

VASEM Summit Bios

Morning Keynote

Sheril Kirshenbaum

Sheril Kirshenbaum is a scientist and author working to enhance public understanding of science and improve communication between scientists, policymakers and the public. She currently hosts *Serving Up Science* at PBS Digital Studios and the discussion series "Our Table" at Michigan State University. Sheril has been a Presidential Leadership Scholar, a Marshall Memorial Fellow, a legislative NOAA fellow in the U.S. Senate with Senator Bill Nelson (D-FL) and a Next Generation Fellow through the Robert Strauss Center for International Security and Law. Her books include *Unscientific America: How Scientific Illiteracy Threatens Our Future* with Chris Mooney and *The Science of Kissing*. Sheril's research focuses on how we make decisions about science and policy.

Morning Panel

Cary Funk

Cary Funk is director of science and society research at Pew Research Center, where she leads the Center's efforts to understand the implications of science for society. Center studies look at the social, ethical and policy implications of scientific developments in areas such as climate and energy, emerging issues in genetic engineering, and food and space science. She has authored or co-authored a number of reports focused on public trust in science, scientific experts and science news and information.

Funk has broad expertise in public opinion research and has specialized in public understanding of science topics for nearly two decades. Prior to joining Pew Research Center, she directed the Virginia Commonwealth University Life Sciences Surveys, national surveys on science and biotechnology. Funk began her career at CBS News in New York working on preelection polling and analysis of exit polls. She earned a doctorate and a master's in social psychology from the University of California, Los Angeles.

Dr. John Almarode

Dr. John Almarode is an Associate Professor of Education in the College of Education. In 2015, John was awarded the inaugural Sarah Miller Luck Endowed Professorship. In 2021, John was honored with an Outstanding Faculty Award from the State Council for Higher Education in Virginia. At James Madison University, he continues to work with pre-service teachers and

graduate students, as well as actively pursues his research interests including the science of learning, the design and measurement of classroom environments that promote student engagement and learning.

Outside of being a husband and father, John is a bestselling author and has worked with schools, classrooms, and teachers all over the world on the translation and application of the science of learning to the classroom, school, and home environments, and what works best in teaching and learning. He has in Australia, Canada, Egypt, England, Qatar, Saudi Arabia, Scotland, South Korea, Thailand and all across the United States.

The work of John and his colleagues has been presented to the United States Congress, Virginia Senate, at the United States Department of Education as well as the Office of Science and Technology Policy at The White House.

Frank Niepold

Frank Niepold is the Climate Education Coordinator at NOAA's Climate Program Office in Silver Spring Maryland, Climate.gov Education section lead, a co-chair of the U.S. Global Change Research Program's Education Interagency Working Group, the U.S. Climate Action Report Education, Training, and Outreach chapter lead for the U.N. Framework Convention on Climate Change (UNFCCC), Education and Youth delegate for the United States at the 2015 Conference of Parties (COP21), and a member of the Federal Steering Committee for the Fourth National Climate Assessment (NCA4). At NOAA, he develops and implements NOAA's Climate goal education and outreach efforts that specifically relate to NOAA's Climate goal and literacy objective. Frank is the "Teaching Climate" lead for NOAA's Climate.gov web portal that offers learning activities and curriculum materials, multi-media resources, and professional development opportunities for formal and informal educators who want to incorporate climate science into their work. Additionally, he is the managing lead of the U.S. Global Change Research Program (GCRP) document, Climate Literacy: The Essential Principles of Climate Science. NOAA, NSF, NASA, AAAS Project 2061, CIRES, American Meteorological Society, and various members from both the science and education community worked to define climate literacy in the United States.

He received a MEd in Earth Space Science Education (2006) from Johns Hopkins University with areas of concentration in Earth Observing Systems, Scientist/Teacher/Student Collaboration and Earth Systems science education focused on climate.

Dr. Bob Holsworth

Dr. Bob Holsworth is the DecideSmart team lead for higher education and civic engagement projects.

Prior to joining the firm, he was the Founding Director of the Center for Public Policy and the L. Douglas Wilder School of Government and Public Affairs at Virginia Commonwealth University. He also served as Dean of the College of Humanities and Sciences – the largest unit of the 31,000-student university.

Bob has occupied key positions in a number of major governmental initiatives. He was the Executive Director of the Governor’s Commission on Efficiency and Effectiveness. He has been the Director of the Virginia Executive Institute and Co-Staff Director of the Commission on the Future of Virginia’s Urban Areas, a gubernatorial commission that examined how Virginia’s urban areas could become flourishing parts of regional economies.

