Invited Speakers Biographies

15th Annual AMS Student Conference

Beyond the Weather: Embracing the Interface of Science and Society

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Chris Alston graduated from Rutgers University in 2010, where he obtained a degree in meteorology. After graduating, he went on to participate in a post-baccalaureate research program at the Center for Multiscale Modeling of Atmospheric Processes at Colorado State University. There, he researched land falling east coast hurricanes under the leadership of Dr. Wayne Schubert. Chris also spent a short time at Impact Weather in Houston, TX to learn more about the private sector and operational forecasting. He then moved back to NJ to pursue a career in operational weather forecasting at Weather Works LLC. After spending nearly a year there. Chris landed a job at Mars Chocolate North America as a seasonal forecaster and commodity analyst. Supporting energy, edible oils, dairy, and coffee research, his passion for weather forecasting and willingness to continue to improve the weather forecasting methodology was evident. In 2014, Chris was promoted to lead meteorologist of Mars, responsible for all forecasting across the globe and all research initiatives. After spending a short time in that role, Chris had the opportunity to more non-weather role and was promoted to Sr. Grains and Oilseeds Analyst in April of 2015, based in the Mars Petcare Division, in Nashville TN. In his +4 years at Mars Inc., Chris's experience has ranged well beyond weather forecasting. His scope of expertise has grown to include price risk management, trading derivatives, price and yield modeling. Chris has also been on the AMS Board of Private Sector Meteorologists since 2013, and most recently became the Chair of the BPSM. Outside of his professional endeavors, he enjoys traveling across the world, spending time with friends and family, playing music, and mentoring students. If interested in private sector work. I would advise tapping into the AMS Board of Private Sector Meteorologists (https://www.facebook.com/AMSBPSM), the perfect resource for learning more.



Jordan Bell is a Research Associate with Earth System Science Center (ESSC) at the University of Alabama in Huntsville and works with the NASA Short-term Prediction Research and Transition (SPoRT) Center. He recently completed his M.S. work in August 2015 at UAH, focusing on the development of an automated algorithm for detecting hail damage through land surface remote sensing. Jordan continues to develop his algorithms as a member of the SPoRT team, while also supporting NASA's efforts in global disaster response. Other research interests include uses of Synthetic Aperture Radar (SAR) imagery, and increasing SPoRT's presence on social media. Jordan received his B.S. in Atmospheric Science in May 2013 from the University of Missouri, including a Geography Minor and GIS Certificate



Tom grew up in the farm country of western New York state and took his degrees in mathematics and physics from the State University of New York, University at Buffalo (1975) and the University of Chicago (1984). He came to the National Center for Atmospheric Research (NCAR) in Boulder as a postdoctoral fellow in the Fall of 1983. His research was focused on the magnetohydrodynamic description of the Sun's variability and dynamics and the acceleration of energetic particles in astrophysical settings. During that time he taught graduate courses at the University of Colorado at Boulder, and supervised two Ph.D. Theses (granted by the Katholieke Universiteit Leuven, and the University of Oslo). In 2001, he became a "bureaucrat(!)", overseeing a grants program with the National Science Foundation in Washington. On his return to NCAR in 2003. Tom continued science management activities with the Advanced Study Program and the Societal and Environmental Research and Education Laboratory. In 2006, Tom left NCAR to join the National Weather Services as the Director of the Space Weather Prediction Center (SWPC). An organizational sibling of the better known National Hurricane Center (Miami), the Storm Prediction Center (Norman), and the Aviation Weather Center (Kansas City), SWPC (Boulder) is the world's 24x7 source for space weather alerts, watches and warnings. He returned to NCAR in 2012 as the sixth President of the University Corporation for Atmospheric Research, a consortium of over 105 universities across the US and Canada that operates NCAR on behalf of the National Science Foundation and that is also home to the community support activities of Unidata, COMET/Met Ed. COSMIC, the Visiting Scientist Program, GLOBE and the Joint Office for Science Support (JOSS). During his tenure as UCAR President. Tom visited 50 of UCAR's member universities, meeting with students. faculty, postdocs and administrators to understand how UCAR and NCAR can better provide the value and advocacy to its constituencies in these times of rapid change and technology advancement. He also spent considerable time in Washington and around the globe creating partnerships, developing opportunities and advocating for the critical importance of weather, water, climate and air quality to the health of our global society. During the summer of 2015, Tom and the UCAR Board of Trustees parted ways. They are in the process of searching for a new UCAR President, and Tom is writing a long overdue book on the history of the High Altitude Observatory and the emergence of space weather. and looking out for his next adventure in science.

Carolyn Brinkworth



Dr. Carolyn Brinkworth is NCAR's Director for Diversity, Education & Outreach. She holds a PhD in Astrophysics from the University of Southampton in the UK, and is completing her MA in Education from Claremont Graduate University. She worked for NASA for 10 years as a research and support scientist and the Deputy Lead for Public Affairs at the Spitzer Space Telescope, before moving to NCAR in 2014. Her astronomy research focuses on the hunt for extrasolar planets, and the characterization of the remains of planetary systems around dying stars. Her education research focuses on the experiences of minority students in higher education, and best practices for supporting LGBTO+ students and staff.



Daniel Brown is a senior hurricane specialist and warning coordination meteorologist at NOAA's National Hurricane Center in Miami. Brown received his Bachelor of Science Degree in Meteorology from the University of North Carolina-Asheville in 1993. Brown began his career with NOAA in 1993 as a meteorologist intern with the Tropical Analysis Forecast Branch of the National Hurricane Center. In 1995, he joined the National Weather Service forecast office in Miami as a journey forecaster. Brown rejoined the Tropical Analysis Forecast Branch as a journey forecaster in 1998. He became a hurricane specialist with the National Hurricane Center in 2006 and was promoted to a senior hurricane specialist in 2009. The position involves the issuance of track, intensity, and wind radii forecasts as well as associated watches and warnings for tropical cyclones in the Atlantic and eastern Pacific Oceans. His role as the warning coordination meteorologist includes coordinating NHC's outreach and training activities, and working with FEMA's Emergency Management Institute (EMI) to develop hurricane preparedness training courses for emergency managers. Brown has also assisted in the development of several tropical cyclone related COMET training modules. Brown has served on the AMS Committee on Tropical Meteorology and Tropical Cyclones.

He also serves on the Meteorology Topic Committee for the National Hurricane Conference and is an officer of the Florida Governor's Hurricane Conference. Brown was part of an NHH team that received a National Hurricane Conference Outstanding Achievement Award in 2009 for the development of the NHC Graphical Tropical Weather Outlook. Brown was also part of an NHC team that received the regional NWS Isaac Cline Award in 2013 for enhancing public awareness of hurricane threats through innovative and effective use of social media.



