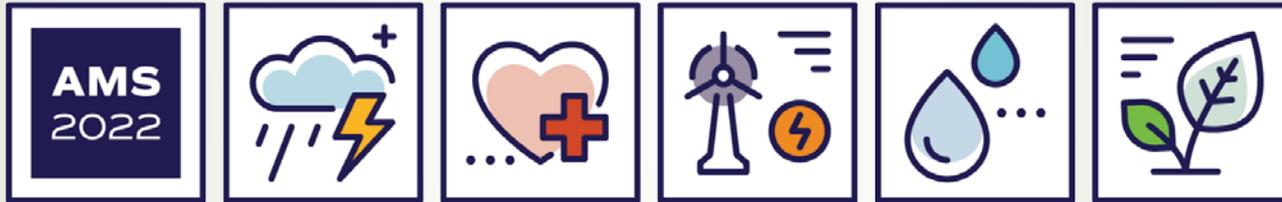


# 2022 Awards

AMERICAN METEOROLOGICAL SOCIETY



102nd ANNUAL MEETING | HOUSTON & ONLINE

# AMS FELLOW

## Dennis D. Baldocchi



Professor, University of California, Berkeley, California

D. Baldocchi is a professor of biometeorology at UC Berkeley. Prior work experience includes being a physical scientist at the Atmospheric Turbulence and Diffusion Division of NOAA, in Oak Ridge, TN. Education includes a B.S. in atmospheric science from UC Davis and a Ph.D. in bio-environmental engineering from the University of Nebraska.

# AMS FELLOW

## Mian Chin

Physical Scientist, NASA/GSFC, Greenbelt, Maryland



Mian Chin is a physical scientist in the Atmospheric Chemistry and Dynamics Laboratory at NASA GSFC. Her major research areas include aerosol-chemistry-weather-climate interactions, regional and global air quality, and seasonal to decadal variability of atmospheric composition. Currently she is a co-lead of Aerosol Comparisons between Observations and Models (AeroCom) and Atmospheric Composition and the Asian Monsoon (ACAM) activities. She has received exceptional achievement awards from NASA and NASA GSFC and is an elected AGU fellow.

# AMS FELLOW

## Jennifer M. Collins



Professor, University of South Florida, Tampa, Florida

Dr. Jennifer Collins (professor, Ph.D. from University College London) researches at the intersection between physical and social sciences. She investigates the interaction between largescale climatic patterns and hurricane activity. She also examines hurricane evacuation behavior. She has three books: Florida Weather and Climate: More Than Just Sunshine, Hurricanes and Climate Change (ed.), and Hurricane Risk (ed.). She is a dedicated mentor to students serving as PI/Co-PI for multiple research experience for undergraduate programs.

# AMS FELLOW

## Paul Douglas



Meteorologist, AerisWeather, Praedictix and Climatrends LLC., Eden Prairie, Minnesota

Paul Douglas is a Penn State meteorologist with 45 years of television and radio experience. A serial entrepreneur, Douglas has launched 7 businesses, including Praedictix (consulting), AerisWeather (weather data) and Climatrends (climate scenario analysis). With a daily Star Tribune weather column and a talk show on WCCO Radio, Douglas has authored 4 books, including "Caring for Creation, the Evangelical's Guide to Climate Change and a Healthy Environment" and "A Kid's Guide to Saving the Planet".

# AMS FELLOW

## Andreas H. Fink

Professor, Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research, Karlsruhe, Germany



Dr. Andreas Fink received his Ph.D. from the University of Cologne (Germany) and has been at the Institute of Meteorology and Climate Research at Karlsruhe Institute of Meteorology since 2013. Dr. Fink's research focuses on tropical meteorology, with a regional focus on Africa, and on the better understanding and practical predictability of weather phenomena like tropical cyclones, heat waves, and tropical rainfall systems. He is active in field-based interdisciplinary research in Africa and Southeast Asia and in capacity development of African researchers at various stages of their career. Dr. Fink is also passionate about his role as a teacher-scholar.

# AMS FELLOW

## Robert G. Goldhammer

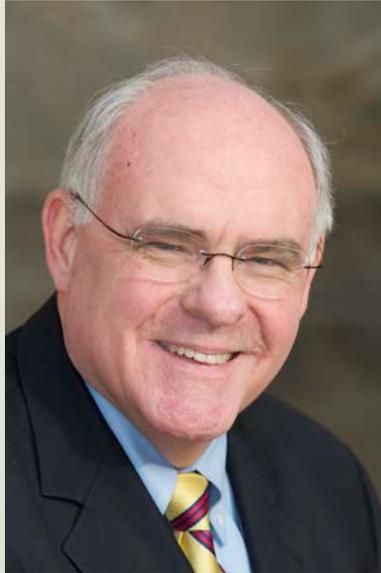


Certified Emergency Manager, International Association of Emergency Managers, Falls Church, Virginia

Mr. Goldhammer's career in public safety began in 1969. Bob has been a certified emergency manager through the International Association of Emergency Managers (IAEM) since 1994. Bob has a masters in teachers in geosciences. He currently does a variety of activities related to emergency preparedness. Bob is the IAEM liaison to the National Weather Service WeatherReady Nation's program. He is the former chairperson of the AMS Emergency Management Committee.

# AMS FELLOW

## Stephen W Harned



Stephen Harned CCM Consulting, Leland, North Carolina

Steve Harned has over a half century of service in three sectors of our enterprise: public (NOAA/National Weather Service), private (Atlantic States Weather, Inc.), and military (Naval Reserve). During his career with the NWS he held various leadership, program, and forecasting positions. Concurrently he served in the Naval Reserves as a meteorological/oceanographic officer. Finally, he founded and operated Atlantic States Weather, Inc., a meteorological consulting firm specializing in providing forensic services.

# AMS FELLOW

## Andy Heymsfield

Senior Scientist, National Center for Atmospheric Research, Boulder, Colorado



When I was growing up in New York City and heard of a forecast for snow overnight, I would invariably get up during the night and watch the snow fall past the street lights. I was mesmerized by the snow falling past the lights, watching individual snowflakes pass through the light beam. I wondered why it was snowing and how the snow was forming. That formed the basis for my continuing interest in how snow formed, what comprised the clouds that produced the snow, and the field of cloud physics.

# AMS FELLOW

## Gerald M Heymsfield



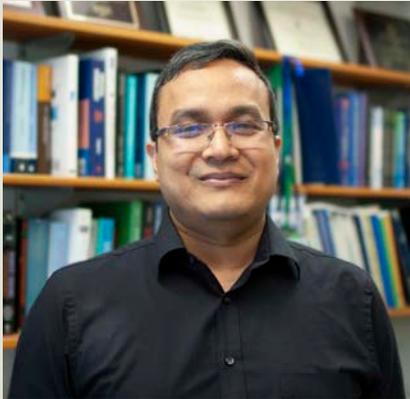
Senior Scientist, NASA Goddard Space Flight Center,  
Greenbelt, Maryland

Gerald Heymsfield is a senior scientist in the Mesoscale Atmospheric Processes Laboratory at the Goddard Space Flight Center. His research focuses on convection, hurricanes, frontal systems using high-altitude NASA airborne Doppler weather radars and spaceborne measurements. He started and leads the high-altitude radar group at Goddard and he is currently one of the leads on the NASA IMPACTS mission. He received his Ph.D in meteorology from the University of Oklahoma and a M.S. in geophysical sciences from the University of Chicago.

