

# **Invited Speakers**

# Presentations will be August 12<sup>th</sup> & 13<sup>th</sup> 2024 at the Colorado Chautauqua, Boulder

Schedule details not yet confirmed; adjustments may occur before August 2024

## "By and for All Antarcticans"

The Antarctican Society extends great appreciation to our invited speakers and potential attendees!



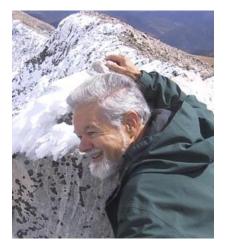
**Dr. Cassandra Brooks** is an Assistant Professor at the University of Colorado Boulder. She works at the intersection of marine science, environmental policy and public outreach to achieve conservation solutions. Cassandra has a fierce passion for Antarctica, with the last 15+ years of her career focused on protecting the region.

Learn more about Cassandra Brooks on her website: www.cassandrabrooks.com



William L. Fox is founding Director of the Center for Art + Environment at the Nevada Museum of Art in Reno, Nevada, and has variously been called an art critic, science writer, and cultural geographer. He has published fifteen books on cognition and landscape, hundreds of essays in art monographs, magazines and journals, and fifteen collections of poetry. His most recent title is Michael Heizer: The Once and future Monuments (2019). Fox is also an artist who has exhibited in numerous group and solo shows in eight countries since 1974. He has twice been a Lannan Foundation Writer in Residence.

Fox has researched and written books set in the extreme environments of the Antarctic, the Arctic, Chile, Nepal, and other locations. His work has been reviewed in The New York Times, Los Angeles Times, The Times Literary Supplement, Artforum and Nature. He is a fellow of the Royal Geographical Society and recipient of fellowships from the Guggenheim Foundation, National Endowment for the Humanities, and National Science Foundation. He has been a visiting scholar at the Getty Research Institute, Clark Art Institute, the Australian National University, National Museum of Australia, and the Oslo School of Architecture and Design.



Tom "Frosty" Frostman still wonders what he'll do when he grows up. Thanks to Paul Dalrymple, his first "real world" job was Senior Research Meteorologist at Plateau Station, Antarctica, from late 1967 through early 1969. Along the way he got a couple of Masters degrees, published in educational and scientific journals, taught meteorology on the high school level, taught Curriculum Design at Harvard and at Boston University, ran a children's camp in Colorado, and conducted Alcohol and Drug Education workshops around the world. He happily retired with his wife Sam in 2010, and continues to enjoy his two kids, three grandkids, photography, travel, playing bridge, acting, and eating.

Frosty will share a story of experience in *Exploration in/of Isolation: memories of an Old Antarctic Explorer before Apollo 8, cell phones, or Internet.* He says, "I did science,

but I remember the human experience. What was it like to winter over with 8 men, have the last plane drop body bags, have no physical contact with the outside world for 10 months, run out of ketchup at the start of winter, deal with a structural fire in the high desert, have one's child die back in the States with no way to return, lose all power for days with winter coming on... Back in the day, it was not just doing science, it was physical and psychological survival." It is a different story than that of those deploying today!







His research has focused on stream-groundwater exchanges in glacial meltwater streams of the McMurdo Dry Valleys, Antarctica. He also conducts research in Arctic Alaska, mostly from the Toolik Field Station; and in Colorado, on the Colorado and Gunnison Rivers.

Dr. Gooseff has served on the editorial boards of Eos, Hydrology and Earth System Sciences (HESS), Water Resources Research, and WIRES Water. He is also on the Board of Directors of the Consortium of Universities for the Advancement of Hydrologic Science, Inc. (CUAHSI), and chair of the Water Quality Technical Committee of the Hydrology Section of the American Geophysical Union. More information can be found at Gooseff HydroEcology Science & Engineering Lab at UC Boulder

**Leilani Raashida Henry**, M.A. is the author of <u>The Call of Antarctica</u>: Exploring and Protecting Earth's Coldest Continent, published in 2022. In her book, she utilizes the diaries of her late father, George W. Gibbs, Jr., who was the first person of African descent to set foot on the continent of Antarctica. She also authored the "Navigating Conflict" chapter, in Springer's book on Management and Leadership Skills for Medical Faculty.

