of Barrow High School. She received her undergraduate degree from the University of Hawaii, Hilo, and her MSW from the University of New England. Wilhelm has worked the entirety of her career on the North Slope, including 14 years with the North Slope Borough Health Department working in various capacities, including with direct service delivery and compliance, followed by seven years as the Deputy Director of Behavioral Health. In 2017, Wilhelm joined Iḷisaġvik College working with institutional advancement, advancing to VP of Administration, and was appointed President in 2020. She is known for her inclusive servant leadership with a strategic focus. Wilhelm is committed to leading with integrity and promotes building collaborative relationships that support tribal higher education. Wilhelm continues to be actively engaged in the region. She is an *imiun* (a whaling captain's wife), and she and her husband have been the Captain and Wife of Makalik Crew since 2007. Wilhelm serves on the Utqiaġvik City Council, North Slope Borough School District School Advisory Council, and Arctic Women in Crisis Board. Wilhelm is married to Ross Wilhelm and, together, they have four children.

Dr. Bernard Zak, Retired

Dr. Bernard Zak earned his PhD in Physics from the University of California, Berkeley in 1971. He was manager of the Applied Atmospheric Research Division at Sandia National Laboratories from 1977 to 1985, and was a Senior Scientist at Sandia for 15 years prior to his retirement. He served as President of the Arctic Research Consortium of the U.S. (ARCUS) from 1998-2001, and was advisor to the Arctic Research Commission from 1999-2000.



Donatella Zona, Associate Professor, Biology, San Diego State University

Dr. Donatella Zona's research integrates the study of the functioning of a variety of ecosystems, including Arctic tundra. She is particularly interested in the impact of climate change on biodiversity, ecosystem functioning, and greenhouse gas emissions (CO₂ and CH₄) in the Arctic. She is also interested in science communication, outreach and education, integration, monitoring, modelling and risk perception. Zona recently convened a session at the European Geosciences Union annual meeting (2021) on effective communication of scientific and place-based knowledge of Arctic change: understanding interactions between indigenous & local knowledge, and natural & social science perspectives.

Zona is an Associate Professor in Biology at San Diego University and a Senior Research Fellow, School of Biosciences, at the University of Sheffield, UK. She received her PhD in Ecology from the University of California, Davis (2009) and completed postdoctoral research at CSTAR, UC Davis (2009), the University of Antwerp, Belgium (2010-2012), and Marie Curie Fellow (2010-2012). She has served as a reviewer for the journals Biogeosciences, Global Change Biology, Agricultural and Forest Meteorology, Polar Science, Polar Biology, Arctic Antarctic and Alpine Research, Environmental Research Letters, and others.