# AMS FELLOW

## Faisal Hossain

Professor, University of Washington, Seattle,  
Washington



Faisal Hossain is a John R. Kiely endowed professor at the University of Washington Department of Civil and Environmental Engineering. He received his Ph.D. from The University of Connecticut. His research interests are hydrologic remote sensing, water management and weather and climate model applications for food-water-energy nexus. He is the recipient of awards such as the American Geophysical Union (AGU) Charles Falkenberg Award (2012), ASCE Walter Huber Award (2015), and American Geophysical Union International Award (2020).

# AMS FELLOW

## Everette Joseph

Director, National Center for Atmospheric Research,  
Boulder, Colorado



Dr. Joseph is currently director of NCAR. Previously he was director of the ASRC at SUNY Albany, Howard University Program in Atmospheric Science and Beltsville Center at Howard. He also taught and trained numerous Ph.D. students most from minoritized groups and studied a range of atmospheric physics and chemistry topics such as aerosol cloud interaction. He has extensive community service as a member of NAS BASC, the NOAA SAB and other boards and committees.

# AMS FELLOW

## Troy M. Kimmel, Jr.

Senior Lecturer, University of Texas at Austin,  
Austin, Texas



In addition to his 33 years of teaching, Troy serves as University/Incident Response Meteorologist/UT Campus Safety & Security, Meteorologist/KOKE FM Radio and Incident Response Meteorologist/Austin FC Soccer. He holds the Certified Broadcast Meteorologist certification and serves as chair/CBM Exam Review Committee with past service on the Board of Broadcast Meteorology and the Board on Women and Minorities. BS geography, Texas A & M University.

# AMS FELLOW

## Valliappa (Lak) Lakshmanan



Director for Data Analytics and AI Solutions, Google LLC, Kirkland, Washington

Lak is the director for data analytics and ai solutions on Google cloud. Before Google, Lak was a director of Data Science at Climate Corporation and a research scientist at the NOAA Cooperative Institute at the University of Oklahoma. His research focuses on pattern recognition and machine learning (ML) methods in severe weather forecasting. His current work includes the incorporation of weather information in ML models that inform a variety of industries and human activities.

# AMS FELLOW

## Xin-Zhong Liang

Professor, University of Maryland, College Park,  
Maryland



Xin-Zhong Liang is a professor at the University of Maryland and earlier at the University of Illinois. He is the head of the Earth System Model Research and Development Laboratory in the Earth System Science Interdisciplinary Center. His principal research topics include developing and applying integrated earth system models to study climate variations and environmental impacts, building decision support systems for human-nature interactions, and projecting coupled system changes to address food-energy-water nexus and sustainability issues.

# AMS FELLOW

## Julie K. Lundquist

Associate Professor, University of Colorado Boulder,  
Renewable and Sustainable Energy Institute, Boulder,  
Colorado



Prof. Lundquist leads an interdisciplinary research group in the Department of Atmospheric and Oceanic Sciences, University of Colorado, with a joint appointment at the National Renewable Energy Laboratory. She is a fellow at CU's Renewable and Sustainable Energy Institute. Her research group uses both observational and computational approaches to understand the dynamics of the atmospheric boundary layer, with emphasis on atmospheric turbulence and atmospheric interactions with wind energy.

# AMS FELLOW

## Gudrun Magnusdottir



Professor, University of California Irvine, Irvine, California

Dr. Gudrun Magnusdottir is one of the founding faculty of the Earth System Science department at the University of California Irvine. She works on large-scale atmospheric dynamics, especially interactions with other components of the climate system possessing longer memory than the atmosphere. With her group, she examines how remote conditions affect local extremes in temperature and precipitation using observations, specifically designed model experiments and analysis of coordinated large ensembles of historical and projected climate simulations

# AMS FELLOW

## Sara C. Pryor

Professor, Cornell University, Ithaca, New York



Sara C. Pryor is a professor at Cornell University. Her work includes experimental and numerical tools and seeks to make better projections of regional climate, build climate change resilience and develop sustainable energy solutions. She serves a range of climate advisory panels (e.g. U.S. National Climate Assessment, IPCC and the World Climate Research Programme) and energy agencies (e.g. International Energy Agency). Sara is author of over 200 journal articles and editor of two books.

# AMS FELLOW

## Liz Ritchie

Professor and Associate Dean (Education), University of New South Wales Canberra, Canberra, New South Wales



Dr. Liz Ritchie is a professor of atmospheric sciences and associate dean at UNSW Canberra, Australia. Her research focused on the genesis, structure and intensity change, rainfall processes, landfall impacts, and climate interaction of tropical cyclones and other extreme mesoscale weather systems. She previously served on the AMS Council and the AMS Tropical Meteorology and Tropical Cyclones Committee and is editor of Weather and Forecasting. She currently serves on the WMO/WWRP TMR Working Group.

# AMS FELLOW

## Hui Su

Principal Scientist, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California



Hui Su is a principal scientist at the Jet Propulsion Laboratory, California Institute of Technology. She received her Ph.D. in atmospheric sciences from the University of Washington. Her research focuses on tropical convection and its interaction with large-scale dynamics. Dr. Su has published ~120 peer-reviewed articles. She serves on the AMS Committee on Tropical Meteorology and Tropical Cyclones and US CLIVAR Process Study and Model Improvement Panel. She is an editor of Geophysical Research Letters.

# AMS FELLOW

## Guiling Wang



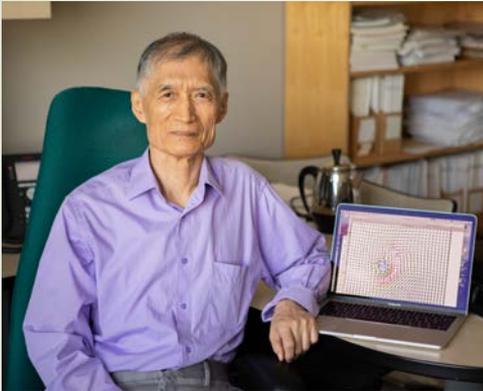
Professor, University of Connecticut, Storrs, Connecticut

Dr. Wang is professor of environmental engineering at UConn. She received her Ph.D. degree in hydroclimatology from MIT in 2000. Her research investigates biosphere-atmosphere interactions, hydrological cycle and extremes, and climate change impact on water resources and agriculture, and has led to over 110 journal articles. She participates in the Fifth National Climate Assessment as a chapter author, serves on the AMS Committee on Hydrology, and is associate editor for GRL and Journal of Hydrometeorology.

