

## American Women of Science Symposium Speaker Bios

### Keynotes

**Lonnie G. Bunch III** Lonnie G. Bunch III is the 14th Secretary of the Smithsonian. He assumed his position June 16, 2019. As Secretary, he oversees 19 museums, 21 libraries, the National Zoo, numerous research centers, and several education units and centers.

Previously, Bunch was the director of the Smithsonian's National Museum of African American History and Culture. When he started as director in July 2005, he had one staff member, no collections, no funding and no site for a museum. Driven by optimism, determination and a commitment to build "a place that would make America better," Bunch transformed a vision into a bold reality. The museum has welcomed more than 6 million visitors since it opened in September 2016 and compiled a collection of 40,000 objects that are housed in the first "green building" on the National Mall.

Occupying a prominent location next to the Washington Monument, the nearly 400,000-square-foot National Museum of African American History and Culture is the nation's largest and most comprehensive cultural destination devoted exclusively to exploring, documenting and showcasing the African American story and its impact on American and world history.

Before his appointment as director of the museum, Bunch served as the president of the Chicago Historical Society (2001–2005). There, he led a successful capital campaign to transform the Historical Society in celebration of its 150th anniversary, managed an institutional reorganization, initiated an unprecedented outreach initiative to diverse communities and launched a much-lauded exhibition and program on teenage life titled "Teen Chicago."

A widely published author, Bunch has written on topics ranging from the black military experience, the American presidency and all-black towns in the American West to diversity in museum management and the impact of funding and politics on American museums. His most recent book, *A Fool's Errand: Creating the National Museum of African American History and Culture in the Age of Bush, Obama, and Trump*, which chronicles the making of the museum that would become one of the most popular destinations in Washington.

Bunch has worked at the Smithsonian in the past, holding several positions at its National Museum of American History from 1989 through 2000. As the museum's associate director for curatorial affairs for six years (1994–2000), he oversaw the curatorial and collections management staff and led the team that developed

a major permanent exhibition on the American presidency. He also developed "Smithsonian's America" for the American Festival Japan 1994; this exhibition, which was presented in Japan, explored the history, culture and diversity of the United States.

Bunch served as the curator of history and program manager for the California African American Museum in Los Angeles from 1983 to 1989. While there, he organized several award-winning exhibitions, including "The Black Olympians, 1904–1950" and "Black Angelenos: The Afro-American in Los Angeles, 1850–1950." He also produced several historical documentaries for public television.

Born in Belleville, New Jersey, Bunch has held numerous teaching positions at universities across the country, including American University in Washington, D.C., the University of Massachusetts in Dartmouth and George Washington University in Washington, D.C.

In service to the historical and cultural community, Bunch has served on the advisory boards of the American Association of Museums and the American Association for State and Local History. In 2005, Bunch was named one of the 100 most influential museum professionals of the 20th century by the American Association of Museums.

Among his many awards, he was appointed by President George W. Bush to the Committee for the Preservation of the White House in 2002 and reappointed by President Barack Obama in 2010. In 2019, he was awarded the Freedom Medal, one of the Four Freedom Awards from the Roosevelt Institute, for his contribution to American culture as a historian and storyteller; the W.E.B. Du Bois Medal from the Hutchins Center at Harvard University; and the National Equal Justice Award from the NAACP's Legal Defense Fund.

Bunch received his undergraduate and graduate degrees from the American University in Washington, D.C.

**Dr. Katrina Pagenkopp Lohan** is a Senior Scientist and head of the Marine Disease Ecology Laboratory at the Smithsonian Environmental Research Center. Her research examines the ecology of parasites and infectious disease in coastal waters and how human alter these interactions. She has a Ph.D. in Marine Science from The College of William and Mary, a M.S. in Biology from American University, and a B.S. in Marine Science from Southampton College of Long Island University. After obtaining her Ph.D., she was a MarineGEO Postdoctoral Fellow with Dr. Robert Fleischer, the Center Head of the Center for Conservation Genomics at the Smithsonian's National Zoological Park, and Dr. Gregory Ruiz, the head of the Marine Invasions Research Laboratory at the Smithsonian Environmental Research Center. She then worked

as research staff in the Marine Invasions Research Laboratory before starting her current position. She is also an avid reader, long distance runner, and the mother of two tenacious toddlers.

**Dr. Eva J. Pell** has a B.S. in Biology from City College of the City University of New York, and a Ph.D. in Plant Biology from Rutgers University. She was a professor of Plant Pathology at Penn State University from 1973-1999, and was internationally known for her research studying the impact of air pollutants on vegetation. In recognition of leadership in her field, Dr. Pell was elected a Fellow of the American Association for the Advancement of Science (AAAS). Dr. Pell served as the Senior Vice President for Research and Dean of the Graduate School at Penn State from 1999-2009. The university recognized her contributions by naming a new building after her, the “Eva J. Pell Laboratory for Advance Biological Research.” Dr. Pell was Under Secretary for Science at the Smithsonian Institution from 2010-2014. In 2014 the Smithsonian Board of Regents awarded her the Joseph Henry Medal for her contributions. Dr. Pell is currently a member of the Board of Discovery Space in State College, Pennsylvania, and a member of the Society for Children’s Book Writers and Illustrators. She is a writer of children’s adventure novels, focused on the rescue of endangered species. Her first book, ResQ and the Baby Orangutan, was published in September 2019. The second book in the series, ResQ Takes on the Takhi was published in May 2020.

**Dr. Oris Sanjur** is the Acting Director of the Smithsonian Tropical Research Institute, a unit of the Smithsonian Institution headquartered in Panama City, Panama. The Institute furthers the understanding of tropical nature and its importance to human welfare, trains students to conduct research in the tropics and promotes understanding of present and past biological diversity by increasing public awareness of the beauty and importance of tropical ecosystems.

She oversees more than 400 employees, an annual budget of \$35 million, and the Institute’s research facilities throughout Panama and field sites in Africa, Asia and the Americas. In addition to its resident scientists, the Institute’s facilities are used annually by some 1,400 visiting scientists, pre- and postdoctoral fellows and interns from academic and research institutions around the world.

Dr. Sanjur graduated from the University of Panama in 1991 and completed her Ph.D. in Molecular Biology and Evolution at Rutgers University in 1998. She has published more than a 20 peer-reviewed articles and presented more than 20 papers at scientific meetings. She has sponsored and advice more than 10 postdoctoral and predoctoral students. She served as President of the Panamanian Association for the Advancement of Science, and is member of various national boards in Panama.

In 2013, Dr. Sanjur was selected as one of the ten pioneering women in science in Panama; in 2014, as one of the nine members of the National Electoral Board for the Panamanian Presidential elections; and she was honored as “Distinguished Woman of the Year 2015” by the Panamanian Association of Business Executives. In 2019, she was included in the book “Those Who Inspire – Panama”. Forbes Magazine named Dr. Sanjur as one of 2020's most powerful women in Central America and the Dominican Republic for her leadership as a Smithsonian scientist and now as STRI's Interim Director. She is currently a member of the Women Corporate Directors –Panama Chapter and International Women Forum (IWF).

### **American Women's History Initiative Co-chairs**

**Kevin Gover** is Acting Under Secretary for Museums and Culture. He is the director of the Smithsonian's National Museum of the American Indian since 2007 and is a citizen of the Pawnee Tribe of Oklahoma. In February 2020, Gover was named co-chair of the Smithsonian American Women's History Initiative.

Gover served as the Assistant Secretary for Indian Affairs in the U.S. Department of the Interior from 1997 to 2000 under President Bill Clinton where he won praise for his efforts to rebuild long-neglected Indian schools and expand tribal and Bureau of Indian Affairs police forces throughout the country. His tenure as Assistant Secretary is perhaps best-known for his apology to Native American people for the historical conduct of the Bureau of Indian Affairs.

After leaving office in 2000, Gover practiced law at Steptoe & Johnson LLP in Washington. In 2003, he joined the faculty at the Sandra Day O'Connor College of Law at Arizona State University and served on the faculty of the university's Indian Legal Program, one of the largest such programs in the country.

His legal career began in 1983 at Fried, Frank, Harris, Shriver & Kampelman in Washington, and in 1986, he founded Gover, Stetson & Williams in Albuquerque, N.M. His practice areas included federal Indian law, commercial transactions, environmental and administrative law, and legislative affairs.

In addition to his professional work, Gover has served on several boards and committees, including the Federal Bar Association and the American Bar Association, the Southwestern Association for Indian Art, Futures for Children, the Grand Canyon Trust, the Federal Home Loan Bank of Dallas and the Salt River

Development Co., an enterprise of the Salt River Pima-Maricopa Indian Community.

Gover received his bachelor's degree in public and international affairs from the Woodrow Wilson School at Princeton University and his juris doctor degree from the University of New Mexico School of Law. He was awarded an honorary doctor of laws degree from Princeton in 2001.

**Stephanie Stebich** is the Margaret and Terry Stent Director of the Smithsonian American Art Museum. She is responsible for the nation's premier collection of American art and major exhibition, research, publication, education and digital-media programs at the museum and its Renwick Gallery. She was named director of the Smithsonian American Art Museum in January 2017. Stebich serves on the Smithsonian's Capital Board and in May 2018, she was named co-chair of the Smithsonian American Women's History Initiative.

She was previously a trustee of the Association of Art Museum Directors from 2010 to 2012, where she led and implemented its diversity initiative as chair of the membership committee. She currently serves as a trustee of the American Alliance of Museums and is a member of the executive committee.

Stebich earned a bachelor's degree in art history from Columbia University and a master's degree with a concentration in modern art from the Institute of Fine Arts at New York University. She has a certificate in nonprofit management from Case Western Reserve University and is a graduate of the Getty Leadership Institute in Los Angeles. She was a fellow at the Guggenheim Museum and has studied at the University College London.