Kristin Calhoun (nee Kuhlman) is a research scientist with the University of Oklahoma Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) and NOAA National Severe Storms Laboratory (NSSL). She first became interested in weather in 1985 when Hurricane Gloria moved across Massachusetts sending a tree crashing into her living room. Ultimately, this event led to the pursuit of a B.S. in Atmospheric Science from the University of North Carolina at Asheville, which was completed in 2000. Following a brief break (and contemplation of a career in forecasting or research), she attended graduate school at the University of Oklahoma, completing her M.S. in 2004 and Ph.D. in 2010 examining storm electrification and lightning within tornadic supercell storms. Currently, her focus is on applied research and the transition of research to operations including leading annual experiments in the Hazardous Weather Testbed in Norman. OK.

Kenneth Carev



Ken is the Vice President for Science and Engineering at Earth Resources Technology (ERT), Inc. Ken has over 33 years' experience in all sectors of our weather, water and climate enterprise—public, private and academic sectors—providing and passionately pursuing science solutions, systems engineering, leadership and management, operations analysis, software product development, weather forecasting, teaching and mentoring for the Department of Defense, NOAA, the private sector and for Embry-Riddle Aeronautical University. Ken leads ERT's initiatives in customer-valued science and engineering services and solutions, serves as Program Manager supporting calibration and validation and algorithm development, systems engineering and weather support to NASA, Departments of Commerce, Interior and Defense. Ken also leads efforts to encourage, pursue and grow collaboration and excellence in key science, engineering, business development and programmatic areas important to ERT's clients. Ken worked as a Senior Principal Systems Engineer for Noblis, a nonprofit science, technology and strategy organization. He provided strategic planning, systems engineering and project management support, developed a science and technology roadmap and a national system for air quality products, helped develop a prototype coastal flooding and inundation tool that is capable of aiding decisions to protecting critical infrastructure and the public, and engaged in a research effort to build a regional climate model assessment capability, including high-resolution climate predictions to provide actionable, regional-scale, climate change impact information. Ken retired from the United States Air Force, developing analyses of force structure projections and presented classified optimum force structure allocations to senior Department of Defense leaders. implementing new dispersion modeling initiatives to forecast modeling scenarios to help protect military bases and public communities, commanded a weather organization supporting front-line combat units stationed in Europe in the Gulf War, and provide meteorological support to warfighters across the globe. Ken earned M.S. degrees in Technology Management (Beta Gamma Sigma International Honor Society), Meteorology and Oceanography (Dean's List), and B.S. in Physical Sciences (Chi Epsilon Pi Honor Society). He is an AMS Fellow, Visiting Scientist and Guest Speaker for Royal Caribbean Cruise Lines, an adjunct faculty member for Embry-Riddle Aeronautical University, high school Weather Camp host, and has been a frequent guest speaker and mentored numerous students in meteorology-for this long-term effort, commitment and his passion he earned a "Weather Hero" Award.



Dave is a high school science teacher from Okemos, Michigan. For about 20 years he has taught an "Advanced Earth Science" course which includes a significant amount of meteorology. He also works with an oceanography club and an environmental club at the school. Currently he is developing a ship-based experience for youth focusing on limnology of an inland lake, believed to be the first in the U.S. Within AMS Dave has been a participant and then teacher leader in the AMS Education program. This highly acclaimed program includes teaching activities, on-line courses for K-12 teachers. a two week summer program in Meteorology at the Kansas City training center, and a two week course in oceanography at the Navel Academy in Annapolis. He is proud to be apart of the AMS because he says "no other scientific organization has done as much for K-12 teachers then AMS." Dave has also been a member of the AMS Board on Outreach & Pre-College Education, eventually becoming the first pre-college person to ever hold a board chair position within AMS. While on the Board he initiated a program to recognize outstanding formal and non-formal educators; as well as participating on the committee to select the Anderson Award winners. Dave has written original teaching activities dealing with climate change, hurricane structure, many aspects of limnology, and frost depth. He has led numerous workshops for teachers and a frequent demonstrator at WeatherFest. He also designed a 3-D floodplain model where by students can change variables and test their relative contribution to the risk of flooding, including the production of realistic hydrographs. Numerous copies of this model have been purchased by NWS and placed across the country for field office personnel to use in explaining flood risk to the public.



Michael graduated from Metropolitan State University of Denver with a degree in Meteorology. During his time as a student at Metro, he worked as a Student Assistant at the National Center for Atmospheric Research. Upon graduation he took a job with NCAR as an Associate Scientist working with the Forecast Verification group in the Research Applications Lab. He completed his Masters in Atmospheric Science at the University of Colorado at Boulder and began work with the Surface Transportation Weather group in RAL. He was the science lead for a major federal project called the Maintenance Decision Support System which helped to provide vital road weather information to the winter road maintenance community. He was also the science lead and test director for connected vehicle weather research (for the USDOT) over the past 7-8 years. During the Fall of 2014, Michael left NCAR in order to work on Road Weather Applications in the private sector. He is currently the Chief Weather Officer for a tech startup in Boulder, Colorado called WeatherCloud. WeatherCloud has developed low-cost road weather sensors that will be mass-deployed on large fleets of vehicles across the world. Michael is also a adjunct professor at Metro teaching various undergraduate level Meteorology courses.



Dr. Ariel Cohen is a Mesoscale Assistant/Fire Weather Forecaster at the Storm Prediction Center in Norman, Oklahoma. He has worked as a forecaster at the SPC for the past five years, and recently completed his PhD at the University of Oklahoma School of Meteorology, with a dissertation entitled "Southeast U.S. Cold-Season Severe-Thunderstorm Environments and Their Depictions Using Multiple Planetary Boundary Layer Parameterization Schemes." He received his M.S. in Meteorology at the University of Oklahoma in 2008 and his B.S. in Atmospheric Sciences from The Ohio State University in Columbus, Ohio in 2006. Before becoming a forecaster at the SPC, he worked as a General Forecaster at the National Weather Service Forecast Offices in Great Falls. Montana and Jackson, Mississippi, and he was also a Surface Analyst at the National Hurricane Center in Miami, Florida. In addition to forecasting, he is involved in a variety of research projects, including Southeast United States cold-season severe-weather environments and related planetary-boundary-layer modeling, along with deep convection occurring during the United States monsoon pattern. He has also published research on Gulf of California gale-wind events, mesoscale convective system severity, violent tornado environments, synoptic-scale patterns associated with tropical-cyclone tornadoes, and south-Florida flash flooding. He is teaching the second iteration of a graduate-level course at the University of Oklahoma that he developed, where Storm Prediction Center and other National Weather Service staff members present on topics within their areas of expertise. When he's not forecasting, doing research, grading papers, or lifting weights. Ariel enjoys hanging out with friends and rooting on his Oklahoma Sooners and Ohio State Buckeyes in football! For more information on forecasting fire, please see the fire-weather section of the Storm Prediction Center website (http://www.spc.noaa.gov/products/fire_wx/overview.html) and the forecast tools there (http://www.spc.noaa.gov/exper/).