# AMS FELLOW

## Qin Xu

Senior Scientist, National Severe Storms Laboratory,  
Norman, Oklahoma



Qin Xu (Ph.D. meteorology, Penn State University, 1984) is a senior scientist in the Forecast Research Development Division at NOAA/NSSL. His research areas include dynamic theories and diagnostic methodologies in synoptic-scale and mesoscale meteorology, radar data quality control, and data assimilation techniques for improving analyses and predictions of severe storms. He has published 94 first-authored and 46 co-authored peer-reviewed papers, received the AMS Editor's Award in 1996 and the NOAA's Distinguished Career Award in 2016.

# AMS FELLOW

## Sepideh Yalda



Professor and Director of the Center for Disaster Research and Education, Millersville University, Millersville, Pennsylvania

Dr. Sepi Yalda is a professor of meteorology and the director of the Center for Disaster Research and Education. She has served on several boards and committees for the FEMA's EMI, UCAR, AMS, and PEMA. She has worked on funded projects on information technology, science education, emergency management planning and education for justice. Dr. Yalda is an official consultant for the United Nations. She earned her Ph.D. in meteorology from Saint Louis University in 1997.

# The Robert E. Horton Lecturer in Hydrology

## Francina Dominguez

Associate Professor, University of Washington, Seattle, Washington

*For developing data analysis techniques that enabled important advances in the scientific and operational application of terrestrial remote sensing products*



Dr. Francina Dominguez is a University of Illinois scholar and associate professor in the Department of Atmospheric Sciences. She received her Ph.D. in civil engineering at the University of Illinois . Two questions guide her research:

- 1) Can we provide hydrologically-relevant information for communities to make better decisions in a changing climate?
- 2) How does the land surface modify the overlying atmosphere and affect processes such as floods and droughts?

# The Walter Orr Roberts Lecturer

## Allison L. Steiner

Professor, University of Michigan, Ann Arbor, Michigan

*For outstanding research in biosphere-atmosphere interactions and their influence on atmospheric chemistry, weather, and climate*



Allison Steiner is a professor of atmospheric sciences in the Department of Climate and Space Sciences and Engineering and the Department of Earth and Environmental Sciences at the University of Michigan. She received her B.S. in chemical engineering from Johns Hopkins University and her Ph.D. in atmospheric sciences from Georgia Institute of Technology. Her research uses and develops state-of-the-art models to explore the interactions of the biosphere and atmosphere, with the goal of understanding the natural versus human influence on climate and atmospheric chemistry.

# The Bernhard Haurwitz Memorial Lecturer

## Isla R. Simpson

Scientist, Climate and Global Dynamics Laboratory, National Center for Atmospheric Research, Boulder, Colorado

*For novel approaches in advancing fundamental knowledge of the dynamics of stratosphere-troposphere coupling and the response of atmospheric circulation and variability to climate forcing*



After receiving her Ph.D. from Imperial College London in 2009, Isla subsequently worked as a postdoctoral fellow at the University of Toronto and Lamont-Doherty Earth Observatory. Since 2015 she has worked as a scientist at the National Center for Atmospheric Research. Isla works on large-scale atmospheric dynamics and global climate modelling, aiming to understand dynamical mechanisms involved in climate variability and change and assess their representation in global climate models.

# Local Student Chapter of the Year Award

*For finding new and creative ways to provide community service, professional development, and social opportunities to its members*



**Northern Vermont University -  
Lyndon Student Chapter**

# The Charles L. Mitchell Award

## Daniel G. Kottlowski

Senior Meteorologist, AccuWeather Inc., State College, Pennsylvania

*For exceptional forecast services provided to stakeholders for over 40 years, as exemplified through his unwavering support of the broadcast sector and training of meteorologists*



After receiving his B.S. degree from Purdue University in 1976, Dan became an operational weather forecaster for AccuWeather. His 45-year career includes being director of forecaster training for 37 years, senior TV weather briefer working with dozens of on-air TV meteorologists across the U.S. and Canada and a company certified on-air radio and TV personality. Dan has also focused his forecasting career on tropical meteorology and continues to be lead hurricane forecaster for AccuWeather.

## Editor's Award - *Bulletin of the American Meteorological Society*

# Robert J. Trapp

Professor and Head, University of Illinois at Urbana-Champaign, Urbana, Illinois

*For numerous thorough and insightful reviews that resulted in substantially improved manuscripts*



Robert J. Trapp is a professor and head of the Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign. He conducts research on severe convective storms, their attendant hazards, and their connection with climate change and variability. He has also authored a textbook “Mesoscale-Convective Processes in the Atmosphere,” published by Cambridge University Press.

## Editor's Award - *Journal of Applied Meteorology and Climatology*

# Shiyuan Zhong

Professor, Michigan State University, East Lansing, Michigan

*For providing multiple, timely, thorough reviews and thoughtful advice as an Associate Editor*



Dr. Shiyuan (Sharon) Zhong is a professor of atmospheric sciences at Michigan State University. She joined the faculty in 2006 after working as an associate professor at University of Houston and a senior research scientist at the Pacific Northwest National Laboratory. She holds a Ph.D. in atmospheric sciences from Iowa State University. Professor Zhong's research is focused on boundary-layer processes and land-atmosphere interactions, particularly those involving complex terrains and wildfires.

# Editor's Award - *Journal of the Atmospheric Sciences*

## Manuela Lehner

Postdoctoral Researcher, University of Innsbruck, Innsbruck, Austria

*For providing constructive and thorough reviews that improved the organization, clarity, and content of manuscripts*



Manuela Lehner is a postdoctoral researcher at the Department of Atmospheric and Cryospheric Sciences of the University of Innsbruck. She holds a Ph.D. in atmospheric sciences from the University of Utah. Her research focuses on processes within the atmospheric boundary layer in mountainous terrain, including thermally driven winds, flows modified by the topography, turbulent exchange, and the representation of these processes in numerical models.

# Editor's Award - *Journal of the Atmospheric Sciences*

## **Maria Gehne**

Associate Scientist, CIRES, University of Colorado, Boulder, Colorado

*For multiple concise, thoughtful, and thorough reviews*



Dr. Maria Gehne is an associate scientist at the Cooperative Institute for Environmental Research at the University of Colorado, Boulder. Before joining CIRES she worked as a postdoctoral fellow in the Climate Analysis Section at the National Center for Atmospheric Research. Her research focuses on large scale tropical convection and its predictability and representation in numerical weather forecasts. She received her Ph.D. in 2012 from New York University in atmosphere ocean science and mathematics.

# Editor's Award - *Journal of Climate*

## **Russell Blackport**

Postdoctoral Research Scientist, Canadian Centre for Climate Modelling and Analysis, Environment and Climate Change Canada, Victoria, Canada

*For consistently delivering detailed, informative and timely reviews*



Dr. Russell Blackport is a postdoctoral research scientist at the Canadian Centre for Climate Modelling and Analysis. He received his Ph.D. from the University of Toronto and subsequently worked as a postdoctoral research fellow at the University of Exeter. His research is on climate variability and change, with a focus on the links between the Arctic and midlatitudes.