## **October 20, 2020: Histories of Women in Science**

### **Tracing Historical Pathways of Women into STEM**

**Elizabeth Harmon** (Moderator) is the American Women's History Initiative Digital Curator at the Smithsonian Institution Archives, where she researches and produces digital resources and exhibitions about women in science at the Smithsonian. Harmon completed her Ph.D. and M.A. in American studies from the University of Michigan. Her current book project explores the history of American philanthropy in the nineteenth century, particularly the corporate entities that preceded the nonprofit corporations we know today. Harmon has extensive experience in philanthropy and technology in San Francisco and Washington, D.C.

**Pamela Henson** directs the Institutional History program, Smithsonian Archives and is Historian in Residence, American University. With a Ph.D. in history and philosophy of science, research interests include history of the Smithsonian, museums, natural history, women in science, and use of visual materials and oral history. Publications in 2018 include “Looking at Culture through an Artist’s Eyes: William Henry Holmes and Exploration of Native American Archaeology” and “American Zoos: A Shifting Balance between Recreation and Conservation.” She co-curated Welcome to Your Smithsonian, Smithsonian Castle, 2015--. Recent awards include 2015 American Historical Association Feis Award for Public History and Secretary’s Gold Medal for Exceptional Service, 2014.

**Sally Gregory Kohlstedt** is professor in the History of Science, Technology, and Medicine Program at the University of Minnesota. Her research has focused broadly on the ways in which science has engaged the public through schooling and in public institutions, especially in North America. She has also studied the dynamics of scientific communities, with considerable attention to gender and science. At a recent conference at Kew Gardens, she presented the relationship between imperial botany and public education reflected in two New York City botanical gardens. She has been active in several professional associations, including the American Association for the Advancement of Science and the History of Science Society. In 2018 she was awarded the Sarton Medal by the HSS, given each year to an outstanding member of the field.

**Peggy Aldrich Kidwell** is the curator of mathematics at the Smithsonian’s National Museum of American History. In this role, she tends a collection of instruments ranging from astrolabes to slide rules and calculating machines to a whiteboard used in a math class. Kidwell’s undergraduate degree is in physics from Grinnell College, and her graduate degrees in history of science from Yale. She is a member of the History of Science Society and of the Mathematical Association of America, and a fellow of the American Physical Society. Kidwell is interested in mathematics education in part because both her grandmothers, her mother, her mother’s sister, and her late husband all taught math at various levels. A niece continues the family tradition.

### The Double Bind: The Price of Being a Minority Woman in Science

**Katrina D. Lashley** is a program coordinator at Smithsonian’s Anacostia Community Museum where she leads the Urban Waterways Project, a long-term research and educational initiative which documents the relationship between urban communities and their watersheds thorough the lenses of civic oversight, community engagement, and environmental advocacy. Ms. Lashley also leads the Women’s Environmental Leadership Initiative (WEL) which builds capacity for

future environmental leadership by convening a national and international network of established women environmental leaders with emerging and aspiring leaders for in-person discussions focused on the exchange of best practices, wisdom, and experience. Ms. Lashley received her BA in English Literature and Italian at Rutgers University and earned an MA in History (Public History track) at American University, with a focus on the British Caribbean. She has worked on projects for the National Museum of American History and Arlington House. In addition to her Public History work, Ms. Lashley taught English Literature and English Language for 12 years.

**Shirley Malcom** is senior advisor and director of SEA Change at the American Association for the Advancement of Science (AAAS). In her more than 40-year tenure at the Association she has worked to improve the quality and increase access to education and careers in STEM as well as to enhance public science literacy. Dr. Malcom is a trustee of Caltech and regent of Morgan State University. She is a former member of the National Science Board, the policymaking body of the U.S. National Science Foundation, and served on President Clinton's Committee of Advisors on Science and Technology. Malcom, a native of Birmingham, Alabama, received her PhD in ecology from the Pennsylvania State University, masters in zoology from UCLA and bachelor's with distinction in zoology from the University of Washington. In addition, she holds 17 honorary degrees. Malcom is a former high school science teacher and university faculty member. She serves on the boards of the Heinz Endowments, Public Agenda, National Math-Science Initiative and Digital Promise Global. In 2003, Malcom received the Public Welfare Medal of the U.S. National Academy of Sciences, the highest award given by the Academy.

**Ruki Neuhold-Ravikumar** is the Acting Under Secretary for Education responsible for defining the Smithsonian's educational priorities. She concentrates her efforts on Institution-wide educational initiatives, communication strategies and funding for programs that benefit learners of all ages. A significant focus of her work is to leverage the collective capacity of the Smithsonian education community to support the needs of K-12 teachers and students at the local and national level. In 2020, she formed and led a pan-institutional team to respond to the distance learning needs of teachers, students and families during the COVID crisis. Neuhold-Ravikumar previously served as the director of education at Cooper Hewitt, Smithsonian Design Museum. Neuhold-Ravikumar draws from her international experiences as a designer and educator to inform her human-centered approach to reimagining education at the Smithsonian. Originally from Chennai, India, she holds a bachelor's degree in the history of fine art and drawing and painting from the Stella Maris College (India), a Master of Fine Arts in graphic design from Iowa State University and an executive education certificate in business from Yale University. Before joining the Smithsonian in 2017, Neuhold-

Ravikumar, an award-winning designer, was an associate dean and professor of design at the University of Central Oklahoma in Edmond, Oklahoma.

**Carol O'Donnell** is a Senior Executive at the Smithsonian Institution and Director of the Smithsonian Science Education Center. In this role, Carol serves on the Subcommittee on Federal Coordination in STEM Education of the US Office of Science and Technology Policy; the Science Education Programme Global Council of the InterAcademy Partnership, the global network of science academies; the International Committee of the Foundation La main à la pâte in France; the UN Broadband Commission on School Connectivity; and the Program Committee of the International Dialogue on STEM Education. In this role, Carol co-authored the position paper on STEM Education for Sustainable Development (<http://bit.ly/3a3ObkS>). Prior to Smithsonian, Carol was a teacher and leader at the US Department of Education as both a research and policy analyst; she has expertise in K-12 education policy, professional development, cognition and student learning, education research, and curriculum development. Carol earned her Bachelor of Science in Education from the University of Pittsburgh, Master of Science in Geosciences from MSU, and doctorate in Curriculum and Instruction from George Washington University (GWU). A former K-12 teacher, Dr. O'Donnell is still in the classroom today, serving on the part-time faculty of the Physics Department at GWU.

### **October 21, 2020: Women Leaders in Biology**

#### Pathbreaking Female Conservation Biologists at the National Zoo and Smithsonian Conservation Biology Institute

**Janine Brown** was born in southern California and received a M.S. (1980) and Ph.D. (1984) from Washington State University, majoring in Animal Sciences at a time when 90% of the graduate students were male. She was hired by the NZP/SCBI in 1991, and soon established the world's most productive wildlife endocrinology laboratory.

She developed dozens of assays to measure hormones in a variety of biological samples to assess reproduction, health and welfare. She has published >350 papers on more than four dozen species identifying unique hormone patterns and demonstrating diversity in gonadal and adrenal function. This and the creation of the first wildlife endocrine diagnostic laboratory has led to dramatic improvements in management of dozens of species, most notably elephants, of which she is a world authority. In 2020, Brown received an honorary doctorate in veterinary medicine from Chiang Mai University where she has worked for 17

years after establishing the first endocrine laboratory dedicated to wildlife in Asia.

She co-founded the International Society of Wildlife Endocrinology and the Asian Captive Elephant Working Group, and is committed to training the next generation of conservation biologists. To date, 80% of her trainees have been women and who now lead research programs around the globe.

**Kate Christen**, an environmental historian, is a strategic advisor on sustainability to Nancy Bechtol, Director of Smithsonian Facilities and Smithsonian's Chief Sustainability Officer. Kate was a conservation training manager at SCBI and Smithsonian-Mason School of Conservation until 2018. There she co-developed and implemented training courses in conservation science and allied fields. Kate also chaired SCBI's researcher-led Science Council for several years. Between 2008-2017, Kate served on the Society for Conservation Biology's (SCB) Governing Board/Executive Committee. She led the development and implementation of the SCB's 2011-2015 and 2016-2020 Global Strategic Plans. Kate cofounded SCB's Social Science Working Group (SSWG) in 2004 and served for several years on SSWG's Board of Directors. Kate first came to Smithsonian in 1996 as a postdoc in History of Science with Dr. Pamela Henson, at the Smithsonian Archives. Prior to that Kate received her AB in History (Medieval!) at Harvard/Radcliffe, and her PhD in History (Latin America, Environmental) at The Johns Hopkins University. Among Kate's recent publications is "*Sustaining Wildlife Populations in Human Care: An Existential Value Proposition for Zoos,*" co-authored with NZP Director Steve Monfort, for *The Ark and Beyond: The Evolution of Zoo and Aquarium Conservation* (2018).

**Robert Fleischer** is senior scientist and head of the Center for Conservation Genomics at Smithsonian's National Zoo and Conservation Biology Institute. His primary fields of interest are conservation and evolutionary biology with foci on population genetics, systematics, and molecular and behavioral ecology, mostly on birds, amphibians and mammals, and their pathogens. Most of his recent projects use genomic, transcriptomic, and microbiome methods. Dr. Fleischer has served on many advisory committees for the USFWS, NSF, NIH, OSTP and NAS. He is a fellow of the American Association for the Advancement of Science and the American Ornithological Society and received that society's Brewster Medal in 2012. Dr. Fleischer grew up in California, watching and identifying birds, insects, plants and anything else in nature. He received a B.A. in biology from UC Santa Barbara in 1978 and a Ph.D. in evolutionary biology from University of Kansas in 1983. After a postdoc position he was university faculty for six years before starting at the Smithsonian nearly 30 years ago. He has been involved in the training of more than 75 postdoctoral fellows and 20 graduate

students in conservation biology, more than half women and nearly all who remain in academic or research positions today.

**Katherine Ralls** was born in California and educated at Stanford, Radcliffe, and Harvard (PhD 1965). She was the 4<sup>th</sup> scientist hired at NZP (1976) and is the only woman counted among the founders of the Society for Conservation Biology (SCB).