Bob serves on the Board of Visitors of Virginia Commonwealth University. He received his BA from Seton Hall University and his PhD from the University of North Carolina at Chapel Hill.

Breakout Sessions

Climate Change:

Dr. Jeremy Hoffman

Jeremy Scott Hoffman, Ph.D. is the David and Jane Cohn Scientist at the Science Museum of Virginia and an Affiliate Faculty in the L. Douglas Wilder School of Government and Public Affairs and the Center for Environmental Studies at Virginia Commonwealth University.

Jeremy specializes in Earth science communication, data-driven and community-based participatory science, and science center exhibit content development. Jeremy's work has been highlighted on the Grist 50 and written about in the New York Times, Richmond Family Magazine, National Public Radio (NPR), Radio IQ/NPR, Style Weekly, Yale e360, New York Times, Richmond Magazine, STEM Jobs Magazine, the Richmond Times Dispatch, UPWORTHY, and the Corvallis Advocate.

Jeremy earned his Ph.D. in Geology with a focus in Paleoclimatology as a National Science Foundation Graduate Research Fellow in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. Jeremy also served as a Science Communication Fellow for the Oregon Museum of Science and Industry (OMSI) and the Mitchell Hamline College of Law. Most recently, Jeremy served the Science Museum of Virginia as their Climate and Earth Scientist, completing the requirements of a three-year NOAA Environmental Literacy Grant.

Elliott Robinson

A Hampton, Va. native, Robinson is a 15-year veteran of print and digital publications. He began his career as a reporter and columnist at *The Progress-Index* in Petersburg and went on to work

in leadership roles at the *Hopewell News*, *The Daily Progress* in Charlottesville and, most recently, *Charlottesville Tomorrow*.

As news editor of *Charlottesville Tomorrow*, Robinson transformed the publication focused on land use, transportation and education into one emphasizing race and equity. He also played a significant role in the launch of the Charlottesville Inclusive Media project, a partnership between *Vinegar Hill Magazine*, "In My Humble Opinion" radio show and *Charlottesville Tomorrow*, created with the goal of bringing more inclusive representation to local media.

Robinson is a member of the National Association of Black Journalists, a life member of the NAACP, and a board member of the Virginia Pro Chapter of the Society of Professional Journalists.

Vaccines:

Dr. Bill Petri

William A. Petri is a physician-scientist at the University of Virginia School of Medicine and the Wade Hampton Frost Professor of Epidemiology.

Petri was born and raised primarily in Washington, D.C., with a brief stint with his family in London during childhood. He attended the University of Wisconsin – Madison where he studied chemistry and music, moving to Charlottesville in 1976 to start medical and graduate school at UVA. After obtaining his MD and PhD in microbiology, he married his medical school classmate Mary Ann McDonald at the University Chapel and they moved to Cleveland where he completed his residency in internal medicine at Case Western Reserve University. They returned to Charlottesville UVA for Bill's infectious diseases fellowship and he became an assistant professor in 1988. He has been there ever since.

Governor Terry McAuliffe awarded Petri the Commonwealth of Virginia's Outstanding Faculty Award in 2014 and the Virginia Outstanding Scientist Award in 2017. The University of Virginia recognized him this year with the Thomas Jefferson Award. He has served as president of the American Society of Tropical Medicine and Hygiene and is the recipient of the Oswald Avery Award of the Infectious Diseases Society of America, the Kean Medal of the American Society for Tropical Medicine and Hygiene, and the Finland Award of the National Foundation for Infectious Diseases. He has worked at the University continuously for more than 30 years as a physician, scientist and educator.

In January 2020, he was among the first in Charlottesville to realize the impending threat of COVID-19. He shifted his work to pursue understanding of the coronavirus SARS-CoV-2. He led the UVA site of the study of anti-coronavirus antibody treatment that showed effectiveness in preventing COVID-19 in household contacts, launched an FDA-approved clinical trial of an allergy medicine called Dupilumab to prevent respiratory failure, and is developing a needle-free intranasal vaccine. Public education has also been a major part of his effort to combat COVID-19,

both on-line with over 9 million readers at “The Conversation” and through public outreach on radio and TV. Finally he cares for patients with the infection, working on the inpatient ward for COVID-19 at UVA Hospital.

He and Mary Ann have raised five children in Charlottesville, and as they have left the nest his interests have shifted from coaching their soccer teams (36 seasons) to a return to music (trombone) and a new interest in running, including training for the San Diego Marathon this fall, which will be his eighth.