# Editor's Award - *Journal of Climate*

## **Antonietta Capotondi**

Physical Oceanographer, University of Colorado, CIRES and NOAA/PSL,  
Boulder, Colorado

*For numerous high-quality and thorough reviews*



Antonietta Capotondi is a physical oceanographer at the University of Colorado/CIRES, and the NOAA Physical Sciences Laboratory. Her research aims at understanding the role of the ocean in large-scale climate variability and predictability, focusing on El Niño Southern Oscillation, Pacific decadal variability, and the influence of climate variability and change on the physical drivers of marine ecosystems. She serves in several national and international committees, and is co-chair of the International CLIVAR Pacific Region Panel.

# Editor's Award - *Journal of Climate*

## **Kazuaki Nishii**

Associate Professor, Graduate School of Bioresources, Mie University, Mie, Japan

*For particularly insightful and careful reviews*



Dr. Nishii is an associate professor of meteorology at Mie University in Mie, Japan. He received his Ph.D. from the University of Tokyo in 2006. His research interests include storm tracks, blockings, teleconnection patterns, and stratospheric sudden warmings.

# Editor's Award - *Journal of Hydrometeorology*

## **Lawrence Mudryk**

Associate Scientist, UResearch Scientist, Environment and  
Climate Change Canada, Toronto, Canada

*For thorough and constructive reviews of highly technical manuscripts*



Dr. Lawrence Mudryk is a research scientist with Environment and Climate Change Canada's Climate Research Division in Toronto, Canada. He received his Ph.D. in astrophysics from the University of Toronto in 2007 before retooling for a career in climate science. Lawrence's research focuses on snow and sea ice variability and trends as well as the downstream impacts of these cryospheric changes.

# Editor's Award - *Journal of Hydrometeorology*

## **Romina C. Ruscica**

Research Assistant, Research Centre for the Sea and the Atmosphere,  
CIMA, Buenos Aires, Argentina

*For thorough and insightful reviewing of multiple Journal of Hydrometeorology manuscripts*



Romina received a B.S/M.S degree in physics in 2009 and a Ph.D. degree in atmospheric sciences in 2015 both from the University of Buenos Aires, Argentina. She was a postdoctoral fellow and since 2016, she has been a permanent research assistant within the CIMA in Buenos Aires, Argentina. Her research interests include South American climate, land-atmosphere interactions, climate modelling, EO satellite estimates, water cycle processes and climate uncertainty.

# Editor's Award - *Journal of Physical Oceanography*

## Leah Johnson

Postdoctoral Research Associate, Brown University, Providence, Rhode Island

*For several very perceptive and helpful reviews in a variety of sub-disciplines*



Leah Johnson is a postdoctoral research associate at the Department of Earth, Environmental and Planetary Sciences at Brown University. Her work combines theory with observational data and numerical models to understand dynamics in the ocean surface boundary layer, with a particular focus on multiscale interactions between submesoscale processes and the turbulent environment they exist in. She received a Ph.D. in oceanography from the University of Washington.

## Editor's Award - *Journal of Atmospheric and Oceanic Technology*

# Bruce Ingleby

Senior Scientist, European Centre for Medium-Range Weather Forecasts,  
Reading, UK

*For timely and excellent reviews provided over the years*



Bruce Ingleby works on the quality, assimilation and impact of in situ observations at ECMWF, and previously at the UK Met Office. He contributes to European and WMO expert teams on observations and tries to bridge the gap between numerical weather prediction and the observation community.

# Editor's Award - *Monthly Weather Review*

## **Andrew C. Winters**

Assistant Professor, University of Colorado Boulder, Boulder, Colorado

*For consistently providing constructive, insightful and timely reviews for a large number of manuscripts*



Dr. Andrew Winters is an assistant professor of atmospheric and oceanic sciences at the University of Colorado Boulder. Andrew's research investigates the dynamics, variability, and predictability of synoptic-scale environments conducive to high-impact weather events at middle latitudes. He holds a Ph.D. in atmospheric and oceanic sciences from the University of Wisconsin–Madison (2015), and spent 4 years as a postdoctoral fellow at the University at Albany before arriving at CU.

# Editor's Award - *Weather and Forecasting*

## **Michael J. Brennan**

Branch Chief, Hurricane Specialist Unit, NOAA/National  
Hurricane Center, Miami, Florida

*For providing numerous superb reviews over many years in areas relating to tropical meteorology and operational prediction*



Michael Brennan is the branch chief of the Hurricane Specialist Unit at NOAA's National Hurricane Center. He received his Ph.D. in atmospheric science from North Carolina State University, and has worked for the National Weather Service since 2007. His research interests include observational targeting, quantifying the impact of supplemental observations on tropical cyclones analyses and forecasts, and the use of satellite ocean vector winds in marine and tropical cyclone analysis.

# Editor's Award - *Weather and Forecasting/Monthly Weather Review/Journal of Applied Meteorology and Climatology*

## **John T. Allen**

Associate Professor, Central Michigan University, Mt. Pleasant, Michigan



*For contributing an exceptional number of excellent reviews spanning a broad range of scientific areas and across several AMS journals*

John Allen is an associate professor of meteorology at Central Michigan University. His work focuses on statistical and process-based methods to bridge the gap between large scale climate drivers, synoptic systems and the frequency and intensity of severe weather phenomena such as tornadoes and hail. He earned his Ph.D. from the University of Melbourne, Australia in 2013. He is author or co-author of more than 50 peer-reviewed publications.

# Editor's Award - *Weather and Forecasting*/Monthly *Weather Review*/*Journal of Applied Meteorology and Climatology*

## **Ryan Lagerquist**

Research Scientist, CIRA and NOAA GSL/NOAA's Global Systems Laboratory (GSL),  
Boulder, Colorado



*For contributing numerous rigorous and constructive reviews in  
the areas of machine learning and artificial intelligence across  
three journals*

Dr. Ryan Lagerquist is a research scientist with CIRA and NOAA GSL, based in Boulder, Colorado. He has been working at the intersection of machine learning and atmospheric science for 10 years. His current interests are severe-weather prediction, model emulation with ML, and explainable/trustworthy ML. Outside of science, Ryan is a father of two cats and can generally be found either biking or running in the mountains.

# Editor's Award - *Weather, Climate, and Society*

## Castle Williams

Social Science Contractor, Cherokee Nation Strategic Solutions, Athens, Georgia

*For thoughtful and thorough reviews, always delivered from an encouraging and positive perspective*



Dr. Castle Williams is the social science contractor with Cherokee Nation Strategic Solutions supporting NOAA/OAR Weather Program Office's (WPO) Social Science and FACETs programs. Castle's dissertation offered a definition of 'message consistency' for the weather enterprise and explored the implications of inconsistent Convective Outlook graphics on lay public end users. Castle is currently a member of the AMS Committee on Effective Communication of Weather and Climate Information and the Board on Enterprise Communication.