Ralls' early papers on scent marking and sexual dimorphism in mammals have been widely cited. She is still publishing on both subjects. Her pioneering research on inbreeding problems in zoo animals, along with Jon Ballou (initially her assistant), led to the methods now practiced globally for genetic and demographic management of captive wildlife populations and led to her interest in conservation. Most recently, Ralls and Ballou were among the co-authors of the first textbook on the genetic management of wild populations, extending their methods devised for captive populations to small isolated non-captive populations of wildlife species.

Ralls is also known for her field research on San Joaquin kit foxes and sea otters. She has served as the genetic advisor to the California Condor Recovery Program since 1990 and has advised many government agencies on endangered species. She has received the highest awards given by the SCB, the American Society of Mammologists, and the Zoological Society of London.

### Overcoming Gender-based Obstacles to Conservation Biology and Social Science

**Melissa Songer** (moderator) is a Conservation Biologist leading international conservation projects at the Smithsonian Conservation Biology Institute, among them the Smithsonian Myanmar Biodiversity Initiative, the reintroduction of Scimitar-Horned Oryx in Chad, the Giant Panda Conservation & Capacity Building Program in China, and the restoration of Przewalski's horse populations in China and Mongolia. All focus on leveraging Smithsonian expertise and resources in conservation science to advance the conservation of species, ecosystems, and critical biodiversity hotspots globally. Her research integrates ecological field work, remote sensing, and animal tracking with community-based conservation efforts to restore and maintain conservation-dependent species in the wild. She is a leader in expanding Smithsonian's conservation capacity-building programs through mentoring, training, and workshops in the U.S. and abroad, resulting in the training of over 1,000 conservation practitioners from over 40 countries.

**Kate Christen\*** an environmental historian, was, prior to 2018, a conservation training manager at SCBI and Smithsonian-Mason School of Conservation, where she co-developed and implemented training courses in conservation science and allied fields. Kate also chaired SCBI's researcher-led Science Council for several years. Presently Kate provides strategic advising on sustainability issues to Nancy Bechtol, Director of Smithsonian Facilities. Between 2008-2017, Kate served on the Society for Conservation Biology's (SCB) Governing Board/Executive Committee. Kate cofounded SCB's Social Science Working Group (SSWG) in 2004, and served on the SSWG Board for several years. Among Kate's recent publications is "Sustaining Wildlife Populations in Human Care: An Existential Value Proposition for Zoos," co-authored with NHP Director Steve Monfort, for *The Ark and Beyond: The Evolution of Zoo and Aquarium Conservation* (2018).

**Daniela Chavez** is a Postdoctoral Fellow and Molecular Reproductive Biologist at the Smithsonian Conservation Biology Institute. She works in the Department of Reproductive Sciences where she is working to develop a novel, cost-effective method for long-term storage of genetically valuable gametes, performs gamete cryopreservation for the Smithsonian Genome Resource Bank and studies the basic cellular biology of feline egg cells. Due to diminishing natural habitat, the development of artificial reproductive technology for felids and the preservation of rare genotypes is becoming an increasingly critical component of endangered felid conservation. Findings from her work can be applied to in vitro reproductive techniques used for endangered cat conservation. Dr. Chavez earned a bachelor's degree from the Evergreen State College and a Ph.D. in Human Genetics from the University of Utah. She has been an active member of the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science and currently, the National Zoo Diversity Committee and the Association of Minority Zoo Professionals. Through her research and these organizations, she is committed to strong mentorship for the next generation of conservation scientists and making science education accessible to everyone.

**Gwyneira Isaac** is the curator for North American Ethnology at the National Museum of Natural History. Her research focuses on Native American systems of knowledge, knowledge diversity and the dynamics of intersecting cultural systems. Central to this study is her fieldwork and ethnography of a tribal museum in the Pueblo of Zuni, New Mexico, where she examined the difficulties faced and strategies developed by Zunis operating between Zuni and Euro-American approaches to the transmission of knowledge. Her recent collaborative work at the Smithsonian as part of the Recovering Voices initiative resulted in the development of a methodological platform focused on the applied synthesis of research, as a means to understand and integrate the production of new knowledge within interdisciplinary research on endangered

languages. This includes public programming such as the session titled 'What Role Can Museums Play in the Revitalization of Endangered Languages and Knowledges?' held at the American Anthropological Association in 2014. This session brought together community scholars working with Recovering Voices to share lessons learned while working with museum collections.

**Alex Moore** is an NSF Postdoctoral Fellow jointly appointed with the Center for Biodiversity Conservation and the Education Department. Their work focuses on how predator-prey interactions impact the health and functioning of wetland ecosystems. Alex is expanding this work to incorporate a diversity, equity, and inclusion perspective, exploring the social and cultural implications of habitat restoration and conservation. Alex also teaches Conservation Biology to high school students in the Museum's After School Program and helps to coordinate the Education Department's Science Research Mentoring Program. Alex serves as a mentor in this program, working with two students to develop an ecologically and culturally-relevant research program in coastal wetlands within the Pacific Islands. Alex received their Ph.D. in Forestry and Environmental Studies from Yale University and their Master's and Bachelor's in Ecology and Evolutionary Biology from the University of Michigan.

**Dr. Suzan Murray** is a board-certified zoo veterinarian at the Smithsonian Conservation Biology Institute and serves as both the program director of the Global Health Program and as the SCBI's chief wildlife veterinary medical officer. She leads an interdisciplinary team engaged in worldwide efforts to address health issues in endangered wildlife and combat emerging infectious diseases of global significance, including zoonotic diseases. Dr. Murray also acts as the Smithsonian liaison to the Foreign Animal Disease Threat and Pandemic Preparedness subcommittees of the White House's Office of Science and Technology. Dr. Murray's work focuses on providing clinical care to free-ranging wildlife, pathogen detection, advanced diagnostics, training of international veterinarians and other health professionals, capacity building, and collaboration in infectious disease research at the human-wildlife-domestic animal interface. Dr. Murray earned a bachelor's degree from Amherst College and completed her veterinary degree from Tufts University. After a surgical internship, she completed a residency in zoological medicine at the Smithsonian's National Zoo and became a Diplomate of the American College of Zoological Medicine (DACZM).

**Nucharin Songsasen** is the Center Head of the Center for Species Survival. Since joining the Smithsonian she built the Global Canid Conservation Program and expanded this conservation and research initiative from a laboratory setting to field conservation in range countries, including Brazil and Thailand. Research conducted in her laboratory focuses on developing innovative technologies to

rescuing valuable genetics from wild canids and felids, while improving human reproductive health. In addition to reproductive research, she has collaborated with SCBI scientists and developed partnerships with national and international governmental and non-governmental organizations to address many threats to the sustainability of wild canids, including the maned wolf, dhole, red wolf and African painted dog, living in zoos or the wild. She is also a member of the IUCN's Canid Specialist Group (CSG), the coordinator of CSG's Dhole Working Group and the Maned wolf Species Survival Plan (MWSSP) as well as Reproductive Advisor to the Canid Taxon Advisory Group. Nucharin received her Doctor of Veterinary Medicine degree from the Kasetsart University in Thailand, and Master of Science and doctoral degrees from the University of Guelph in Canada.

### Women Scientists of the Future: Smithsonian Interns and Their Paths through a Changing Scientific World

**Skye Austin** is a sophomore Environmental Studies major at Shenandoah University. Over the summer, Skye interned for the Ecosystem Conservation lab at the Smithsonian Environmental Research Center, where they conducted a backyard experiment with two other interns on the effects of nitrogen runoff on various aspects of native plants. Skye is interested in how we could adapt riparian buffer concepts to urban settings to reduce or prevent urban pollutants from harming terrestrial and aquatic systems. In their free time, Skye tends to the greenhouse and native plant garden, is part of the Environmental Club, and plays on one of the university Overwatch teams.

**Corryn Knapp** is a graduate student researcher at Smithsonian Environmental Research Center West obtaining her Interdisciplinary Masters in Marine and Estuarine Science through San Francisco State University. Before coming to SERC, she studied sediment deposition at an eelgrass and oyster reef restoration site as an undergraduate at the University of Southern California, inspiring her research interest in what are known as living shoreline restorations. Through her internship with SERC West, Corryn studied how macroalgae canopies reduce thermal stress as part of a larger project investigating their effect on native oysters targeted in restoration projects. Her broader research interests are centered on the utilization of nature-based solutions to revitalize urbanized shorelines with native species.

**Matilda Newcomb** is a recent graduate of Vassar College majoring in Biology. She interned at the Smithsonian Environmental Research Center in the summers of 2018 and 2019 in the Marine Disease Ecology Lab. In 2019 Matilda completed an REU internship evaluating the daily release of *Perkinsus marinus* into the water

column over a 24-hour period. Matilda presented the findings from her research at the Coastal and Estuarine Research Foundation Conference in the fall of 2019 and the data collected during her REU is in the process of being published this fall. While at Vassar, Matilda completed a thesis project evaluating the effect of sequential stress exposure on corals and the potential for coral resilience. Matilda received a grant to complete her thesis from the Environmental Research Institution grant board. She hopes to continue to contribute to understanding the effects of climate change on our local ecosystems both in research and science communication.

**Amy Tian** is a senior at the University of Chicago studying Biology and Public Policy. This summer, Amy was an intern in the Terrestrial Ecology Lab at SERC researching the drivers of public interest in invasive plants. Her research interests include the intersection of spatial ecology and human-nature interactions, which have taken her through a variety of interesting work in Brazil, Ecuador, the Field Museum, and the National Institute for Mathematical and Biological Synthesis (NIMBioS). In 10 years, Amy sees herself working as a scientific advisor and researcher helping people find solutions to ecological and conservation issues. She is passionate about bridging the gap between science and policy through fun and engaging science communication, particularly through videos and photojournalism. On campus, she leads a student sustainability group and has helped establish an inaugural \$50,000 Green Fund and push forward a new carbon reduction goal for the University. In her free time, you can find her being an artistic chameleon by dabbling in various art mediums from painting to fashion design to videography.