Kristen Corbosiero



Dr. Kristen L. Corbosiero is an assistant professor of tropical and synoptic-dynamic meteorology at the University at Albany / State University of New York. Her current position marks a return to her graduate alma mater as she received her Master's and PhD degrees from the University at Albany in 2001 and 2005, respectively, studying the structure. intensity change, and distribution of lightning in tropical cyclones. Before returning to Albany, Dr. Corbosiero was an assistant professor in the Department of Atmospheric and Oceanic Sciences at the University of California, Los Angeles from 2007 to 2011, and an Advanced Study Program postdoctoral fellow at the National Center for Atmospheric Science from 2005 to 2007. Fascinated by the power of tropical cyclones after experiencing Hurricane Gloria in 1985, and motivated by her middle school geography teacher who ran a before school weather club. Dr. Corbosiero earned a Bachelor's of Science with Distinction in soil, crop and atmospheric sciences from Cornell University. Her current research projects involve trying to understand hurricane structure and intensity change, including the processes responsible for secondary eyewall formation using the Weather Research and Forecast model, and examining data collected by the NASA Global Hawk unmanned aircraft to investigate how tropical cyclones respond to, and evolve in, vertical wind shear.



Melissa Di Spigna grew up in the Southern Tier of New York State and developed an interest in weather as she endured blizzard after blizzard, most notably the "Storm of the Century" in 1993, along with the annual spring flooding of the Susquehanna River and occasional severe-weather outbreaks. Knowing from a young age that she wanted to be a meteorologist (and also possibly a Zamboni driver), she completed her introductory courses at Binghamton University before transferring to Embry-Riddle Aeronautical University. Melissa was hired as a SCEP (Student Career Experience Program) intern for the National Weather Service office in Jacksonville, Florida in 2004. Just prior to graduation, she was hired as an intern for the Boise. Idaho office, before returning to Jacksonville as a journeyman forecaster. In 2008 she landed her dream job at the Storm Prediction Center where she spent the next five years nerding out before moving back to her home state. Melissa now serves as an expert aviation forecaster for the busiest airspace in the country and maintains an interest in both research and outreach. She serves on a national recruiting and retention team, has been published in Weather and Forecasting, and is the proud recipient of a Department of Commerce silver medal and two Isaac Cline awards. Melissa enjoys meeting new people and in her free time likes spending time with her husband and cat, as well as participating in the delicate balance of keeping fit while enjoying food.



Greg has been with UNC Asheville's National Environmental Modeling and Analysis Center (NEMAC) for nearly 10 years, serving first as the Geographic Information Systems (GIS) Coordinator before becoming the Director of Geospatial Technology, in addition to being a Research Scientist during this time. He is responsible for all of NEMAC's GIS activities, research, mapping, and development. In this capacity he coordinates and provides GIS support for the Center's various projects. His current research interests include: (1) GIS applications for applied physical geography (land use, natural hazards, climate, hydrology, extreme weather); (2) GIS as a decision support tool; (3) the integration of GIS with weather, climate, and society (societal impacts); (4) geospatial visualization (2D and 3D) and web mapping technologies; and (5) the use of geospatial technologies for effective science communication and outreach. In addition to his responsibilities as NEMAC's GIS Coordinator, Greg also serves as an Adjunct Faculty member in the Atmospheric Sciences Department at UNC Asheville, where he developed and continues to teach a GIS course for meteorology majors titled "GIS in Meteorology". He also teaches introductory GIS courses as an Adjunct Faculty member at a local community college. Greg holds a B.S. in Geography from East Tennessee State University and an M.A. in Geography from Appalachian State University, both with concentrations in GIS. He also holds the GISP (professional) Certification from the GIS Certification Institute.



Nolan grew up in rural Illinois with a fascination in weather from a very early age. After graduating from the University of Michigan and the University of Illinois, he moved to Colorado in 1977 for an opportunity to work at the Colorado Climate Center at Colorado State University. He has been there ever since. He was appointed State Climatologist in 2006 and continues in that position. He is responsible for monitoring the climate of Colorado and providing climate data and expertise to support planning and decision making. He loves collecting climate data and sharing information with students and the general public. In 1998 he founded a volunteer rain gauge network called the "Community Collaborative Rain, Hail and Snow Network" (CoCoRaHS). CoCoRaHS has blossomed and now has 20,000 active volunteers helping measure and map precipitation patterns across the country.



Jamie Dyer is an associate professor in meteorology/climatology at Mississippi State University in the Department of Geosciences. He received his graduate degrees at the University of Georgia in the Department of Geography, where he focused on research related to trends in snow cover over North America and their relation to large-scale climate fluctuations. While earning his Ph.D., Dr. Dyer worked at the National Weather Service Southeast River Forecast Center (SERFC) where he worked as an operational river forecaster while also doing hydrometeorological research using multi-sensor precipitation estimates. Since arriving at Mississippi State University, Dr. Dyer has been involved in and/or led a variety of research projects involving topics such as scientific visualization, mesoscale weather modeling, precipitation analysis, unmanned aerial systems, and land surface/atmosphere interactions. Recently, Dr. Dyer has become focused on combining these topics into a general research program with an emphasis on observation and analysis of regional weather and climate fluctuations over land surface boundaries. In addition to research, Dr. Dyer teaches courses in Atmospheric Dynamics and Thermodynamics, Computer Methods and Techniques, and Hydrometeorology.



Josh Eachus is a meteorologist at WBRZ News 2 in Baton Rouge, Louisiana. He broadcasts weekday mornings from 5-7am and 12-1pm. In this capacity, Josh has served as panelist at various conferences to discuss social media use and weather communication. In 2014, Josh facilitated the Gulf Coast's first Integrated Warning Team (IWT)-an effort focused on improving forecast clarity that joins Emergency Managers, Media and the National Weather Service. Josh holds a bachelor's degree in meteorology and a master's degree in sports management from California University of Pennsylvania. Right now, he is a Ph.D. student at Louisiana State University, researching the communication of weather information in the United States. Josh makes an effort to bring appealing, relatable content to all audiences. For the dedicated weather enthusiasts, he posts daily synoptic discussions and video briefings. For the regular forecast user, he offers a simple value-added forecast each day. In addition. Josh makes regular blog posts about topics in the field of meteorology on wbrz.com/weather and in October, he was welcomed as a contributor to wxshift.com Josh draws inspiration from his undergraduate advisor, Dr. Chad Kauffman, his graduate advisor, Dr. Barry Keim, and the forefathers of broadcast meteorology!