# Editor's Award - *Weather, Climate, and Society*

## Ashlinn K. Quinn

Research Scientist, Berkeley Air Monitoring Group, Fort Collins, Colorado

*For helping the authors write an outstanding paper by providing a review that identified the salient issues*



Ashlinn Quinn, Ph.D. is a research scientist with Berkeley Air Monitoring Group in Fort Collins, Colorado. An environmental epidemiologist, she focuses on indoor household air pollution generated from cooking with solid fuels and on the health impacts of climate change. She has analyzed the health effects of air pollution on birth weight, infant pneumonia, and blood pressure - and is always excited to discuss study designs related to climate, air pollution, and human health.

# The Award for Early-Career Professional Achievement

## Joseph E. Trujillo Falcón

Graduate Research Assistant, CIWRO/NOAA NSSL/NWS SPC, Norman, Oklahoma

*For innovative and extensive collaboration in risk communication for Spanish-speaking communities and leadership as an exceptional student member across multiple AMS boards and committees*



Joseph Trujillo Falcón is a GRA at CIWRO supporting NOAA's National Severe Storms Laboratory and the NOAA/NWS Storm Prediction Center. Joseph examines how Spanish-speaking communities receive, comprehend, and respond to life-threatening weather and climate hazards. Within the AMS, he founded and chairs the Committee for Hispanic and Latinx Advancement. Joseph earned a double degree in meteorology (B.S.) and Spanish (B.A.) from Texas A&M University and received his M.A. in communication from the University of Oklahoma.

# The Henry G. Houghton Award

## Mark D. Zelinka

Atmospheric Scientist, Lawrence Livermore National Laboratory,  
Livermore, California

*For innovative advances in understanding the critical involvement of clouds to achieve a better understanding of climate interactions*



Mark Zelinka is an atmospheric scientist at Lawrence Livermore National Laboratory. His research seeks to improve predictions of how much global warming accompanies increasing greenhouse gases. In particular, his work focuses on feedbacks caused by changes in clouds with warming, a primary source of climate change uncertainty. He holds a B.S. in meteorology from Pennsylvania State University and an M.S. and Ph.D. in atmospheric sciences from University of Washington.

# The Nicholas P. Fofonoff Early- Career Award

## Andrew L. Stewart

Associate Professor, University of California, Los Angeles, California

*For his pioneering research discoveries regarding the dynamics of oceanic currents, eddies, and sea ice in polar regions*



Andrew Stewart is an associate professor in the Department of Atmospheric and Oceanic Sciences at UCLA. His research explores the physical processes that support the ocean circulation, particularly around the margins of Antarctica and in the abyssal ocean, via a combination of theoretical analysis and numerical simulations. Major themes include the dynamics of mesoscale eddies, exchanges of water masses across the Antarctic shelf break, and ventilation of the abyssal ocean via Antarctic Bottom Water production.

# The Clarence Leroy Meisinger Award

## Isla R. Simpson

Scientist, Climate and Global Dynamics Laboratory, National Center for Atmospheric Research, Boulder, Colorado

*For advancing scientific understanding through studies of the fundamental mechanisms that govern tropospheric and stratospheric circulation influences on surface climate variability and change*



After receiving her Ph.D. from Imperial College London in 2009, Isla subsequently worked as a postdoctoral fellow at the University of Toronto and Lamont-Doherty Earth Observatory. Since 2015 she has worked as a scientist at the National Center for Atmospheric Research. Isla works on large-scale atmospheric dynamics and global climate modelling, aiming to understand dynamical mechanisms involved in climate variability and change and assess their representation in global climate models.

# The Award for Excellence in Science Reporting by a Broadcast Meteorologist

## **Anthony Yanez**

Meteorologist, KPRC2 Television, Houston, Texas



*For combining journalism, science, and advanced technology to explain and gain interest in weather and ocean topics pertaining to Southern California*

Anthony Yanez is an Emmy winning morning weekday meteorologist in Houston, Texas at KPRC2. He moved from Los Angeles after working for KNBC six and a half years. Yanez earned the 2020 best weathercast by the Radio & Television New Association of Southern California. He currently serves on the AMS Station Scientist Committee and is a published children's book author.

# The June Bacon-Bercey Award for Broadcast Meteorology

## **Danielle Breezy**

Chief Meteorologist, WKRN-TV, Nashville, Tennessee



*For exceptional life-saving coverage during the March 2-3, 2020 Middle Tennessee tornado outbreak and sustained efforts to educate the community about severe weather safety*

Danielle Breezy has been the chief meteorologist at WKRN-TV in Nashville, TN since 2016. Prior to her arrival, her experience includes Boston, Dallas, Oklahoma City, along with Salisbury, MD. She is an Edward R. Murrow Award winner and was named one of Nashville Business Journal's 40 under 40 in 2020. Danielle has been a member of the AMS Board of Broadcast Meteorologists for the past 3 years and has been named the chair of the board in 2022.

# The Award for Distinguished Science Journalism in the Atmospheric and Related Sciences

## Heather Goss

Editor-in-Chief, Eos, American Geophysical Union, Washington, DC



*For illustrating in a scientifically accurate way how advances in lightning detection positively impact public safety through improved forecasting and verification of tornadoes and wildfires*

Heather Goss has served as the editor in chief of Eos, the science news magazine published by AGU, since 2018. She has been an editor of science, arts, and local news at publications such as Air & Space/Smithsonian magazine and DCist. She has an undergraduate degree from Ohio Wesleyan University and a law degree from American University. Heather lives in Washington, D.C. and is also the founder of the 501(c)(3) arts organization Exposed DC.

# The Louis J. Battan Author's Award - K-12

## Jessica Stoller-Conrad

Science Writer and Author, Pasadena, California

*For “The Big Book of Weather”, which balances accessible, scientific descriptions with visual and experiential learning, and motivates budding investigators to understand the hows and whys of atmospheric phenomena*



Jessica Stoller-Conrad is a science writer specializing in simple and engaging explanations of science concepts for young audiences. She has also written about the science of food, health, and nature for adult audiences at several top media organizations and universities. Jessica holds a bachelor's degree in biology from Saint Mary's College and a master's degree in biological sciences from the University of Notre Dame. She lives with her husband and two sons in Southern California.

# The Louis J. Battan Author's Award - Adult

## Tim Woollings

Professor, University of Oxford, Oxford, UK

*For "Jet Stream", a very readable and scientifically accurate account of large-scale atmospheric dynamics, told from the perspective of a drifting weather balloon*



Tim Woollings is a professor of physical climate science at the University of Oxford, tutor in physics at Pembroke College, and the Oxford joint chair of the Met Office Academic Partnership. His research work centres on the dynamics of the midlatitude jet streams and how these interact with both tropical and polar regions. He is motivated by problems on all timescales, from understanding individual events to improving seasonal predictions and long term climate projections.