#### Mujeres de STRI: From Exclusion to Influence, Women's Role in the Making of a Scientific Community at the Smithsonian Tropical Research Institute

**Adriana Bilgray** (Moderator) is currently STRI's Academic Programs Manager, where she oversees the selection process, management and administration of academic programs for interns, graduate students and postdoctoral fellows. STRI currently hosts approximately 300 interns and fellows per year from ~50 countries. She also coordinates logistics for field courses, manages the Research Associates program and administers the Neotropical Environmental Option program, a joint program with McGill University. Adriana has a BA in Business Administration from the Latin American University of Science and Technology in Costa Rica. She first came to STRI in 1994 as an administrative assistant in the Office of Education. Adriana received STRI's Unsung Hero Award in 2014.

**Hannah Byrne** (moderator) is the program assistant in the Institutional History Division at the Smithsonian Institution Archives. With a focus on oral history and community-based, collaborative work, Hannah received her M.A. in public history from American University in 2019. Her research interests include Smithsonian history, queer history, and the history of activism and community organizing in Washington, DC.

**Mercedes Arroyo** wore many hats in her 40 years at STRI. She joined the staff in 1965 as a secretary after studying at the Canal Zone College. Later, she began to do accounting for STRI and rose to become Head of the Purchasing Department. During this period, she returned to the university to take classes and received a bachelor's degree in Public Administration of Customs.

For more than 10 years she contributed to the STRI community by organizing extracurricular events on special occasions. She retired in 1999, but because of her extensive experience and knowledge, continued as a consultant to the Procurement Department until 2005. She is now licensed as an independent customs broker by Panama's National Customs Authority and continues to coordinate many of STRI's import and export needs with Panamanian customs officials.

**Georgina de Alba** completed her undergraduate work at Georgetown University, her masters at Tulane University and taught high school Spanish before moving to Panama in 1975. Soon after arriving she began her career at STRI where she worked for more than 30 years. She managed the fellowship and internship programs and was responsible for significantly increasing the number of applicants from Panama and other Latin American countries. In 1986 she received a Smithsonian Webb Fellowship and took a leave of absence to pursue a masters in public administration at the London School of Economics.

With the return of democracy to Panama in 1990, she became involved in opening the Institute to the community at large by expanding public outreach: establishing a marine public education program, and giving numerous talks and briefings about STRI's mission to public audiences. In the 2000s she focused on management and policy decisions that were strategically important for the future success of STRI as Associate Director for Administration and Finance.

**Elena Guardia Lombardo** grew up in Panama. She attended Sacred Heart College in Belmont, North Carolina, and Strayer Business School in Washington, D.C. In 1969, she came to STRI, where she played key administrative roles to advance STRI's mission. She received the Smithsonian's "Robert Brooks Award" in 1991 in recognition of Excellence in Administration and is an alumna of Harvard University's John F. Kennedy School of Government and Executive Education.

Her duties included leading negotiations with the Panamanian government before and after the transition of the Panama Canal and promoting institutional initiatives throughout Latin America. She represented STRI on the Board of Directors of Fundación NATURA, the Special Zone Management Committee for Coiba National Park and the Board of Metropolitan Natural Park until 2006 and the Board of Directors of the Wetlands Regional Office (an IUCN Ramsar Convention program). She is a founding member of the local NGO, CIAM, a privately funded advocacy group that supports activities and carries out research to inform legal actions directed toward the accountability of government decision makers in actions related to their support for national biodiversity and environmental conservation policies.

**Gloria Maggiori** grew up in Colon, Panama, and attended Balboa High School in Panama City. After graduation, she married Alberto Maggiori and started a family. In 1961, Adela Gomez, STRI administrative assistant and family friend, asked Maggiori to fill in for a staff member on vacation. She did this regularly for several years until she joined the staff in 1971 as transportation clerk. She advanced to Manager of Visitor Services and handled all STRI travel and visitor services for the many visiting scientists at STRI until her retirement in 2006. Gloria and Alberto have been married for 60 years. They have three sons and a daughter and seven grandchildren.

### **October 22, 2020: Recovering the History of Women in Science**

#### Collections, Data, and Representation in Digital Historical Work

**Sharon M. Leon** is an Associate Professor of History and Digital Humanities at Michigan State University, where she specializes in digital methods with a focus on public history. Dr. Leon directs the Omeka family web publishing platforms. Currently, she is at work on a digital project to surface and analyze the community networks and experiences of the cohort of people enslaved and sold by the Maryland Province Jesuits in the Eighteenth and Nineteenth Centuries. Prior to joining the History Department at MSU, Dr. Leon spent over thirteen years at George Mason University's History Department at the Roy Rosenzweig Center for History and New Media as Director of Public Projects, where she oversaw dozens of award-winning collaborations with library, museum, and archive partners from around the country.

#### Uncovering the scientific impact of women at the SI using machine learning

**Rebecca B. Dikow** is a Research Data Scientist and leads the Smithsonian Institution Data Science Lab, part of the Office of the Chief Information Officer. She has a B.S. in Biology from Cornell University and a Ph.D. in Evolutionary Biology from the University of Chicago. Her dissertation research focused on using whole-genome data to build evolutionary trees. After the completion of her Ph.D., she was a Biodiversity Genomics postdoctoral fellow at the Smithsonian. Since starting the Data Science Lab in 2016, she has been conducting biodiversity research using genomics, informatics, and machine learning tools. More recently, the Data Science Lab has begun working with researchers studying digitized collections and archives data outside the biodiversity sphere and strives to collaborate with scholars all across the Smithsonian. The Data Science Lab also provides support for researchers using the High-Performance Computing Cluster and training in data science and bioinformatics tools. She is also an affiliated faculty member in the George Mason University School of Systems Biology and the Smithsonian-Mason School of Conservation.

**Mirian Tsuchiya** is a Biodiversity Genomics Postdoctoral Fellow at the Smithsonian Institution Data Science Lab, part of the Office of the Chief Information Officer. She has a B.S. in Biology from the Universidade Estadual de Londrina, an M.S. in Zoology from the Pontificia Universidade Catolica do Rio Grande do Sul, and a Ph.D. in Environmental Science and Policy from George Mason University. She joined the Data Science Lab in 2018 with funding from the Smithsonian Women's Committee, where she has been leading and collaborating with researchers in several projects in genomics and bioinformatics. Mirian is passionate about mentoring and training students and researchers on data science methods, and is excited about applying the skills she learned in bioinformatics to help uncover women's contributions throughout Smithsonian history.

#### The Women Behind the Pseudonyms: Uncovering the Lives of Anonymous Nineteenth-Century Science Writers

**Catherine McNeur** is associate professor of history at Portland State University in Oregon and the award-winning author of *Taming Manhattan: Environmental Battles in the Antebellum City* (Harvard University Press, 2014). She is currently writing *Sister Scientists* (under contract, Basic Books) about the lives, work, and erasure of nineteenth-century scientists Margareta Hare Morris and Elizabeth Carrington Morris.

#### Hidden Voices: A Data Analysis of Subject Headings for Books on Women in Science

**Dr. Heidi Blackburn** is the STEM and Business Librarian and Associate Professor at the University of Nebraska at Omaha. She serves as the subject specialist for the College of Information Science & Technology, College of Business Administration, and science and engineering programs. Her research explores the status of women in STEM, particularly in higher education. She is published in Science & Technology Libraries, Journal of Library & Information Services in Distance Learning, and Issues in Science and Technology Librarianship, among others. Her publications list may be found at [http://works.bepress.com/heidi\\_blackburn/](http://works.bepress.com/heidi_blackburn/).

**Dr. Jason A. Heppler** is a Digital Engagement Librarian and an Assistant Professor of History at the University of Nebraska at Omaha. He currently leads digital humanities, digital community engagement, and research data services for UNO Libraries and provides expertise on the R language, research software design, and data visualization. He is a historian of the United States specializing in the North American West, with particular interests in urban environmental history and digital history. He's currently working on his first book exploring environmental politics in Silicon Valley and how communities confronted the challenges of urban growth, shifting political economies, and environmental justice.

[Uncovering the Work of Women in Science in Library, Archive and Museum Collections, featuring a speaker from each session on 10/26](#)

**Ashleigh D. Coren** (Moderator) is the Women's History Content and Interpretation Curator at the National Portrait Gallery and the Smithsonian's American Women's History Initiative where she focuses on collections research, student and teacher programs, and public programming. She is also an adjunct lecturer in the College of Information Studies at the University of Maryland, College Park. She has held previous positions at West Virginia University and Emerson College and in 2018 she was named an American Library Association Emerging Leader.

### **October 27, 2020: Women's Scientific Achievements**

[Reach Across the Stars: Interactive AR App Showcases Women in Science with Innovative Technology](#)

**Kimberly Kowal Arcand**, Ph.D., is the Visualization Scientist & Emerging Tech Lead for NASA's Chandra X-ray Observatory, which has its headquarters at the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts. Arcand is

an award-winning producer and director. She is a leading expert in studying the perception and comprehension of high-energy data visualization across the novice-expert spectrum. As a science data storyteller she combines her background in molecular biology and computer science with her current work in the fields of astronomy and physics. Arcand has been a pioneer in astronomy data visualization, 3D printing and virtual reality. She led a team of researchers to launch the first-ever data-driven virtual reality application of a supernova remnant using NASA observational data.

**Christina Hernandez**, a space enthusiast and self-proclaimed nerd, is an aerospace engineer at NASA's Jet Propulsion Laboratory in California where she works as an instrument engineer on NASA's newest rover mission – Mars2020. The Mars2020 rover is a robotic scientist that is launching to the Red Planet next year. Christina's job is to make sure that the instruments we send to the Martian surface are designed, built, tested and operated correctly so we can retrieve all the science.

**Sasha Samochina** (sam-ocean-uh) is an Emmy award-winning creative technologist. She joined the team at NASA Jet Propulsion Laboratory after working in New York in the fields of video and web development and in Chicago, where she was a Media Producer at The Field Museum of Natural History. After dreaming up content for JPL's Communications department, she began to explore the world of 360 videos and XR. Through Sasha's visualization skills, she pioneered the very first 360° video release on social media for NASA. She is currently the Deputy Manager of the Ops Lab, Project Lead for ProtoSpace, and the Technical Group Supervisor for the User Interface Development Group (397M) at JPL.