As a game changer who specializes in whole brain strategies for individual and collective transformation, Leilani sparks the hearts and minds of those who want extraordinary results aligned with their highest aspirations. She's worked with the International Thwaites Glacier Collaboration-ITGC for three years with leadership, communication and teamwork, especially for inclusion, diversity, equity and access.

She is a licensed Educational Kinesiologist and former Director of Training and Development with Jones Inter-cable. Leilani also served as an Organizational Development Specialist at Honeywell and Lockheed Martin. She is a demonstrated thought leader in the field of Organizational Development and has been widely cited in national publications. Regis University's Institute on the Common Good awarded Leilani a fellowship for her work in dialogue. Her lifetime experience in the healing and performing arts is integrated into her unique approach to leadership, education, and transformation. Leilani works with Fortune 50 companies, academic institutions, government, and non-profits.



**Dr. Shane Kanatous,** Professor of Biology at Colorado State University has long been fascinated by the physiology of animals. He can tell us what an apex predator is doing in a changing climate and what we are learning from leopard seals and other marine mammals.

Dr. Kanatous has participated in physiological, biological, and oceanographic research of wide variety. He has studied many aspects of marine mammals including diving behavior and physiology, fuel homeostasis, reproductive behavior, foraging behavior, thermoregulation, and swimming energetics. His current research combines his interests in exercise and skeletal muscle physiology with molecular techniques to focus on oxygen metabolism, especially on the control and regulation of skeletal and cardiac muscle adaptations to extreme environmental conditions such as hypoxia.

Learn more, see <a href="https://kanatouswebsite.wixsite.com/extremephysiology/dr-shane-kanatous">https://kanatouswebsite.wixsite.com/extremephysiology/dr-shane-kanatous</a> photo courtesy of CSU website.



**Dr. Diane McKnight** is a Distinguished Professor at the University of Colorado Boulder, Her research focuses on interactions between hydrologic, chemical, and biological processes in controlling the dynamics in aquatic ecosystems. This work is carried out in diverse freshwater environments, including lakes and streams in the Colorado Rocky Mountains and in the McMurdo Dry Valleys in Antarctica. She teaches civil, environmental, and architectural engineering at UC Boulder and a fellow at the Institute of Arctic and Alpine Research (INSTAAR). Dr. McKnight is a co-principal investigator in the McMurdo Dry Valley LTER and in the Niwot Ridge LTER.

Learn more at https://www.colorado.edu/instaar/diane-m-mcknight



Rob Robbins is the most experienced Antarctic diver in the world. He has logged thousands of dives and has been honored with several awards. His diving career started at the Florida Institute of Technology as a student in their Underwater Technology Program, that led to working in the Gulf of Mexico, followed by his more than four-decades commercial and scientific diving in Antarctica for the U.S. Antarctic Program (USAP). Rob helped install the sea water intake and sewer outfall at McMurdo and Palmer Stations, worked with numerous science groups, and experienced 5 different Antarctic support contactors and many changes in Antarctic diving.

Photo by R. Shoop, NSF, https://creativecommons.org/licenses/by-nc-nd/4.0/



**Dr. Ted Scambos** is a Senior Research Scientist at the University of Colorado's Earth Science and Observation Center, a part of CIRES at the University of Colorado Boulder. Prior to this position, he was Lead Scientist at the National Snow and Ice Data Center for 14 years (2004-2018), a part of the university. He received degrees in geology and geochemistry from Stony Brook University, Virginia Tech, and the University of Colorado. Dr. Scambos' research has focused on the use of remote sensing to study the great ice sheets and polar sea ice, and investigate the effects of climate change on the poles.

Dr. Scambos has been on 21 expeditions to Antarctica, working with the British, Australian, South Korean, Argentinian, and Norwegian research programs to explore most areas of the continent and its surrounding ocean. He's published extensively on polar ice loss and glacier acceleration, changes in Arctic and Antarctic sea ice, the evolution of icebergs, wind-snow interactions on the high East Antarctic Plateau, and using satellite data to find the coldest place on Earth, which he hopes to visit to install automated climate instruments. He is the Principal Investigator for the Science Coordination Office of the International Thwaites Glacier Collaboration, and a member of the Landsat Science Team.