# Special Award

## Arizona Department of Environmental Quality and United States Forest Service

*For critical ground-breaking work creating and fielding a platform providing for the health and safety of Arizona residents with early and ongoing wildfire smoke forecasts*



The Arizona Department of Environmental Quality's (ADEQ) Smoke Management team, in coordination with the United States Forest Service, developed a new wildfire smoke forecast for the public. This forecast provides early and ongoing smoke information for communities affected by wildfire smoke, allowing residents to make informed decisions to protect their health. Since implementing the forecast in June 2020, ADEQ has issued 124 smoke forecasts for 16 wildfires throughout Arizona.

# The Banner I. Miller Award

## John A. Knaff

Research Scientist, NOAA Center for Satellite Applications and Research/CIRA  
Colorado State University, Fort Collins, Colorado

*For groundbreaking work in developing a new application to significantly improve the prediction of rapid intensification of tropical cyclones in the Western North Pacific*



John Knaff is a researcher and satellite algorithm developer employed by NOAA's Center for Satellite Applications and Research. He has 25+ years of experience in the areas of satellite remote sensing and tropical meteorology and is a recognized tropical cyclone expert. His research, algorithm development and statistical and statistical-dynamic models focuses on improving the utility of satellite-based observations, combined with other readily available information, to monitor, diagnose and forecasts tropical weather phenomenon and extreme events.

# The Banner I. Miller Award

## Charles R. Sampson

Meteorologist, NRL Monterey, California

*For groundbreaking work in developing a new application to significantly improve the prediction of rapid intensification of tropical cyclones in the Western North Pacific*



Charles "Buck" Sampson is a 34-year veteran of the Naval Research Lab in Monterey CA. His area of focus is developing guidance for operational forecasters at the Joint Typhoon Warning Center.

# The Banner I. Miller Award

## Kate Musgrave

Research Scientist, Cooperative Institute for Research in the Atmosphere,  
Colorado State University, Fort Collins, Colorado

*For groundbreaking work in developing a new application to significantly improve the prediction of rapid intensification of tropical cyclones in the Western North Pacific*



Dr. Kate Musgrave is a research scientist and the tropical cyclone group lead at the Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University. Her research focuses on tropical cyclone structure and evolution and the representation of tropical cyclones in dynamical and statistical models. Dr. Musgrave earned Ph.D. and M.S. degrees in atmospheric science from Colorado State University and B.S. degrees in computer engineering and interdisciplinary studies from the University of Florida.

# The Award for Outstanding Achievement in Biometeorology

## Rong Fu

Professor, University of California, Los Angeles, Los Angeles, California

*For elucidating the critical role of tropical biosphere feedback mechanisms, exceptional mentorship of underrepresented groups in science, and extraordinary service to scientific societies and policymakers*



Rong Fu is a professor in the Department of Atmospheric and Oceanic Sciences, University of California, Los Angeles. She studies the causes of rainfall variability over tropical and subtropical continents, especially the impacts of global climate, terrestrial ecosystem, biomass burning, and oceanic variability on droughts. She is an elected Fellow of the American Meteorological Society, the American Geophysical Union and the American Association for the Advancement of Science.

# The Charles E. Anderson Award

## Melissa A. Burt

Assistant Dean for Diversity, Equity, and Inclusion, Colorado State University,  
Fort Collins, Colorado

*For enduring efforts to broaden awareness, spark creativity, and expand opportunities, while promoting diversity, equity, and inclusion within the geosciences community and beyond*



Dr. Melissa Burt is the assistant dean for diversity and inclusion in the Walter Scott, Jr. College of Engineering, and a research scientist in the Department of Atmospheric Science at Colorado State University. She leads and facilitates diversity, equity, and inclusion efforts to strengthen a culture of inclusion and belonging. She received a B.S. in meteorology from Millersville University and a M.S. and Ph.D. in atmospheric science from Colorado State University.

# The Helmut E. Landsberg Award

## Petra M. Klein

Executive Associate Dean, University of Oklahoma, Norman, Oklahoma

*For decades of sustained leadership in the field of urban meteorology and exemplary contribution to experimental investigation of flow and turbulence characteristics in urban areas*



Dr. Petra Klein is the executive associate dean in the College of Atmospheric and Geographic Science at the University of Oklahoma (OU) and a professor in OU's School of Meteorology. She received a diploma in physics and a Ph.D. in civil engineering from the University of Karlsruhe in Germany and was a post-doc at ETH Zurich in Switzerland. Her research focuses on the impacts of cities on flow and dispersion in the atmospheric boundary layer.

# The Henry T. Harrison Award for Outstanding Contributions by a Consulting Meteorologist

## **John Toohey-Morales**

Chief Meteorologist, WTVJ NBC6, Miramar, Florida

*For a career of exemplary service as a Certified Consulting Meteorologist*



John Toohey-Morales is an atmospheric and environmental scientist, and a Fellow of the AMS. He is chief meteorologist for WTVJ NBC6-TV in Miami, and the longest tenured weathercaster in South Florida. He was inducted into the National Academy of Television Arts and Sciences Silver Circle for distinguished work in broadcasting. He serves on the Cornell Atkinson Center for Sustainability external advisory board, is vice president of the CLEO Institute's board of directors, and an editorial fellow for the Bulletin of the Atomic Scientists.

# The Award for Outstanding Contribution to the Advance of Applied Meteorology

## Prabhat Kumar

Professor, MIT World Peace University, Pune, India

*For innovative concepts in developing the Pre-Hail Detection Algorithm and cloud seeding techniques to enhance weather modification and mitigation to agriculture and other fields*



Dr. Prabhat Kumar received a Ph.D. in mathematics from Banaras Hindu University, India in 1973 for his researches in fluid mechanics and magnetohydrodynamics. He served as a meteorologist in the Indian Air Force for 22 years and subsequently retired as chair, Board of Studies, professor and head, Department of Mathematics, MIT-World Peace University, India. He authored two books, chapters in two books and published more than 65 research articles. He has received eight national and international awards.

# The Syukuro Manabe Climate Research Award

## Cecilia Bitz

Professor and Chair, Atmospheric Sciences, University of Washington,  
Seattle, Washington

*For fundamental contributions to polar climate science, including numerical modeling, its role in the global climate system, and causes and consequences of polar climate change*



Cecilia has worked on climate research since she was a graduate student. She often focuses on the role of sea ice in the climate system, and currently is investigating how sea ice and weather forecasts can support safety and food security in northern communities. She has traveled to both the Arctic and Antarctic to make measurement to understand polar climate physics. She enjoys developing numerical models to test hypotheses and improve predictions of climate change.

# The Joanne Simpson Tropical Meteorology Research Award

## Frank D. Marks

Meteorologist, NOAA/AOML, Hurricane Research Division, Miami, Florida

*For outstanding contributions to the understanding and prediction of tropical cyclones through scholarship, field contributions, and community leadership*



Dr. Frank D. Marks serves as a meteorologist with the Hurricane Research Division at NOAA's Atlantic Oceanographic and Meteorology Laboratories since 1980, and director since 2003. He is an adjunct professor in the Department of Atmospheric Sciences at the University of Miami. Marks joined AMS in 1971 as a student member, becoming a full member in 1973, and a Fellow in 2000. Marks was the recipient of the AMS Verner E. Suomi Medal in 2011.