Bodies in the Field: Ursula Marvin and the Antarctic Search for Meteorites

**Alexis Rider** is a Ph.D. Candidate in the History and Sociology of Science. Her research, which is situated between the history of science, environmental history, and the environmental humanities, explores how ice has been used by naturalists and scientists to understand and imagine the deep past and future of the Earth. At Penn, Alexis' work has been supported by the Penn Program in the Environmental Humanities, the GAPSA-Provost Award for Interdisciplinary Innovation, and now, the Wolf Humanities Center. Beyond Penn, the National Science Foundation, the Smithsonian Institute, the Linda Hall Library, and the Consortium for Science Technology and Medicine have supported her work. In addition to her academic writing, Alexis engages in artistic collaborations that explore environmental, particularly cryospheric, change. Alexis completed her MA at the New School in New York, and her BA in English Literature and Philosophy at Victoria University, New Zealand, which is where she is from.

## Breaking the Ice Ceiling: Trailblazing Women in Arctic and Antarctic Science

**Dr. Victoria Herrmann** is the Managing Director of The Arctic Institute, where she researches climate change impacts and adaptation. As an Assistant Research Professor at Georgetown University, Victoria serves as the Principle Investigator of the National Science Foundation funded Arctic Migration in Harmony, a major international initiative to integrate discipline-isolated research on changing Arctic migration patterns. Victoria also studies climate-induced displacement in North America and Fiji as a National Geographic Explorer. In her project America's Eroding Edges, she traveled across the country interviewing 350 local leaders to identify what's needed most to safeguard coastal communities against the unavoidable impacts of climate change. Her current initiative, Rise Up to Rising Tides, is creating an online matchmaking platform that connects pro bono experts with climate-affected communities. She serves on the Arctic Research Consortium of the United States' and Arctic Youth Networks' Board of Directors and as an IF/THEN Ambassador for the American Association for the Advancement of Science. She was a Junior Fellow at the Carnegie Endowment, a Canada Fulbright Awardee, a Mirzayan Science and Technology Policy Fellow at the National Academies of Sciences, and a Gates Scholar at the University of Cambridge, where she received her PhD in Geography.

**Morgan Seag** is a geographer and historian of science completing her PhD at the University of Cambridge. Her research centers on science, policy, and social change in international spaces, from the polar regions to outer space. Her PhD dissertation examines scientific institutions in Antarctica, asking how they have evolved to become more gender inclusive over time. Prior to beginning her research, Morgan spent two seasons working at McMurdo Station, Antarctica, as a support contractor for the US Antarctic Program. She received a BA in Political Science from the University of Pennsylvania and an MPhil in Geography / Polar Studies from the University of Cambridge. In addition to her research, Morgan serves as a rapporteur to the Antarctic Treaty Consultative Meeting and has led or supported numerous local and international projects advancing diversity, inclusion, and equity in polar research. She is working on a book about women in Antarctica, focused on the life story of Dr. Lois Jones, leader of the first all-female expedition to Antarctica in 1969.

**Sarah M. Pickman** is a Ph.D. candidate in History, Program in History of Science and Medicine, at Yale University, where she researches the material culture of exploration and science in extreme environments, especially the Polar regions, in the nineteenth and early twentieth centuries. Her dissertation focuses on ordinary gear items, such as tents, preserved food, and waterproof clothing, that were carried by explorers, and how explorers' endorsements were used to

market the same products to general consumers. Her essay on the clothing of Polar explorers was published in the exhibition catalogue *Expedition: Fashion from the Extreme* (London: Thames & Hudson, 2017). Her research has been supported by grants from organizations including the American Geographical Society Library, the Hagley Museum and Library, and the Lemelson Center at the Smithsonian Institution. In 2019 she participated in the Arctic Circle, and interdisciplinary residency in Svalbard in the Norwegian Arctic. Sarah holds a B.A. in Anthropology from the University of Chicago and an M.A. in Decorative Arts, Design History, and Material Culture from the Bard Graduate Center.

**Nanna Katrine Lüders Kaalund\*** is a Postdoctoral Research Associate at the Scott Polar Research Institute, University of Cambridge, where she works as part of the ERC funded 'Arctic Cultures' project. Kaalund is also a Postdoctoral Research Associate at Darwin College, University of Cambridge. Her research centers on the intersection of Arctic exploration, race, print culture, gender, science, religion, and gender in the modern period with a focus on the British, Danish and American imperial worlds. Before moving to Cambridge, Kaalund worked as a Lecturer in the History of Science Communication at the University of Leeds. She received her PhD from the postgraduate program in Science and Technology Studies at York University, Canada in 2017. She is the author of the forthcoming book *Explorations in the Icy North: how travel narratives shaped science in the Arctic*, which will be published with the University of Pittsburgh Press in 2021.

**Tahnee Prior\*** is a Trudeau Scholar, Vanier Canada Graduate Scholar, and Ph.D. Candidate in Global Governance at the University of Waterloo and co-founder and co-lead of "Women of the Arctic" ([www.genderisnotplanb.com](http://www.genderisnotplanb.com)), a non-profit based in Finland. Tahnee is currently also a Research Associate at the Marine & Environmental Law Institute of the Schulich School of Law at Dalhousie University, where she is a collaborator on a project titled "Women of the Arctic Ocean: Exploring the Intersection of Gender, Indigeneity & the Law of the Sea in the Canadian Arctic", funded through an Oceans Frontier Institute Seed Grant. Her research focuses on the intersection of law and complexity science, Arctic environmental governance, climate change and human rights, and the gender-and-environment nexus.

**Dr. Renuka Badhe** currently serves as the Executive Secretary of the European Polar Board, based in the Netherlands. Her educational background is in economics and public policy (University of Cambridge), and she holds a PhD on Southern Ocean phytoplankton physiology (British Antarctic Survey). As a knowledge broker, she has longstanding expertise working with projects at the interface of governance, science, and policy in the polar regions and has been invited to serve on various national and international scientific and advisory committees. Renuka has worked with a wide range of national, European and

International organisations on various aspects of polar science, policy and/or strategy development. She is a passionate advocate for diversity in polar research and has co-founded the Women in Polar Science network to highlight and promote women working in all aspects of polar research, particularly as an outspoken advocate for members of underrepresented communities. She has mentored countless early career researchers globally and was awarded 2017 Association of Polar Early Career Scientists (APECS) International Mentorship Award. She promotes polar research to a wide variety of stakeholders using a range of traditional and non-traditional communication tools to ensure that the message reaches the audience in the best possible manner.

**Dr. Gosia Smieszek\*** is a researcher and a project coordinator at the UiT The Arctic University of Norway in Tromsø and a co-founder and co-lead of a non-profit organization “Women of the Arctic” ([www.genderisnotplanb.com](http://www.genderisnotplanb.com)). In her research Gosia studies international environmental regimes, Arctic and ocean governance, science-policy interface, and gender-environment nexus. She worked on a number of national and international Arctic projects, including for the European Commission, Poland's Ministry of Foreign Affairs, Finland's Prime Minister Office, German Arctic Office, and for Iceland's Ministry of Foreign Affairs. She was a chair of the International Arctic Science Committee (IASC) Action Group on Communicating Arctic Science to Policy Makers, and a representative of IASC to the meetings of the Arctic Council. She is a member of the steering committee of the North Pacific Arctic Conference (NPAC) of the East-West Center (EWC) and Korea Maritime Institute (KMI). Outside of work, Gosia loves spending time outdoors and she is currently completing the mindfulness meditation teacher certification program.

**Susan R. Eaton** is a geoscientist, journalist and polar explorer who explores the world's oceans—from Antarctica to the Arctic—in the snorkel zone, a unique land-sea-ice-air interface where charismatic animals and snorkelers congregate. Susan is the founder and leader of the all-female, multi-year Sedna Epic Expedition which comprises Indigenous and non-Indigenous women ocean explorers, scientists, artists, moviemakers, photographers, historians, educators and scuba divers. The Sedna Epic's mission is to scout, document and record disappearing sea ice in the Arctic. In 2020, Susan was inaugurated into the Women Divers Hall of Fame. In 2018, the Ocean Geographic Society named Susan one of the top 18 most influential women in ocean conservation. Susan holds a B. Sc. Honors degree in geology and biology from Dalhousie University and a M.Sc. in geology (geophysics specialization) from Imperial College, University of London. A graduate of Carleton University's School of Journalism, Susan began her media career in as an on-camera news reporter with CBC-TV.

**Daniella McCahey**

**Kimberly Aiken\*** researches the intersection of and co-production of knowledge and policy in the Arctic, specifically focusing on Arctic Indigenous Peoples and how to incorporate traditional knowledge and ways of knowing in all areas of Arctic research, with the aim of informing policy and improving communication and collaboration between these communities. She is currently a project assistant in Grid-Arendal's Polar and Climate Programme, where she supports the Marine Litter in the Arctic and the UArctic Thematic Network on Arctic Plastic Pollution, and the waste and blue forest projects. Formerly, she worked at the German Arctic Office of the Alfred Wegener Institute as an Arctic research intern. She recently completed the International Environmental Policy master's program at the Middlebury Institute of International Studies at Monterey.

African American Heritage on the Chesapeake Bay and the Promotion, Integration and Sustainability of Minority Women in the Aquaculture Industry

**Imani Black** is an African American oyster farmer building a career in the rapidly growing aquaculture industry. Imani comes from a long watermen history from the Eastern Shore of Maryland that dates back over 200 years. She attended Old Dominion University graduating with a Marine Biology degree while being a Division 1 student athlete. During her career, Imani has worked for the Chesapeake Bay Foundation's VA Oyster Restoration Team, Virginia Institute of Marine Science' Aquaculture Genetics & Breeding Technology Center's (ABC), Oyster Aquaculture Training (OAT) program and oyster companies in Virginia and Maryland. For the last 2 years she was the Assistant Manager for the first privately owned hatchery in Cambridge, Maryland. Due to Imani's passion for marine conservation, environmental stewardship and environmental advocacy, she has developed a nonprofit called "Minorities In Aquaculture" (MIA). Her organization aims to create a more diverse and inclusive aquaculture industry by educating minority women on the restoration and sustainability efforts that aquaculture provides for our local and global seafood fisheries. MIA strives to provide funded hands-on science and mentorship programs to provide more opportunities for women of color to impact the future of the aquaculture and seafood industries.