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This field is constantly evolving. There is no one source for information on how to shape your path. The best advice I have, is to contact a professional already at it. I'd be happy to help!

Dr. Gina Eosco is a senior social scientist and risk communication expert at Eastern Research Group (ERG) in their communication group with 10 years of experience conducting stakeholder engagement activities, employing social science research and methodologies, as well as translating science into policy documents. Dr. Eosco strikes an optimal balance between listening to scientists' needs while suggesting outreach and engagement activities that will meet their goals. With ERG, she has worked with numerous scientific agencies such as the National Hurricane Center and National Weather Service. For NHC, she facilitated focus groups with stakeholders, including emergency managers and broadcast media, to gather feedback on newly developed storm surge inundation maps. Currently, she's working with the NWS to evaluate their watch, warning advisory hazard simplification efforts, which includes examining the possibility of a new system or enhancing the current one, Prior to ERG, Dr. Eosco worked for the AMS Policy Program in Washington, DC for 10 years. While at AMS, she worked with scientists in a variety of contexts including road weather, hazards and insurance, hurricane and satellite policy, and global earth observations to name a few. Within the American Meteorological Society, she sits on the Committee on Effective Communication of Weather and Climate Information, as well as the membership committee. She enjoys mentoring students in the weather community who are interested in discussing societal impacts, as well as those who are interested in earning a degree in one of the social or behavioral sciences. Dr. Fosco earned her PhD in communication from Cornell University focusing on perceptions of risk and uncertainty to different weather graphics during tornado media coverage. She has a Master's in Communication also from Cornell. and a B.S. in Environmental Science and Policy from the University of Maryland.

Emily Fischer



Dr. Emily Fischer is a professor in the department of Atmospheric Sciences at Colorado State University. Her research uses both field-based and applied modeling approaches to investigate the sources of atmospheric trace gases to remote environments. An underlying goal of her work is to improve our understanding of the role of climate in determining the atmosphere's self-cleansing capacity. Past research during her PhD at the University of Washington focused on the transpacific transport of Asian air pollutants. Emily has been a NOAA Climate and Global Change Fellow, and a Harvard Center for the Environment Fellow. Emily really enjoys being a part of interdisciplinary teams working on issues related to air quality. In this vein, she is currently working on the impact of oil and gas development on local and global air quality. She has a number of projects related to forest fires, air quality and health. Emily is also leading a mentoring program for college-level women interested in the geosciences.



Mike Fowler is a Business Manager for Vaisala, a company that delivers weather and climate-based products and solutions to meet a wide range of needs in the meteorological, transportation, energy, and defense industries. Mike's responsibilities include oversight for Vaisala's North American Meteorological portfolio, which currently exceeds \$21M. His primary focus is on key accounts such as the National Oceanic and Atmospheric Administration (NOAA) and Environment Canada. Mike's career spans more than 25 years. During this time. Mike has combined his expertise in the geosciences and business to ensure the development and delivery of systems and solutions that support critical decision makers across a number of economic sectors. As a result, Mike has taken on a broad spectrum of business leadership positions, including positions responsible for P&L and operational management. This has included assuming responsibility for leading large-scale projects. programs, and initiatives that require building and leading teams in an effort to achieve specific objectives and goals related to the provisioning of data and information to key stakeholders and end users. Mike has demonstrated success in product development, project and program management, and business P&L, which have been bolstered through continual business-related training and development, including a Project Management Professional (PMP) certification, as well as ACCA finance & accounting, and CIM marketing certifications. Through his experiences. Mike has evolved into a skilled business practitioner well-versed in tactical execution, strategic planning, and leadership. Overall, Mike can be described as a highly diversified executive-level manager who is driven to excel and succeed through facilitating and driving continuous improvement in people and process. Mike's work ethic is grounded in a results-oriented, integrity-based approach to business and people. He has been routinely noted for effective communication, collaboration, and negotiation skills, even within the most complex matrix environments, where problem-solving and change management skills are critical. Finally, his common sense strategy to problem solving is rooted in minimizing conflict, whilst promoting growth and efficiency, but never underestimating that the key resource for any organization is its people.

Tanja Fransen



Tanja is the Meteorologist in Charge (MIC) at NOAA's/National Weather Service in Glasgow, MT. She was the Warning Coordination Meteorologist (WCM) there for 14 years as well. Ms. Fransen graduated from the University of Northern Colorado in 1995, and has been with the NWS for 22 years, starting her career while in college. She's married with two teenage sons, and spends a lot of time volunteering with their school related activities and other organizations in the community.

Current projects beyond her day to day position includes serving as the Program Chair for the Major Weather Impacts Session at the annual AMS meeting (which needs student committee members!), chairperson for the Montana EAS Committee, and co-chair for the AMS Committee on Emergency Management.

She has served as the co-lead for the NWS Skywarn Modernization Team, the WCM representative to the NOAA Education Council, a member of the AMS Board of Societal Impacts, and a Fellow of the NCAR WAS*IS (Weather and Society*Integrated Studies) program.

Awards include the National Weather Service Isaac Cline Award for Leadership (2003), named "Montana's Hero for the Day" by US Senator Max Baucus (2010), the NOAA Administrators Award (2011), and the AMS Kenneth C. Spengler Award (2014). Her background includes being a Volunteer Firefighter and First Responder while in high school and in college, and she has an avid interest in not just wildfires, but all disasters impacting society. She also appreciates opportunities to meet with students, so don't hesitate to visit with her during breaks and in the hallways.



Dr. William A. Gallus, Jr. is a professor of meteorology at Iowa State University, He received his B.S. in Meteorology at Penn State in 1987, and his M.S. and Ph.D. in Atmospheric Science at Colorado State in 1989, and 1993, respectively. He was awarded a National Science Foundation Graduate Research Fellowship during the period 1987-1990. He was a UCAR Visiting Postdoctoral Scholar at NCEP from 1993-1995, before accepting a faculty position at lowa State in 1995. Dr. Gallus's research interests focus on improved prediction of small-scale weather events, particularly thunderstorm systems with heavy rainfall. However, he has also researched road frost, winds at turbine height, tornadoes and other severe weather events, and the use of cutting-edge technology to improve geoscience education. Because his research has often focused on improvements in forecasting, he has been a frequent visitor at the NOAA Hazardous Weather Testbed Spring Experiments held at the Storm Prediction Center, and was one of the first invitees for the Flash Flood and Intense Rainfall Experiment held at WPC. He recently served as the lead forecaster for the Plains Elevated Convection At Night (PECAN) experiment. He has published roughly 80 refereed journal articles, and given over 100 conference presentations. He has been the PI or Co-PI on research grants funded for roughly \$9,000,000, and has been among the senior personnel on projects funded for several million more dollars. In 2015, he received the lowa State University College of Liberal Arts & Sciences Outstanding Career Achievement in Research Award. Dr. Gallus teaches courses on synoptic and mesoscale meteorology, and severe and hazardous weather. He was named a Master Teacher within his college in 2005-2006, and received the Iowa State Foundation Award for Outstanding Achievement in Teaching in 2006. He has given many presentations on severe weather to community groups and schools. He has served or is serving as the major professor for 33 graduate students. In addition, he has been interviewed roughly 75 times each by print media and also radio or television, including Good Morning America, NBC Nightly News, BBC Television, National Geographic Channel, History Channel, Discovery Channel, and The Weather Channel.