# The Kenneth C. Spengler Award

## Renée A. Leduc

Founder & Principal, Narayan Strategy, Arlington, Virginia

*For fundamental contributions and leadership connecting the weather enterprise, AMS membership, international community, and policymakers, as well as enhancing awareness of radio spectrum management issues*



Renée Leduc is a policy expert who is passionate about translating weather, climate and aerospace topics to decision makers. Since 2013 she has operated Narayan Strategy, a DC-based policy consultancy. Renée was a Fulbright in Malawi and Zimbabwe and engaged rural women in adaptation projects. She was also a PMF in NOAA and advised two NOAA administrators on the agency's satellite programs. Renée has a B.A. from Bates College and an MPP from American University.

# The Robert H. and Joanne Simpson Mentorship Award

## Thomas L. Windham

Senior Advisor, UCAR-NCAR SOARS, Boulder, Colorado

*For visionary and dedicated mentorship of numerous individuals, many from diverse backgrounds, to assist them to realize their full potential*



Thomas L. Windham, psychologist, is a senior advisor to UCAR-NCAR's Significant Opportunities in Atmospheric Research and Science program (SOARS). During his earlier tenure as SOARS inaugural director the program received the 2001 Presidential Award for Excellence in Science, Engineering, and Mathematics Mentoring. Thomas retired from SOARS to serve the NSF director as senior advisor for science and engineering workforce. His numerous local and national recognitions include the 2006 AMS Charles E. Anderson Award.

# The Edward N. Lorenz Teaching Excellence Award

## Don T. Conlee

Professor, Texas A&M University, College Station, Texas

*For demonstrated excellence and devotion to cultivating student success by providing unique hands-on experiences with meteorological instrumentation, immersive international forecasting experiences, and sustained career mentoring*



Don is an instructional professor in the Department of Atmospheric Sciences at Texas A&M University where he has taught since 2009. He specializes in undergraduate teaching and facilitating early undergraduate research experiences. He also designs and mentors high-impact learning experiences and facilities, including study abroad, observations directed studies and research, the Weather Center, and on-demand upper air capability. Don is a retired U.S. Navy METOC (Meteorology and Oceanography) officer, and the former chief scientist of NOAA's National Data Buoy Center.

# The Charles Franklin Brooks Award for Outstanding Service to the Society

## **Pamela G. Emch**

Director, Emch & Associates, Redondo Beach, California

*For over twenty years of sustained spirited and exemplary leadership in the AMS  
Weather, Water, and Climate Enterprise Commission and the entire weather community*



Dr. Emch retired from Northrop Grumman as engineering fellow and is currently director at Emch & Associates. Her career has focused primarily on weather, climate, and environmental remote sensing. She is an AMS Fellow, past commissioner of the AMS Commission on the Weather, Water, and Climate Enterprise, and chair of the Ad Hoc Committee on Oceans, Coasts, and the Blue Economy. She earned her Ph.D. in civil and environmental engineering (water resources) from UCLA.

# The Cleveland Abbe Award for Distinguished Service to the Atmospheric and Related Sciences

## Paul A. Newman

Chief Scientist, NASA Goddard Space Flight Center, Greenbelt, Maryland

*For sustained leadership and service to science resulting in strengthened policy development for the Montreal Protocol, including contributions to the Kigali Amendment*



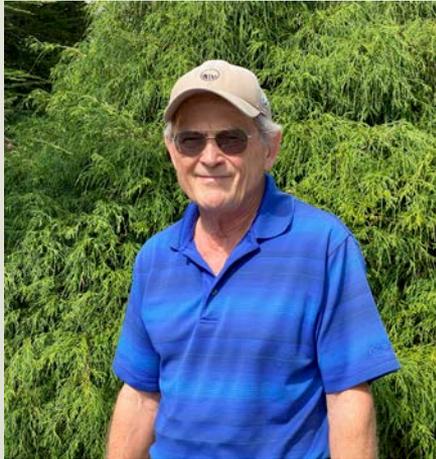
Dr. Paul A. Newman is the chief scientist for earth sciences at GSFC, and a co-chair of the Scientific Assessment Panel for the Montreal Protocol on Substances that Deplete the Ozone Layer, the international treaty banning ozone-depleting substances. A Seattle native, he earned his bachelor's degree in physics at Seattle University in 1978, and his doctorate in physics at Iowa State University in 1984. He has participated in or led more than 20 aircraft field campaigns.

# The Warren Washington Research and Leadership Medal

## **Dr. Bruce A. Wielicki**

Senior Scientist, NASA (retired), Hampton, Virginia

*For sustained excellence in research and leadership in the understanding and measurement of the Earth's energy budget and climate*



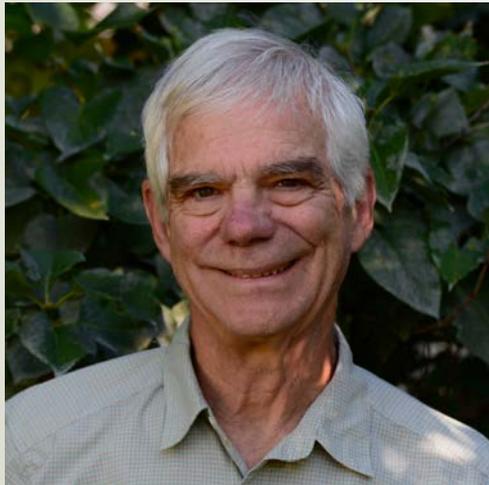
Dr. Wielicki received his doctorate from Scripps Institution of Oceanography in 1980. His research resulted in 120 journal papers authored on studies of climate change, radiative energy balance, cloud feedback, SI traceability of climate observations, and both the design and economic value of an improved climate observing system. He led NASA's CERES and CLARREO space missions for over 30 years. He has received 4 NASA science/leadership medals, and is a Fellow of the AMS.

# The Jule G. Charney Medal

## George N. Kiladis

Research Meteorologist, Physical Sciences Laboratory, NOAA, Boulder, Colorado

*For original, insightful contributions in understanding the codependency of tropical dynamics and convection*



George Kiladis is a research meteorologist at NOAA's Physical Sciences Laboratory in Boulder Colorado. His work is focused on observational aspects of the tropical atmosphere and ocean. His main interests include equatorial waves, tropical-extratropical interaction, the coupling between tropical convection and the large-scale atmospheric circulation, and statistical analysis that can be used to improve numerical models. He is a Fellow of the AMS, and was the AMS Bernhard Haurwitz Memorial Lecturer for 2018.