Ecological Meaning-Making

**Malia Akutagawa** was born and raised on Moloka'i. She is an Associate Professor with the Hawai'i inuiākea School of Hawaiian Knowledge – Kamakakūokalani Center for Hawaiian Studies and the William S. Richardson School of Law – Ka Huli Ao Center for Excellence in Native Hawaiian Law. Malia

is part of Hui 'Āina Momona, a consortium of scholars throughout the university community charged with addressing compelling issues of indigenous Hawaiian knowledge and practices, including the legal regime and Native Hawaiian rights associated with mālama 'āina, and with a focus on cross-disciplinary solutions to natural and cultural resource management, sustainability, and food security.

Malia is a founder and board member of Sust'āinable Moloka'i, a 501(c)(3) nonprofit organization that focuses on maintaining Moloka'i's cultural legacy of 'āina momona (abundant land) while embracing modern pathways to a sustainable future. Malia was recently chosen as po'o of 'Aha Kiole o Moloka'i, the island 'aha moku council for Moloka'i, a local and Indigenous governance system that works with government agencies and lawmakers at the county, state, and federal levels for the protection and care of the natural environment, cultural sites and resources.

**Sonnet Kekilia Coggins** is the Executive Director of The Merwin Conservancy, in Ha'ikū, Maui. There, she leads efforts to steward and interpret the 18-acre palm garden created by poet, ecologist, and activist W.S. Merwin through a decades-long conversation with the land, and to share it as a site for regenerative change at the nexus of arts and ecology. In her public humanities practice, she draws on experience in museums of various scales. Before joining The Merwin Conservancy, she served as Deputy Director of the Williams College Museum of Art (WCMA) where she developed innovative programs and curated exhibitions based on WCMA's historical collection. Prior to her five years at WCMA, Coggins spent nearly a decade at the Denver Art Museum where she directed a range of educational initiatives related to modern and contemporary art. Coggins's work is fueled by a deep curiosity about the world, imagination, and the human spirit. She holds a Master of Teaching degree, and a Master of Arts in French Language and Literatures, both from the University of Virginia.

**Healoha Johnston** lives in Kaiwiki, Hawai'i and is Curator of Asian Pacific American Women's Cultural History at the Smithsonian Institution where she is part of the American Women's History Initiative and the Asian Pacific American Center. Johnston's exhibitions and research projects explore connections between historic visual culture and contemporary art with a particular focus on the socio-political underpinnings that inform those relationships. Recently curated exhibitions include *Ho'oulu Hawai'i*, *The King Kalākaua Era*, the accompanying exhibition catalog for which received the Samuel M. Kamakau Book of the Year Award from the Hawai'i Book Publishing Association; and *Lisa Reihana: Emissaries*, an exhibition that for the first time brought together the

groundbreaking video *iPOV [infected]* and telescope installation with the complete set of French 19<sup>th</sup> century wallpapers that Reihana critically recast.

Johnston served as Chief Curator and Curator of the Arts of Hawai'i, Oceania, Africa, and the Americas at the Honolulu Museum of Art, and worked in contemporary art galleries, arts and cultures non-profit organizations, and NOAA's Pacific National Monument program before joining the Smithsonian Asian Pacific American Center. She received her BA and MA in Art History with a focus on Pacific Art from the University of Hawai'i at Mānoa.

### **October 28, 2020: Full Partners in Science: Gender Equity and Inclusion**

#### Agencies in Action: Lessons Learned from Diversity Initiatives at U.S. Scientific Institutions

**Alise Fisher** (moderator) is Science Press Secretary for the Smithsonian Institution. She develops and executes communications strategies that turn scientific research into news headlines. Alise came to the Smithsonian from the American Society of Clinical Oncology, where she promoted research from the society's medical journals and conferences, including the largest cancer research conference in the world. In addition to her experience with strategic communications, crisis communications, and media relations, she has written about research across scientific disciplines, from medicine to astrophysics to environmental science. Alise holds an M.A. in Science Writing from Johns Hopkins University and a B.S. in Public Relations from the S.I. Newhouse School of Public Communications at Syracuse University.

**Dr. Jessie DeAro** started her federal career as a Presidential Management Fellow (PMF) after earning her doctorate in physical chemistry from the University of California at Santa Barbara. She has twenty years of experience managing federal capacity building and education programs at the U.S. Department of Education and the National Science Foundation (NSF). Her expertise is focused on higher education diversity programs designed to improve the participation and success of underrepresented minorities and women in STEM education programs and the workforce. She spent a year detailed to the White House Office of Science and Technology Policy in 2010 working on policy related to STEM education and diversity. In addition, she has served in temporary Senior Executive Service roles as acting Deputy Division Director in two different Divisions in the Directorate for Education and Human Resources (EHR) at NSF. She is currently an NSF program director for the EHR Core Research (ECR) and the ADVANCE programs. ECR supports education research proposals to study STEM learning and learning environments, STEM workforce, and broadening

participation in STEM. The NSF ADVANCE program supports projects to undertake systemic change within institutions of higher education and organizations to address systemic gender inequities in STEM academic careers.

**Dr. Alex Helman** is a Program Officer with the Committee on Women in Science, Engineering, and Medicine at the National Academies of Sciences, Engineering, and Medicine. During her time at the Academies, Dr. Helman has led the Prevention Working Group for the Action Collaborative on Preventing Sexual Harassment in Higher Education and was the co-lead for the recent report, Promising Practices for Addressing the Underrepresentation of Women in STEMM: Opening Doors. Currently, Dr. Helman is leading a new consensus study focused on inclusion of women and minoritized populations in clinical trials. Before joining the National Academies full time, Dr. Helman was as a 2018 Mirzayan Science and Technology Policy Fellow at the National Academies, where she worked on the 2018 report “Sexual Harassment of Women: Climate, Culture, Consequences in Academic, Sciences, Engineering, and Medicine”. Dr. Helman received her Ph.D. in Molecular and Cellular Biochemistry from the University of Kentucky, and her B.S. in Biochemistry from Elon University. Dr. Helman is passionate about issues of health equity, dementia, and creating a more diverse, inclusive, and equitable scientific workforce.

**Dr. Iris R. Wagstaff** is a scientist, researcher, mentor, science policy advisor and keynote speaker. She currently serves as a STEM Program Director in Diversity, Equity and Inclusion at AAAS where she leads efforts focused on broadening participation, workforce development, and inclusive innovation at the higher education level. She is a former AAAS Science & Technology Policy Fellow at the DOJ National Institute of Justice where she developed and led an agency-wide strategic diversity and inclusion initiative. She is a research chemist with 15 years at Dow Chemical and also a social scientist whose research focuses on motivation in STEM. She serves on the Boards of several organizations that include NOBCChE and the Chemical Society of Washington. She has spent over 20 years mentoring STEM students from K – 20 and developing strategic partnerships between industry, academia and government. She is an adjunct faculty member of the UNCG chemistry department. Dr. Wagstaff is the Founder of Wagstaff STEM Solutions, an educational and DEI consulting firm. She has received several honors that include the AERA Science Teaching Research Award, BEYA Science Trailblazer Award, NOBCChE Presidential Award for Mentoring, and the Women of Color in STEM Promotion of Education Award.

[Sheila Minor Huff: A Trailblazing Scientist and Hidden Figure No More](#)

**Sheila Minor Huff** began her thirty-five-year federal career as a part time GS- 3 Clerk Typist, while attending American University. In 1970, she worked for the US Fish & Wildlife Service's Mammal Division as a GS-5 Biological Animal Technician. In 1972, Sheila was hired by the Smithsonian Institution's Environmental Research Center as a GS-7/9 Research Technician in Edgewater, MD. She was the first African American at the Center. The Federal Energy Regulatory Commission hired Huff as a GS-9/11 Wildlife Biologist, where she wrote Environmental Assessments on hydroelectric power plants (1975-1977). From 1977-1980, Huff worked as a Schedule C; GS-11 to GS-14; Special Assistant to the Assistant Secretary for Fish, Wildlife and Parks; US Department of The Interior. She completed her master's degree in 1979; and earned certification as a Wildlife Biologist. As a GS-14, Sheila returned to career service, and was employed as the Department of the Interior's Regional Environmental Officer in Chicago, IL. She had signatory authority for Interior's formal comments on Draft Environmental Impact Statements. In 1994, the Office of Environmental Policy & Compliance transferred Huff back to Washington. In 2005, Huff retired as a GS-14/10 Environmental Protection Specialist.

**Michele L. Simms-Burton, Ph.D.** is a writer, scholar of African American and Africana studies, and a former tenured university professor. She held appointments at the George Washington University, the University of Michigan and Howard University.

Her publications include flash guides, essays, book reviews, short stories, and poetry appearing in *For Harriet*, *Medium*, *Callisto Media*, *Joint Literary Studies*, *The Chronicles of Higher Education*, *The San Francisco Chronicle*, the *American Studies Journal of Turkey*, the *Hemingway Review*, *Callaloo*, the *Detroit Free Press*, and the *Detroit Women's Voices*, to name a few. She was the founding secretary-treasurer of the Toni Morrison Society and co-chaired the Committee on Language and Literatures of People of Color in the Americas at the Modern Language Association (MLA). She has been a researcher and consultant on various film projects about African American culture, with her most recent contribution being a documentary about Sammy Davis Jr. on the American Masters program on PBS. She is also a radio commentator on "The Margins" hosted by E. Ethelbert Miller on WPFW in Washington, DC. She lectures globally on African American studies.