Dr. Bart Geerts is a Professor in Atmospheric Science at the University of Wyoming. He conducts research into cloud-scale to mesoscale atmospheric processes, mainly using aircraft measurements and radar. Much of his research builds on field campaign observations. starting with the Genesis of Atlantic Lows Experiment (GALE-1986) where he participated as a graduate student, operating a scanning Doppler radar. He has taught several graduate-level and undergraduate-level courses in atmospheric science at the University of Wyoming (UW). Dr. Geerts received his PhD from the University of Washington (Atmospheric Science, 1990, advisor: Peter V. Hobbs). His MS (Irrigation Engineering, 1985) and BS (Physical Geography, 1984) are from the University of Louvain in Belgium. his country of origin. He has taught on various campuses in the US as well as in Australia and Europe, co-authored one textbook (Weather and Climate Explained, Routledge, 1997), and (co-)authored over 80 papers in the peer-reviewed literature, most of them lead-authored by his graduate students. Dr. Geerts has chaired the American Meteorological Society (AMS) Radar Meteorology Conference, has served on the UCAR Unidata User Committee and on several AMS committees (Mesoscale Processes; Weather Modification; and Radar Meteorology), and has served on proposal review panels for NSF, NASA, and DOE. He served as a lead PI on several recent field campaigns, including CuPIDO-06 (Cumulus Photogrammetric, In situ and Doppler Observations), ASCII-12/13 (Agl Seeding of Clouds impact Investigation), OWLeS-13/14 (Ontario Winter Lake-effect Systems), and PECAN-15 (Plains Elevated Convection At Night). He also serves as Editor of the AMS's Journal of Applied Meteorology and Climatology.



Dr. Ian Giammanco is a Lead Research Meteorologist at the IBHS Research Center. Dr. Giammanco's responsibilities include providing leadership in: instrumentation design and data collection, wind-flow characterization, multi-hazard testing on the hazards of severe convective storms, and field measurement programs. Dr. Giammanco also provides guidance on weather and climate issues in support of the IBHS public policy program. In addition to his position at IBHS, he is currently appointed as an Adjunct Faculty Research Associate within the National Wind Institute at Texas Tech University. He is currently serving a 3-year term on the American Meteorological Society's Committee on Weather and Climate Financial Risk Management. Dr. Giammanco has more than a decade of meteorological field research experience, serving as the principal investigator and field coordinator for the IBHS Characteristics of Hail annual field program, which began in 2012, the Texas Tech University Hurricane Research Team, and has participated in numerous severe thunderstorm and tornado research projects, including VORTEX 2. His research interests include boundary layer wind flow characteristics, severe convective storms, tropical cyclones, and measurement and instrumentation systems. Dr. Giammanco received a B.S. in Atmospheric Science from the University of Louisiana at Monroe, where he was also a pitcher for their NCAA baseball team. He also holds a M.S. degree in Atmospheric Science, as well as a Ph.D. in Wind Science and Engineering both from Texas Tech University. During his doctoral studies he was appointed as a National Science Foundation-Integrative Graduate Education and Research Training Fellow, and served as an intern at NOAA's Hurricane Research Division in Miami



Dr. Gourley is a Research Hydrologist with the NOAA/National Severe Storms Laboratory and an Affiliate Associate Professor in the School of Meteorology and Civil Engineering departments at the University of Oklahoma. He received his B.S. and M.S. degrees in Meteorology and his Ph.D. in Civil Engineering from the University of Oklahoma. Dr. Gourley has won one Bronze and two Silver Medal Awards from the Department of Commerce, the American Meteorological Society Journal of Hydrometeorology Editor's Award, and NASA's Group Achievement and Robert H. Goddard Team awards for his contributions to the algorithms comprising the Global Precipitation Measurement mission. His primary research interests are in unique observations of storm-scale hydrometeorological states and fluxes, and in the development of models to forecast them. He manages an interdisciplinary team that is responsible for the research, development, and transition of state-of-the-art software to the National Weather Service for use in operational flash-flood monitoring and prediction. He has published approximately 100 peer-reviewed articles as well as a textbook entitled "Radar Hydrology".



Ken Graham is the Meteorologist-in-Charge at the National Weather Service office serving the New Orleans/Baton Rouge region. Ken has had a long and varied career, beginning with his service as a television meteorologist for CBS and an agricultural meteorologist for the Mississippi Radio Network. He then moved to the National Weather Service in a number of positions and locations, eventually becoming the Meteorologist-in-Charge at NWS forecast offices in Corpus Christi, TX and Birmingham, AL. While in Birmingham from 2001 to 2005, his office won Department of Commerce medals each year for innovative services like instant-message exchanges with television stations during severe local events such as the Veteran's Day Tornado Outbreak. He served as Systems Operations Chief at NWS Southern Region Headquarters during Hurricane Katrina, where he won a Bronze Medal for leading a team to make critical repairs in New Orleans. As the MIC in New Orleans, his office also won praise for their responses to Hurricanes Gustav and Ike, and to the Deepwater Horizon oil spill. Additionally, Ken was part of the team which created the BLAST program (Building Leaders for a Solid Tomorrow), which has been training future leaders of the NWS for 14 years. For these and other achievements, Ken received the National Weather Museum's Weather Hero Award in 2010. In recent years, Ken has contributed substantially to emergency-response tools and capabilities—first and foremost, leading the charge to build the NWS's first emergency-response vehicle as part of the Weather-Ready Nation initiative. His team then effectively deployed it for events including Mardi Gras, the Super Bowl, the NCAA Final Four, the National Boy Scout Jamboree, Hurricane Isaac, and several spills and explosions. Ken also aided in creating the first emergency-response tool for cell phones, and he pioneered the AWIPs Thin Client program that enables meteorologists to use state-of-the-art visualization tools while working remotely.