# The David and Lucille Atlas Remote Sensing Prize

## Dr. Kelly Chance

Senior Physicist, Smithsonian Astrophysical Observatory, Harvard & Smithsonian, Cambridge, Massachusetts

*For seminal contributions and extensive collaboration in satellite instrumentation, retrieval algorithm physics, spectroscopy, and measurements to advance the remote sensing of atmospheric trace gases*



Kelly Chance is a senior physicist at the Smithsonian Astrophysical Observatory and the principal investigator for the NASA/Smithsonian Tropospheric Emissions: Monitoring of Pollution satellite instrument that will measure North American air pollution hourly from geostationary orbit ([tempo.si.edu](http://tempo.si.edu)). He has measured earth's ozone layer, greenhouse gases, and atmospheric pollution from balloons, aircraft, the ground and, satellites since receiving his Ph.D. from Harvard in 1978. He is co-author of "Spectroscopy and Radiative Transfer of Planetary Atmospheres," Oxford University Press.

# The Sverdrup Gold Medal

## Shuyi S. Chen

Professor, University of Washington, Seattle, Washington

*For fundamental contributions to understanding of tropical air-sea interactions through innovative use of observations and coupled atmosphere-wave-ocean modeling*



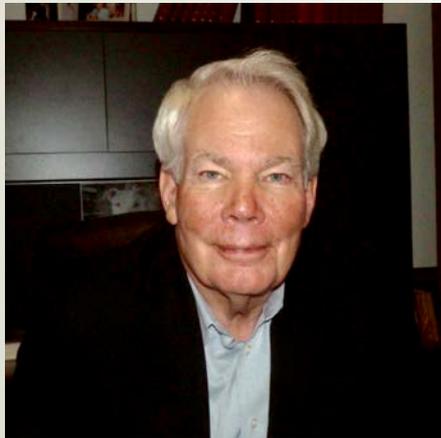
Shuyi Chen is a professor of atmospheric sciences, University of Washington. Her research focuses on high-impact weather and air-sea interaction in hurricanes, coastal flooding, and the MJO, using airborne and satellite observations and numerical models. She served as vice chair of BASC, the National Academies, and is elected to AMS Council and UCAR Board of Trustees. She is a Fellow of AMS. She received B.S. from Peking University, M.S. from OU, and Ph.D. from PSU.

# The Verner E. Suomi Technology Medal

## Dr. Steven A. Rutledge

Professor, Colorado State University, Fort Collins, Colorado

*For exceptional contributions to the development, innovation, and application of radar meteorology and atmospheric electricity technologies*



Dr. Steven A. Rutledge is a professor at Colorado State University. He earned his Ph.D. from the University of Washington in 1983. His research interests are in cloud physics, mesoscale meteorology, radar meteorology and atmospheric electricity. He has participated in many field programs in the mid-latitudes and tropics, served as scientific director of the CSU-CHILL National Radar Facility and recently led the development and deployment of the CSU SEA-POL sea-going polarimetric radar.

# The Henry Stommel Research Medal

## M. Susan Lozier

Physical Oceanographer, Georgia Tech College of Sciences, Atlanta, Georgia

*For theoretical, observational, modeling contributions and leadership in significantly improving our understanding of Atlantic Ocean circulation*



Susan Lozier is a physical oceanographer with a research focus on the ocean's role in climate variability and change. She has served as the international lead for the Overturning in the Subpolar North Atlantic Program since 2010. Lozier has contributed to the community through mentoring efforts for students and early career scientists and through various leadership roles. She is currently the president of the American Geophysical Union, and a Fellow of AMS, AGU and AAAS.

# The Hydrologic Sciences Medal

## L. Ruby Leung

Chief Scientist, Pacific Northwest National Laboratory, Richland, Washington

*For ingenious, groundbreaking contributions which enhance the modeling of land-atmosphere interactions and the hydroclimate*



L. Ruby Leung's research broadly cuts across multiple areas in modeling and analysis of climate, water cycle, extreme events, and land-atmosphere interactions. She is the chief scientist of the U.S. DOE's Energy Exascale Earth System Model (E3SM). She is an elected member of National Academy of Engineering, the recipient of AGU's Bert Bolin Award and Lecture in 2019 and Jacob Bjerknes Lecture in 2020, and a DOE Office of Science Distinguished Scientist Fellow in 2021.

# The Carl-Gustaf Rossby Research Medal

## Venkatachalam Ramaswamy

Director, NOAA/ Geophysical Fluid Dynamics Laboratory, Princeton University, Princeton, New Jersey

*For original and highly influential leadership providing fundamental insight into radiative-climate interaction among greenhouse gases, aerosols and clouds*



Venkatachalam Ramaswamy is director of NOAA's Geophysical Fluid Dynamics Laboratory, with his principal research being the numerical modeling of weather and climate. He has combined theory, modeling, and observations to investigate the roles of radiative agents in climate, including extremes arising from climate change. He is a Fellow of the American Meteorological Society, American Geophysical Union, American Association for the Advancement of Science, and American Physical Society, and is a recipient of the Presidential Distinguished Rank award.

# Honorary Member

## Harry R. Glahn



Director, MDL/National Weather Service (retired),  
NWS, Silver Spring, Maryland

Bob Glahn was director of the Meteorological Development Laboratory for 36 years, and was a primary developer of the MOS forecast systems since 1968. He also composed the first computer worded forecast. Bob, an AMS Fellow, has received the Department of Commerce gold and silver medals, the AMS Cleveland Abbe Award and a named symposium, and the U.S. Legion of Merit. He completed 58 years of federal service in 2012 and continues to volunteer.

# Honorary Member

## Margaret Leinen



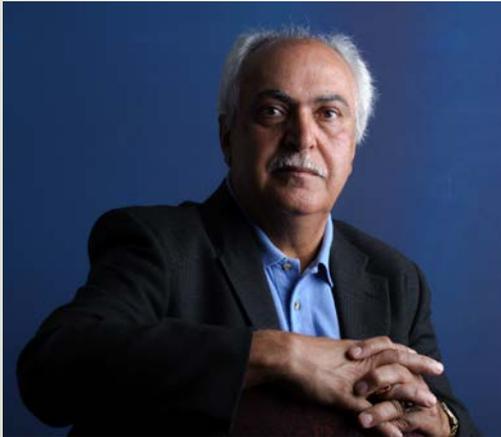
Director, Scripps Institution of Oceanography, UC San Diego, La Jolla, California

Margaret Leinen is director of Scripps Institution of Oceanography and vice chancellor for marine science at UC San Diego. She studies ocean carbon cycling and ocean-climate interactions. She has served as assistant director for geosciences at the National Science Foundation, as US Department of State Science Envoy for the oceans, and as president of the American Geophysical Union and the Oceanography Society. She is a Fellow of the American Academy of Arts and Sciences.

# Honorary Member

## Soroosh Sorooshian

Professor, University of California-Irvine, Irvine,  
California



Soroosh Sorooshian is the director of the Center for Hydrometeorology & Remote Sensing (CHRS) and professor of Civil Engineering & Earth System Science Departments at UC Irvine. He is a member of the US National Academy of Engineering (NAE), the International Academy of Astronautics (IAA) and the World Academy of Sciences (TWAS). He is a Fellow of AMS, IUGG, AGU, AAAS and last year received the AMS Hydrologic Sciences Medal.