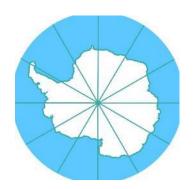
Dr. Scambos contributes to two ongoing science analysis blogs, the Arctic Sea Ice News and Analysis report (<a href="nsidc.org/arcticseaicenews/">nsidc.org/arcticseaicenews/</a>) and Greenland/Antarctica Today report on ice sheet melting (nsidc.org/greenland-today).



**Dr. Ed Stump**, a retired Professor from the School of Earth and Space Exploration at ASU (AZ), geologist, polar explorer, mountaineer, and photographer specializing in the geology of the Transantarctic Mountains spent 13 seasons over several decades in Antarctica conducting geological research. See his blog from some of that work: https://transantarcticmountains.com/blog/.

Ed co-authored "Geology of Arizona," and his book, <u>The Roof at the Bottom of the World</u>, is published by Yale University Press.

### **Antarctic Support Contractor** – Speaker May be added to schedule



The U.S. Antarctic Program deploys roughly 3,000 people to Antarctica every year, mostly during the austral summer. Participants include: scientists; station and vessel support staff; members of the military and other federal agencies; artists and writers; and media.

USAP staff who support scientific operations in Antarctica are hired under the Antarctic Support Contractor who hires full-time employees as well as seasonal contractors. Support subcontractors include <a href="Leidos">Leidos</a> (project management, transportation and logistics, operations, IT, travel, research support, airfield management, communications, and more); <a href="Amentum PAE">Amentum PAE</a> (carpenters, heavy equipment operators, mechanics, electricians, pipefitters, welders, firefighters, and more); <a href="Gana-A">Gana-A</a> 'Yoo Service Corporation (GSC-ESS) and Six Mile, LLC (waste management, food and station services, retail, lodging coordination, and more); <a href="GHG Corporation">GHG Corporation</a> (IT and infrastructure, information systems, and telecommunications); <a href="University of Texas Medical Branch">University of Texas Medical Branch</a> (physicians and medical support staff); <a href="Kenn Borek Air">Kenn Borek Air</a> (fixed-wing aircraft and support); <a href="Air Center Helicopters">Air Center Helicopters</a> (helicopter pilots, mechanics, and aviation management); and <a href="Edison Chouest Offshore">Edison Chouest Offshore</a> (ECO) (Antarctic research vessel sailing and support)

#### **Antarctic Artists and Writers PechaKucha Evening**

The Antarctic Artists and Writers Collective (AAWC) are past participants of NSF's Antarctic Artists and Writers Program who inspire and educate the public about Antarctica and its scientific exploration through artistic collaborations. Members will present their Antarctic work in an evening of fast-paced, original presentations. <a href="https://www.aawcollective.com/">https://www.aawcollective.com/</a>



PechaKucha is a storytelling format of 20 images, each shown for exactly 20 seconds each. Presenters will share their work and stories, while the visuals lead the way. PechaKucha presentations originated in Japan in 2003 to show more, talk less, and provide a consistent template for presenters to follow. This will be an enjoyable evening, full of energy, diversity, and sociability.

**Kirsten Carlson** is co-chair of the Antarctic Artists and Writers Collective (AAWC) and is spearheading the Antarctic Artists and Writers PechaKucha Evening. She has the unique experience of working in Antarctica with two varied perspectives. She first deployed to Antarctica as a graduate student in marine science to learn how sea life was affected by ice bergs scouring their seafloor habitat. The experience inspired her to pursue a career in science



+ art, and she returned to the ice as a participant of NSF's Artist and Writers program, drawing underwater to capture the beauty and wonder of the undersea world. For more about Kirsten, please see <a href="https://www.kirstencarlson.net">www.kirstencarlson.net</a>

The Biographical sketches herein may change with time and speaker input. Please contact <a href="mailto:antarctican.org.president@protonmail.com">antarctican.org.president@protonmail.com</a> with comments or corrections. 2/19/2024