Steve Graham is a Senior Outreach and Exhibits Specialist for NASA's Science Support Office (SSO), Earth Sciences Division, and Science Mission Directorate. Steve is also the Outreach Coordinator for the Agua mission. He has worked at NASA Goddard since July 1997, and for much of that time his work has centered on outreach and technical capabilities in support of NASA's exhibit activities at science and technical conferences worldwide. In April 1999, he was the outreach coordinator and webcast moderator for a historic expedition to the Arctic and the North Pole. A large majority of Steve's efforts within the SSO are spent collaborating with scientists, data visualizers, and multimedia developers on the production and dissemination of NASA Science outreach products and activities related to NASA's hyperwall, a nine-screen video wall used to display high resolution data and model visualizations. In his capacity as the outreach coordinator for the Aqua mission, Steve works closely with the Aqua Project Scientist to ensure the mission is well represented in collaborative projects within NASA's Earth Science Division. From 2000-2006. Steve served on the American Meteorological Society's Board on Pre-College Outreach and Education and has served as a Panel Chair and Science Content Reviewer for NASA's Earth Science Education Product Review since 1999. He has also presented at numerous NASA Earth Science Education workshops and meetings. Steve has a B.S. in Meteorology and an M.S. in Science Education from The Florida State University. Before beginning his tenure at Goddard Space Flight Center, Steve managed the Florida State University Meteorology Department's K-12 outreach program—Florida EXPLORES. This unique initiative implemented NOAA direct readout satellite ground stations into classrooms throughout the state of Florida. He also team-taught an Earth Science course for Elementary Education majors.

Rebecca Haacker



Rebecca Haacker is the Director of the SOARS Center for Higher Education at the UCAR in Boulder, CO. The Center includes the SOARS program, the NCAR Undergraduate Leadership Workshop and other visitor opportunities to NCAR. All programs provide students with relevant skills and training to enter successful careers in the geosciences. Prior to joining UCAR, Rebecca taught geography and nature conservation at the college and graduate level. Many moons ago she managed protected areas in Central America, and she still thinks it's really important to get students involve din field campaigns and fieldwork. In addition to having a graduate degree in geography and cultural anthropology from the University of Hamburg, Germany, Rebecca is a certified mediator and has extensive training in employment law, diversity, student mentoring, and counseling.



Major Ryan J. Harris is the Operations Officer, 14th Weather Squadron, He leads 60 military and civilian personnel responsible for the unit's collection, protection, and exploitation of environmental climate data. In addition, he oversees a 1.2 million-dollar data center and an operations and maintenance budget of over 400 thousand dollars each year. The Squadron operates and populates the Department of Defense's (DoD's) sole authoritative climate database with quality environmental information and leverages the latest innovations in climate monitoring, analysis and prediction (or CMAP) in order to provide unparalleled tailored environmental intelligence to all DoD and Intelligence Community echelons from strategic to tactical. Their efforts optimize the full range of military and intelligence operations including contingency operations, military training exercises, engineering design, joint acquisition programs, and strategic planning. Major Harris graduated from Brockport State University in New York and commissioned through the Reserve Officer Training Corps program at Rochester Institute of Technology in 2002. He has since risen to the level of Master Meteorologist and has earned his Space Professional badge. Major Harris' experience includes support to the Intelligence Community as well as Mobility and Combat Air Forces with assignments and deployments in the Continental US, Europe, and Kuwait. Prior to his current assignment, Major Harris was the Assistant Director of Operations, 14th Weather Squadron, Asheville, N.C.

Leslie Hartten



Leslie Hartten is a research meteorologist at CIRES (the Cooperative Institute for Research in Environmental Sciences, University of Colorado-Boulder), working at the NOAA/Earth System Research Laboratory's Physical Science Division. She has a B.S. in Meteorology from the SUNY College at Oneonta, an M.S. in Meteorology from the University of Wisconsin-Madison, and a Ph.D. in Atmospheric Science from UW-Madison, Leslie has been hooked on weather since she took Earth Science in 8th grade. Experiences during her undergraduate days convinced her she wasn't cut out to be a forecaster, so she turned to research. She has published research about fair-weather continental boundary layers and tropical marine ones; large-scale tropical phenomena and long-term variations in sea breezes; the response of wind profiling radars to atmospheric structures and processes; and the career paths of meteorologists. Leslie served two terms on the AMS Board of Women and Minorities, including two years as Chair, and will begin a term on the AMS History Committee in January 2016. For several years she has been a regular presenter at the ESRL/Global Systems Division's "Daily Weather Briefing". She is also very active in mentoring activities, including serving as a research mentor for 18 students over the last 17 years. In 2011 Leslie received the premier CIRES Director's Award for Diversity in recognition of her extensive volunteer efforts.



A native Oklahoman, Kat Hawley grew up in the small country town of Dewey, Oklahoma, where she developed her passion for severe and unusual weather at a young age. She studied meteorology at the University of Oklahoma where she received her B.S. in Meteorology with a minor in mathematics in 2008. Hawley started her career within the National Weather Service at the Midland/Odessa office in 2010 after working for the private sector for a couple of years. From there she realized her passion to help people and understood the importance of communication with core partners to protect life and property. While in west Texas, she gave several briefings to the Texas Forest Service during the worst fire weather season in state history. Briefings included weather forecasts to help strategically fight fires and save structures as well as homes. After a while in west Texas. she decided to move to a region where rain, snow, and clouds were plentiful. She ended up at the National Weather Service in Binghamton, NY. Kat moved to New York in of May 2013 to further her dream in helping others as a general forecaster. Hawley currently runs the StormReady program. Outreach program. Preparedness program. Verification program. and is part of the Decision Support Service Team. Kat's future goals are to become a Warning Coordination Meteorologist within the National Weather Service.



Jen Henderson is currently a Ph.D. Candidate in Science and Technology Studies at Virginia Tech where she studies the weather warning process in a National Weather Service context. Her dissertation tells the story of three different groups: meteorological software engineers who created warning technologies in the 1980s; forecasters who today issue warnings to save lives and property; and policy makers who envision a future of the NWS meteorologist as interpreter of weather risks. In each instance, she focuses on the sociotechnical challenges operational forecasters face during rapid onset, convective events (e.g., tornadoes and flash floods) and the communication issues that arise in conveying confidence and certainty to different publics. More broadly, she's interested in the history and anthropology of weather disasters, stakeholder collaborations, the ethical and normative underpinnings of warning systems, and the development of expertise and personhood. Her methods are ethnographic. including interviews, focus groups, and participant observations.