Dr. Carol O’Donnell

Carol O’Donnell is the director of the Smithsonian Science Education Center, which is dedicated to transforming the learning and teaching of science in P–12 classrooms throughout the nation and the world. O’Donnell is responsible for all operational activities and planning for the unit, including building awareness for preschool through 12th-grade science-education reform, conducting programs that support the professional growth of P–12 teachers and school leaders, and overseeing all research and curricular-resource development, philanthropic development and administration.

Before joining the Smithsonian, O’Donnell worked at the U.S. Department of Education where she oversaw nearly \$17 billion in annual federal investments under the Elementary and Secondary Education Act. These investments focused on education reform, school improvement, teacher professional development, improved student achievement and assistance for states building their capacity to implement and sustain education reforms and achieve improvement in student outcomes. She also oversaw the cognition and student-learning research program at the Institute of Education Sciences, the research arm of the Department of Education.

While earning her doctorate at the George Washington University, O’Donnell managed a five-year, National Science Foundation-funded trial aimed at identifying the conditions under which effective middle school science curricular interventions improve student learning and reduce achievement gaps when scaled-up. Her research on curriculum implementation was published in the *Review of Educational Research* and earned her an “American Educational Research Association Division of Learning and Instruction Graduate Research Award” in 2008.

Before attending George Washington University, O’Donnell spent 11 years developing science-curriculum materials for the Smithsonian Science Education Center’s science and technology concepts elementary and secondary programs.

O’Donnell began her science-teaching career in Virginia public schools. She currently serves on the part-time faculty of George Washington University’s physics department.

O’Donnell earned her bachelor’s degree in education from the University of Pittsburgh, her master’s degree in geosciences from Mississippi State University and her doctorate in curriculum and instruction from George Washington University.

Vaccines:

David Roop

David W. Roop is currently a power industry consultant and formerly was the Director of Electric Transmission Operations in the Power Delivery Group of Dominion Energy.

Mr. Roop previously managed Dominion Energy Virginia's Electric Transmission Operations & Reliability organization and advised the Corporation on technical issues until his retirement on January 1, 2020 after a 43-year career.

Currently, he is an active member of CIGRE presently serving on the Executive Committee as the Immediate Past President of the CIGRE U.S. National Committee. He was elected to the National Academy of Engineering in 2018 and currently serves on the Board of Directors of the Virginia Academy of Science, Engineering, and Medicine (VASEM). Mr. Roop is a Life Member of the IEEE and is a recipient of the IEEE Power Engineering Society, 2014 Leadership in Power Award for industry-wide leadership and the 2020 CIGRE Attwood Associate Award for notable contributions to CIGRE over an extended period.

Mr. Roop is a member of Advisory Board of the Electric Infrastructure Coordinating Council, Electricity Sector and is an Adjunct Professor of Practice at Virginia Tech in the Bradley Department of Electrical and Computer Engineering.

Mr. Roop is a contributing author to several industry publications dealing with the future of electric grid.

He earned his Bachelor of Science Degree in Electrical Engineering from Virginia Tech in 1976 and is a registered Professional Engineer in the Commonwealth of Virginia.

Juan Conde

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Afternoon Keynote

Dr. Danny Avula

Dr. Danny Avula is Director of the Richmond City and Henrico County Health Departments. He is a public health physician board certified in pediatrics and preventive medicine, and he continues to practice clinically as a pediatric hospitalist. After graduating from the University of Virginia, he attended the VCU School of Medicine, and completed residencies at VCU and Johns Hopkins

University, where he also received a Master's in Public Health. He is an Affiliate Faculty member at VCU, where he regularly serves as an advisor and preceptor to graduate and medical students.

Governor McAuliffe appointed Dr. Avula to the State Board of Social Services in 2013 and he served as Board Chair from 2017 to 2019. He is the Immediate Past Chair of the Richmond Memorial Health Foundation, and serves on several other community boards. He has been named one of Richmond's "Top Docs" every year from 2013-2019. He is a recent recipient of the Virginia Center for Inclusive Community's Humanitarian Award, and in 2019, he was a Richmond Times Dispatch 'Person of the Year' honoree.

At home, Danny devotes his time to life with his wife and five kids, and to learning how to be a good neighbor in the rapidly changing community of Church Hill, where he has lived for the past fifteen years. His work has been featured nationally by the CDC, The New York Times, NPR, PBS Newshour, Christianity Today, and MSNBC.