[Building Galaxies: Collaboration as a Model for Centering Women's History at the National Air and Space Museum](#)

**Rebecca Ljungren** is an Education Specialist at the Smithsonian National Air and Space Museum and the Phoebe Waterman Haas Public Observatory.

Rebecca's activities include developing and conducting innovative, hands-on programs for the public; training educators, interns, and volunteers; organizing and conducting outreach at the local and national level; and developing exhibitions. Rebecca began developing her expertise in informal learning and interpreting science and history while working part-time at the National Air and Space Museum while earning her B.A. in Art History from American University. She went on to earn an M.A.T. in Museum Education from George Washington University, after which she came back to the National Air and Space Museum full-time. Her broader academic interests include interrogating the relationships between science, history, art, and social justice, and how learning experiences can drive participants to be change agents in their lives and communities. Through her work, she advocates for a more inclusive and accessible experience within museums and in daily life.

**Dr. Emily A. Margolis** is Curator of the History of American Women in Aviation, Spaceflight, Astronomy, and Planetary Science, and is jointly appointed at the National Air and Space Museum and the Smithsonian Astrophysical Observatory. Her work supports the Smithsonian American Women's History Initiative. Dr. Margolis trained as a social and cultural historian of spaceflight. She holds a PhD in History of Science and Technology from Johns Hopkins University, MA in History of Science, Medicine, and Technology from the University of Oklahoma, and BA in Physics from Princeton University. Before arriving at NASM, Dr. Margolis served as Andrew W. Mellon Postdoctoral Curatorial Fellow at the American Philosophical Society in Philadelphia. She has been working and researching in museums since 2007, including the Mathematisch Physikalischer Salon (Dresden, Germany), National Electronics Museum (Linthicum, MD), National Museum of American Jewish History (Philadelphia, PA), and the National Air and Space Museum.

**Dr. Emily Martin** is a research physical scientist in the National Air and Space Museum's Center for Earth and Planetary Studies. Emily's research interests are in planetary surface processes and tectonic deformation across our solar system, especially the icy bodies of the outer solar system. Developing a better understanding of how planetary surfaces deformed tells us about their histories and what they have experienced. Of particular interest is the evolution of subsurface oceans on Saturn's moon Enceladus and other icy satellites. Many of these moons had or have liquid water oceans under their brittle water-ice lithospheres making them prime targets for understanding the habitable potential of the outer solar system. Much of Emily's work relies on images taken by the Voyager, Galileo, Cassini, and Lunar Reconnaissance Orbiter spacecrafts.

Emily received her B.A. in physics from Wheaton College (MA) where she first began exploring the icy satellites. She subsequently obtained her M.S. from Northwestern University in Earth and planetary science and her PhD in geological sciences from the University of Idaho.

### Drawn Conclusions: Women and Scientific Illustration

**Katherine Boyce-Jacino** is a Fellow at the Barrett Honors College of Arizona State University. She received her PhD from Johns Hopkins in 2018. Previously she has been a fellow at the National Air and Space Museum, the American Institute for Physics, and the Max Planck Institute for the History of Science. She works as a historian of technology with a focus on Germany and Central Europe, and with additional interests in women's history and cultural theory. Her current project is the early history of planetaria in Germany, from their invention in 1923 through the Second World War.

**Ben Gillespie** is the Arlene and Robert Kogod Secretarial Scholar for Oral History at the Archives of American Art. His research attends to the recuperation, preservation, and amplification of neglected artistic voices. He received his PhD from Johns Hopkins University.

### Fostering Critical Conversations about Equity in the Sciences: The Bearded Lady Project

**Anna K. (Kay) Behrensmeyer** is a paleontologist and geologist who studies processes of fossil preservation and the history of land ecosystems through geological time. She received her Ph.D. from the Department of Geological Sciences, Harvard University, and since 1981 has been Curator of Vertebrate Paleontology at the National Museum of Natural History, Smithsonian Institution. Kay has spent much of her career doing field work that builds understanding of fossil preservation in different geological time periods and modern ecosystems, collaborating with wonderful colleagues in North America, Africa (Kenya, Ethiopia, South Africa, Cameroon), and Pakistan. She was a member of the core team for the NMNH exhibition, *The David H. Koch Hall of Fossils: Deep Time*, which opened in June, 2019. She is also Curator of the Bearded Lady Project exhibit at NMNH. Recent honors include the 2018 Romer-Simpson Medal (Society of Vertebrate Paleontology) and the 2018 Paleontological Society Medal. She is a member of the American Academy of Arts and Sciences and the National Academy of Sciences.

**Jennifer Collins** is Manager of Ocean and Deep Time Education and Outreach at the Smithsonian National Museum of Natural History, responsible for the development and implementation of programs and resources that inspire, inform, and empower connection to the ocean and life through time. Jennifer also oversees the Science Liaison program, which bridges the science and education communities at the museum, and is a member of the Smithsonian Conservation Commons team focused on Earth Optimism. Jennifer grew up in California where she spent countless hours running through forests and exploring the ocean. In fourth grade, a visit to see the Coelacanth at the California Academy of Sciences prompted a lifetime passion for scientific discovery. A decade later, an invitation to tutor at-risk youth fueled her passion for education. Jennifer has since spent her career in science education, both as a middle and high school science teacher and as an informal educator, contributing to the development of resources such as Understanding Evolution and Understanding Science, and working with amazing scientists and educators to inspire scientific understanding and appreciation for a wide range of audiences.

**Lexi Jamieson Marsh** is a documentary filmmaker and the founder of the independent production company, On Your Feet Entertainment. Marsh's creative foundation was established in the theatre where she witnessed the transformative impact a well told story could have over an audience. Her work celebrates the human spirit, offering an inspirational voice to marginalized demographics. Marsh received an Honors BA from the University of Toronto, an MA from Miami University and a Certificate in Filmmaking from New York Film Academy.

**Barbara Stauffer** received her B.A. in History from the University of Virginia and a M.A. in Geography from The George Washington University. She began her museum career working on temporary exhibitions at the National Museum of Natural History and became Chief of Temporary Exhibitions in 2008. In 2012, after a one-year assignment in the FutureNSF office of the National Science Foundation developing a public engagement strategy for the foundation's new headquarters, she returned to the Museum as Chief of Community Programs and was a Noyce Leadership Institute fellow from February 2013 through May 2014. In her current position, she is responsible for adult, family, school, youth and community science programming for local area audiences. She is particularly interested in seeking out partnerships, developing engagement platforms, and designing community events that creatively and effectively engage diverse audiences with the Museum's collections, exhibitions, research and overall mission.

**Dr. Denise F. Su** is the Chief Academic Engagement Officer, Gertrude Haskell Britton Endowed Chair of Education, and Curator of Paleobotany and Paleoecology at the Cleveland Museum of Natural History. In her role as Chief Academic Engagement Officer, she provides the strategic vision for and leads exhibits, education, and community outreach. She is focused on providing opportunities in science, particularly for under-represented groups in science. She is also known for her research in early hominin paleoecology. Her research explores environments in which our early ancestors lived in order to provide insight into how environmental factors shaped the trajectory of hominin evolution. She conducts fieldwork at Mio-Pliocene sites in Africa and China, results of which have informed us of the environmental conditions under which our early hominin ancestors evolved. Her research has been published in *Science*, *Proceedings of the National Academy of Sciences*, *Scientific Reports*, *Journal of Human Evolution* and other specialty journals and featured on various general science and news outlets, including Science Friday, New York Times, CNN, BBC.

Dr. Su holds a B.A. from University of California, Berkeley and M.A. and Ph.D. from New York University.

### **October 29, 2020: Defining the Future**

#### First Ladies of Cultural Heritage

**Shannon A. Brogdon-Grantham** is the Photograph and Paper Conservator at the Smithsonian's Museum Conservation Institute (MCI). She obtained her M.S. from the Winterthur/University of Delaware Program in Art Conservation where she specialized in photograph conservation with minor concentrations in paper and preventive conservation. She holds a B.A. in art from Spelman College. At MCI, Shannon's primary duties includes collections-based conservation research, interventive treatment, and preventive care of photographic and paper-based collections across the Smithsonian Institution. She routinely collaborates with other conservators and scientists at MCI as well as collections care professionals and curators at different Smithsonian museums. Two areas of conservation close to her heart are teaching and mentoring and Shannon has been involved in numerous programs to promote equity and inclusion in the field. She is often invited to lecture on the preservation of photographs in venues around the Washington, D.C. area and beyond. Shannon is active in her professional organizations and is a member of the American Institute for Conservation and served as Vice President of the Washington Conservation Guild (2017-2019).

**Marian A. Kaminitz** became the first Head of Conservation at the National Museum of the American Indian, Smithsonian Institution in 1991. Previously, she was Assistant Conservator in the Anthropology Department of the American Museum of Natural History and Adjunct Professor at NYU's Conservation Center, teaching a course in the conservation of organic ethnographic and archaeological objects. She served as Coordinator for the Ethnographic Working Group of ICOM-CC and subsequently as assistant coordinator. Her primary interests include indigenous representation in the preservation of their cultural materials; the training of conservation fellows and interns; conservation partnerships with Native communities and artists; and demographic diversification of the conservation profession. Since the early 1990s, through this commitment, the NMAI Conservation Department has become renown worldwide as a place interns and fellows can gain experience collaborating with Native people in the conservation of cultural materials. In 2013, she was a recipient of the Sheldon and Caroline Keck Award recognizing her sustained record of excellence in the education and training of conservation professionals. She is a 1984 graduate of the University of Delaware/Winterthur Museum Program in Art Conservation and was an Andrew W. Mellon Fellow at the Pacific Regional Conservation Center, Bishop Museum in Honolulu, HI.

**Amber Kerr** is chief of conservation and senior paintings conservator at the Smithsonian American Art Museum. She oversees programming in the museum's Lunder Conservation Center; a facility with floor to ceiling glass walls that allow the public to observe the conservation staff caring for the collections. She received a master's degree from the Winterthur/University of Delaware in art conservation and is a dedicated advocate for raising professional and public awareness in conservation, preservation, and technical art history. Her scholarly publications have included research on the techniques of artists Henry Ossawa Tanner and Alma Thomas, as well as folk and self-taught artists in SAAM's collection.