Stephen Herbener is a research associate in the Atmospheric Science Department at Colorado State University. He is a member of Professor Susan van den Heever's Cloud Processes Group performing computer modeling research, and is currently studying the impacts of Saharan dust on tropical cyclone development. Stephen came to this position after a twenty-five year career in electrical engineering that included positions at Hewlett-Packard and Intel Corporation. His fascination with the power and beauty of weather phenomena along with an inquisitive nature drew him to the field of atmospheric science research. Stephen holds a B.S. in Computer Science from the University of Nebraska, a M.S. in Electrical Engineering from the University of Illinois, and is currently pursuing a Ph.D. degree in Atmospheric Science at Colorado State University.



Paul Higgins is the Director of the American Meteorological Society's Policy Program. He works to increase the societal benefits from information and services relating to weather. water, and climate. Paul's research examines climate change and its causes, consequences, and potential solutions. He examines the two-way interaction between the atmosphere and the land-surface to help quantify responses and feedbacks to climate change. His policy analysis helps characterize climate risks and identify potential risk management strategies. He works with decision-makers to develop new policy options that can overcome contentious political obstacles. Paul also works to inform policy makers, members of the media, and the general public about climate science and climate policy. In 2011, he was named a Google Science Communication Fellow, From 2005-2006 he was a Congressional Science Fellow of the American Association for the Advancement of Science (AAAS). During his fellowship year, Paul worked on climate policy in the United States Senate. From 2003-2005 he was a National Science Foundation postdoctoral fellow at the University of California. He received Ph.D. and M.S. degrees from Stanford University and a B.S. from The University of Michigan. He is a former fellow of the Department of Energy's Global Change Education Program.



Dr. Hiscox is an Assistant Professor in the Department of Geography at the University of South Carolina. She received her Ph.D. in Natural Resources with a focus on atmospheric resources from the University of Connecticut in 2006. She joined the University of South Carolina in 2010 after serving two years as an Assistant Professor of Environmental Sciences at Louisiana State University. Dr. Hiscox is a member of the American Meteorological Society (AMS) Board on Atmospheric Biogeosciences and the AMS Scientific and Technical Advisory Committee on Agricultural and Forest Meteorology. At USC she conducts research in boundary layer meteorology with a specific focus on near surface dispersion and land air interactions. She uses a variety of field instrumentation to take measurements of near surface atmospheric phenomena. She is a lidar specialist, using this unique form of remote sensing to track aerosol plumes from a variety of sources including dust, smoke and pesticide sprays. In her spare time Dr. Hiscox enjoys spending time with her husband and son, walking in the woods, and knitting,



Wes Hyduke is the Director of Meteorology Operations for Schneider Electric, based in Minneapolis, Minnesota. Wes oversees the day-to-day operations of Schneider Electric's forecast team, a talented group of over 50 meteorologists. Prior to this assignment in 2009. Wes was one of Schneider Electric's on-site meteorologists for premier golfing events. providing early detection and advance warning of lightning to protect players, officials, and spectators from harm. Prior to his employment at Schneider Electric. Wes worked at Pacific Coast Forecasting in Los Angeles, California as an Aviation Meteorologist. Wes completed his Bachelors of Science degree in Atmospheric Science from Millersville University in 2001. Wes has been an active member of the AMS since 2000 and currently serves on the AMS Board of Continuing Professional Development. Wes also participates in his local AMS chapter within the Twin Cities.



Eric Jacobsen is a Research Associate at the National Weather Service's Warning Decision Training Division (WDTD) and OU's Cooperative Institute for Mesoscale Meteorological Studies (CIMMS). There he contributes to AWIPS2 training and tests new tools for release to operational forecasters, which involves a lot of software configuration and development meetings in an exciting research-to-operations environment. Although Eric had an interest in weather from a young age, an abundance of other interests resulted in him taking a less direct path to meteorology than many people. He attended the University of Chicago initially seeking a physics degree but transitioning to geophysical sciences. Before graduating with his BA in 2006, he was fortunate to study abroad in Kyoto, Japan for a year, and to participate in an REU at Columbia University's Lamont Doherty Earth Observatory (2005). Following graduation and a few eclectic years holding positions in higher education, consulting, and even film and TV production, he ultimately felt the call back to science and began a Masters at the OU School of Meteorology in 2011. There he was able to pursue a combined interest in weather and technology as a graduate research assistant studying clear air observations of the boundary layer with 88D weather radars. under the guidance of Dr. Phil Chilson. Eric also briefly contributed to studies of migratory birds which appear on the national weather radar network. Graduate school was a pivotal experience in terms of starting from scratch to acquire new programming and software skills. such as python, Matlab, WDSSii, and more, much of which Eric was motivated to learn by, frankly, an aversion to repetitive tasks combined with a healthy dose of patience. Eric finished his studies and transitioned to WDTD at the start of 2015. In his free time, Eric loves the outdoors, including kayaking, hiking, and anything exciting involving the sky (flying, skydiving, etc!), and he also enjoys traveling to new places.

Dr. Jasko currently serves as a member of the AMS executive committee and as a councilor. She also serves as a member of the AGU's Thriving Earth Exchange advisory board. Her work within the weather enterprise includes serving on two NWS service assessment teams. membership in the Pittsburgh Integrated Warning Team, co-planner on various conference sessions, a Center for Advanced Public Safety Research Fellow (University of Alabama), guest on WeatherBrains and WeatherGeeks, and a facilitator of IWT launches. Teaching a range of applied communication courses at California University of PA in the Communication Studies Department, she often advises Earth Science students about communication and social science course options and consults on student research projects. Her involvement with the weather enterprise grew from a student/faculty/non-profit collaboration with the Carnegie Science Center in Pittsburgh to produce "StormFest". This project brought together meteorology students, education students, and communication students. Dr. Jasko is keenly interested in several aspects of the larger weather enterprise. including the communication dimensions of weather warnings and other forecast messages. the organizational and enterprise-wide coordination challenges, and in the communication of weather and scientific information within the larger social/political sphere. These interests have led to a developing focus on the communication of science, especially in the context of developing information strategies enhancing the capacity of non-scientists to understand science and scientific research and findings in applied contexts (such as policy decision making, addressing local, community-based problems, raising public scientific literacy, and encouraging curiosity). Currently, she is working with two campus colleagues (Dr. Chad Kauffman, Meteorology, and Dr. Paul Hettler, Economics) to develop a weather/natural hazard specific version of the DoSPERT scale. Her interest in organizational communication means she is never bored participating in meetings of all kinds.