Kerr is a professional associate in the American Institute for Conservation, and a fellow with the International Institute of Conservation (IIC), where she serves as vice president, director of communications, and co-chair for the IIC Dialogue series. She also serves as an advisor for IIC advancement programs for emerging conservation professionals, and advisory chair of the IIC Student Poster Committee. Kerr is a founding member and past officer of education and outreach for the American Institute for Conservation Emerging Conservation Professionals Network (ECPN).

**Jane Klinger** earned her Master of Fine Arts in Conservation in Florence, Italy at the Villa Schifanoia, Rosary College Graduate School of Fine Arts. She has held positions at Winterthur Museum, the Smithsonian's National Portrait Gallery, and

the National Archives. Ms. Klinger served as the Chief Conservator for the United States Holocaust Memorial Museum. She currently holds the new position of Museum Curator, Senior Research Conservator. Ms. Klinger has also worked and taught abroad. She has published articles and presented papers to various professional groups and universities in the United States and abroad. Ms. Klinger is currently an editor of and contributor to *The Material Culture of Difficult Histories* to be published in 2021. She is a Fellow of the American Institute for Conservation and is currently on the board of the Research and Technical Studies specialty Group. She is a board member of the International Committee on Memorials and Sites of Remembrance (IC-MEMO). She was President of the Washington Conservation Guild (2013 -2016). Ms Klinger is currently pursuing a Doctorate in the Preservation Studies Program at the University of Delaware. The focus of her research is on the identification and preservation of the material culture of trauma.

**Rebecca Rushfield**, a New York City based consultant in conservation received her Master's degree in Art History at the Institute of Fine Arts of New York University and her diploma in conservation at the NYU Conservation Center. She is co-editor of *The Conservation of Easel Paintings* (Routledge Taylor & Francis Group, 2012; revised edition 2021). She was one of the organizers of the symposium "The Conservation Legacies of the Florence Flood" (November 2006) which commemorated the 40<sup>th</sup> anniversary of that catastrophic event.

She is a member a number of the Equity and Inclusion and the Communications Committees of American Institute for Conservation (AIC). Each year, in conjunction with the annual meeting of the College Art Association, she arranges an AIC-sponsored workshop on the material aspects of one group of art works in an art museum in the host city.

She is actively involved in oral history and has been associated with the Foundation of the American Institute for Conservation oral history project for thirty years. She is the Chair of the New York University Institute of Fine Arts Alumni Association History Committee and directs its oral history project. She has conducted interviews for the Queens Public Library's Queens Memory Project.

**Joyce Hill Stoner** has taught for the Winterthur/UD Program in Art Conservation for 44 years (Director for 15 years: 1982-1997). She graduated Phi Beta Kappa, summa cum laude from William and Mary in 1968, received an MA in Art History from NYU (1970); diploma in conservation, NYU Conservation Center (1973), and a Ph.D. in Art History (1995, UD).

Stoner has treated paintings for many museums and collectors and was senior conservator of the team for the five-year project of treatment of Whistler's

Peacock Room at the Freer Gallery of Art in Washington, DC. She has authored more than 120 book chapters and articles, and with Rebecca Rushfield co-edited *Conservation of Easel Paintings*, an 890-page international reference book published in 2012 and being revised for publication in 2021. She has written on the history of conservation, the history of various artists' techniques, and pioneers in museums. She founded the international oral history project for the Foundation of the American Institute for Conservation (FAIC) in 1975 which contains 430+ interviews with pioneer conservators, conservation scientists, and interested art historians. Stoner has received many awards for teaching, scholarship, and lifetime achievement.

### Affinity Groups as Grassroots Agents of Change

**Kristina Borst** has been a part of the Smithsonian community for 5 years. Currently, she is head technician for the Smithsonian Environmental Research Center's (SERC) Marine Disease Ecology Lab where she leads long-term parasite biodiversity monitoring projects in Chesapeake Bay. She serves on SERC's Institutional Animal Care and Use Committee (IACUC) and was on the first Women In Science (WIS) committee formed at SERC. She has been elected and served one year on the WIS executive committee and is currently serving as Head of SERC's WIS group. She received her Bachelor's degree in Biology from St. Mary's College of Maryland.

**Brenda María Soler Figueroa** was born and raised in Puerto Rico. She completed a Bachelor's degree in Coastal Marine Biology at the University of Puerto Rico in Humacao and a Master's and Ph.D. in Biological Oceanography at the University of Puerto Rico in Mayagüez. During her graduate studies, she researched the population dynamics of dinoflagellates in the bioluminescent systems in Puerto Rico and their responses to environmental changes. Brenda moved to Maryland in 2016 to work in the Marine Invasions Lab at the Smithsonian Environmental Research Center (SERC) where she researches the plankton assemblages associated with the ballast water from ships at bays and ports worldwide. Since 2018, Brenda has been an executive committee member of the SERC Women in Science group. She is also an Adjunct Professor in the School of Science, Technology, and Education at the Anne Arundel Community College.

**Vanessa Liz González** currently serves as a Computational Genomics Scientist for the National Museum of Natural History's Global Genome Initiative (GGI) – an initiative aimed at preserving and understanding the genomic diversity of life.

Her research focuses on understanding how species are related across the tree of life. She leads projects in genome biology and evolutionary bioinformatics, specializing on working with "big data." After receiving her Ph.D. from the Department of Organismic and Evolutionary Biology and the Museum of Comparative Zoology at Harvard University in 2013, Vanessa began research at the Smithsonian focusing broadly on biodiversity genomics, systematics, and invertebrate biology. Vanessa is an active member of Smithsonian Pride Alliance.

**Briana Pobiner** is a paleoanthropologist whose research centers on the evolution of human diet (with a focus on meat-eating) but has included topics as diverse as human cannibalism and chimpanzee carnivory. Since joining the Smithsonian in 2005 to help put together the Hall of Human Origins, in addition to continuing her active field, laboratory, and experimental research programs, she leads the Human Origins Program's education and outreach efforts, including managing the Human Origins Program's public programs, website content, social media, and exhibition volunteer training. Briana has more recently developed an additional research program in evolution education and science communication. She is also an Associate Research Professor of Anthropology in the Center for the Advanced Study of Human Paleobiology at the George Washington University.

[Celebrating cross-generation progress & perspectives of Women in Science at the Smithsonian](#)

**Denise Breitburg** is a marine ecologist at the Smithsonian Environmental Research Center. She retired in 2019, but remains active in research and advisory work with organizations ranging from local land trusts to the UN. Her love of science is in the process – dreaming up interesting questions, figuring out how to answer them, and working with fascinating people to seek solutions. Much of her research has focused on the effects of human activities on our coastal waters and oceans, but she has also worked on jellyfish ecology, sex change in fishes, and tropical mangrove ecosystems. A major research area has been the causes and effects of declining oxygen in the world's estuaries and oceans. Both an oversupply of nutrients and climate change are culprits, and the consequences range from changes in behavior of animals, to increases in disease, to negative effects on fisheries and human welfare. Like us, the oceans need to breathe.

Denise received her BS in biology from Arizona State University, and her MS and PhD in marine ecology and ichthyology from University of California, Santa

Barbara. When she's not engaged in science, Denise can be found hiking the shores of Chesapeake Bay or covered in clay in her pottery studio.

**Dr. Kimberly Komatsu** is a conservation ecologist with a research focus on community and ecosystem responses to global change drivers. She received her BS from University of California, Irvine and went on to complete her PhD at Yale University, where she studied the roles of nutrient availability, climate, and herbivory in driving grassland community composition and ecosystem function. Kim spent a postdoc at University of California, Berkeley, studying how mutualistic interactions are impacted by global change drivers in the legume-rhizobia system. In 2017, Kim started as a Senior Scientist at the Smithsonian Environmental Research Center (SERC) in Edgewater, MD. Her research at SERC builds upon her history of examining the effects of human activities on the environment in natural and agricultural systems.

**Dr. Emily Martin** is a research physical scientist in the National Air and Space Museum's Center for Earth and Planetary Studies. Emily's research interests are in planetary surface processes and tectonic deformation across our solar system, especially the icy bodies of the outer solar system. Developing a better understanding of how planetary surfaces deformed tells us about their histories and what they have experienced. Of particular interest is the evolution of subsurface oceans on Saturn's moon Enceladus and other icy satellites. Many of these moons had or have liquid water oceans under their brittle water-ice lithospheres making them prime targets for understanding the habitable potential of the outer solar system. Much of Emily's work relies on images taken by the Voyager, Galileo, Cassini, and Lunar Reconnaissance Orbiter spacecrafts.

Emily received her B.A. in physics from Wheaton College (MA) where she first began exploring the icy satellites. She subsequently obtained her M.S. from Northwestern University in Earth and planetary science and her PhD in geological sciences from the University of Idaho.

**Dr. Ellen R. Stofan** is the John and Adrienne Mars Director of the Smithsonian's National Air and Space Museum. She came to the Museum with more than 25 years of experience in space administration and planetary science.

Stofan was previously Chief Scientist at NASA, serving as the principal advisor to the Administrator on science programs and strategic planning. She helped guide the development of a long-range plan to get humans to Mars, and worked on strategies for NASA to support commercial activity in low Earth orbit as it transitions from the International Space Station (ISS) to sending humans to the Moon and Mars in the mid-2020s.

She held senior scientist positions at NASA's Jet Propulsion Laboratory, including work on missions exploring Venus, Earth, Mars, and Saturn. She served as chief scientist for the New Millennium Program, and principle investigator on the proposed Titan Mare Explorer. She is currently on the Science and Engineering team of the NASA Dragonfly mission working to send a rotorcraft lander to Saturn's moon Titan.

Stofan holds master's and doctorate degrees in geological sciences from Brown University, and a bachelor's degree from the College of William And Mary. She serves on National Geographic's Board of Trustees, and on the Collier Trophy selection committee. Stofan is an honorary professor at University College London, and was on the board of the College of William & Mary Foundation for 10 years, including serving as board chair.