Kevin Kloesel

Emergency Preparedness before, during and after weather threats of all types on the OU Campus. He also provides support to the OU Executive Policy Group in severe and winter weather situations in order to facilitate campus protection and closure decisions. He develops and leads high-impact weather safety training on the OU campus for its over 30,000 students, faculty and staff, and for the over 40,000 pre-collegiate students that call OU home during summer sports and academic camps. In addition, Kevin serves as Director of the Oklahoma Climatological Survey, one of the largest such Surveys in the country. OCS is charged with providing weather and climate data, analysis and expertise to stakeholders and decision makers throughout the state, and operates the Oklahoma Mesonet weather observing network. He also serves on the State of Oklahoma Hazard Mitigation Task Force. Kevin is a tenured Associate Professor with teaching and research interests ranging from synoptic meteorology to societal impacts and decision-making in weather-impacted situations. He led the teams that won the Innovations in American Government Award from Harvard University and the Ford Foundation for their work with the emergency management community in Oklahoma, as well as awards from the American Meteorological Society and the National Weather Association. Kevin was awarded the American Meteorological Society's 2015 Charles E Anderson Award for "over two decades of dedication to engaging minority and underrepresented groups through community outreach and academic leadership." Kevin works directly with thousands of K-12 students and teachers, as well as hundreds of emergency management agencies in finding appropriate applications for weather data in local education. decision-making, and weather safety planning. He has provided numerous training workshops to improve weather forecasting and decision making in Korea, China, Japan, Taiwan and Nigeria, as well as weather preparedness training to the NFL, NCAA, NASCAR, and numerous sports venues, concert halls and amusement parks throughout the country. A frequent guest on local, state and national radio and television programs, he has appeared on the National Academies of Science Distinctive Voices, NPR's Talk of the Nation, the Tayis Smiley Show, WeatherBrains, ABC Nightly News, The Discovery Channel, The Weather Channel, WxGeeks, the BBC, and dozens of local radio and TV shows from coast to coast. He has also provided keynotes at the National Tornado Summit and the SXSW Eco Conference. He has served on two National Academies of Sciences panels reviewing weather forecast performance for the nation, and works closely with the Norman Chamber of Commerce and Norman Economic Development Coalition to provide support for the growing private weather and climate enterprise in Norman. He also served as a content designer for Scholastic's The Magic School Bus Kicks Up a Storm children's museum exhibit that is currently touring the US. Kevin formerly served as an Associate Dean and led the National Weather Center's outreach. tour and visitor programs from 2006-2014. While a tenured faculty member at Florida State University, he served as a research fellow with the Cooperative Institute for Tropical Meteorology, and co-directed an outreach project, EXPLORES!, which provided NOAA satellite data ingest capabilities to over 200 schools throughout Florida, as well as opportunities to fly teacher-developed payloads on NASA's Space Shuttle.



Alek Krautmann is a Meteorologist at the National Weather Service New Orleans/Baton Rouge office. He works to promote an informed society: one that anticipates and is able to respond to the weather and climate hazards in our world. He was formerly a Research Associate with the Southern Climate Impacts Planning Program (SCIPP), which is a NOAA Regional Integrated Sciences and Assessments team at the Oklahoma Climatological Survey in Norman, OK, While with SCIPP he spent time on the Managing Drought in the Southern Plains initiative and completed a series of climate workshops for environmental professionals at Oklahoma and Texas Native American tribes. During the summer of 2009 Alek worked at the Charleston, SC NWS office through the NOAA Hollings Scholarship Program. Due to interests in government and public policy, he attended the 2011 AMS Summer Policy Colloquium in Washington DC. Alek has previously been a member of the AMS Student Conference Planning Committee and in 2011-2012 served as Co-Chair.

Since living in New Orleans Alek participates in community service projects and events as a member of the Young Leadership Council. He is a graduate of Ohio University (M.S.) and the University of Oklahoma (B.S.), including a semester abroad at Monash University in Melbourne, Australia, Alek is originally from St. Louis, MO and enjoys swimming, hiking, camping and traveling. Feel free to email him at Alek.Krautmann@noaa.gov



Dr. Matthew Kumijan is an Assistant Professor in the Department of Meteorology at Penn State University, where he has been since January 2014. So far at Penn State he has taught undergraduate and graduate courses in Radar Meteorology, Atmospheric Chemistry and Cloud Physics, and Snow and Ice Physics. Prior to his arrival to Happy Valley, Matt was an Advanced Study Program Postdoctoral Research Fellow at the National Center for Atmospheric Research in Boulder, Colorado. He received his B.S., M.S., and Ph.D. in meteorology from the University of Oklahoma (2006, 2008, and 2012, respectively). Matt and his research group at PSU use dual-polarization radar observations and numerical models to study clouds and precipitation. He is interested in better understanding microphysical structures and processes in a variety of high-impact weather events, including severe convection and winter storms, and how the microphysics affects the storm's behavior and evolution. Ultimately, this will lead to an improvement in the way we parameterize these processes in numerical weather prediction models. He is author or co-author of over 30 articles on these and other topics. Outside of academia. Matt is the principal violist in the Nittany Valley Symphony Orchestra. He also enjoys listening to classical music and attending performances by some of the region's premiere orchestras. He also enjoys traveling, especially to explore restaurants, exotic foods, and craft beer. If you have any questions about careers in academia, graduate school, or want to chat about anything mentioned above, feel free to introduce yourself and start a conversation!

Bill Lapenta



William (Bill) Lapenta, Ph.D., is the director of NOAA's National Centers for Environmental Prediction (NCEP). NCEP delivers national and global weather, water, climate and space weather guidance, forecasts, warnings and analyses to help save lives and protect property. As director, Dr. Lapenta oversees the planning, science and technology, and operational responsibilities of NCEP's nine national centers. Before arriving at NOAA in 2008, Dr. Lapenta worked at NASA for 20 years at the Marshall Space Flight Center where he served as the Deputy Manager of the Science and Exploration Research Office responsible for all research and development activities related to space science, earth science and space optics.



Hurricane Specialist and Storm Surge Expert Michael Lowry is a prominent fixture on The Weather Channel. In 2012, Lowry shared his expertise with millions of viewers during Hurricane Sandy, providing in-depth analysis for the most impactful storm to strike the northeast U.S. in 40 years. In addition to his on-air role. Lowry lends his creative talents to the development of new tropical weather content, a passion that carries over from his years at NOAA's National Hurricane Center (NHC) in Miami, Florida. Hailing from New Orleans and growing up along the Mississippi River, Lowry has always had a fascination with hurricanes. He honed this fascination into a science at Florida State University, where he studied under Dr. James J. O'Brien. distinguished professor of meteorology and oceanography and international El Niño expert. Lowry received his bachelor of science and master of science in meteorology at Florida State University while cultivating a propensity for everything garnet and gold. He's been recognized by his alma mater for outstanding professional contributions and personal commitment, proudly receiving the prestigious Reubin O'D. Askew award in 2013. Prior to joining The Weather Channel, Lowry was a hurricane forecaster and research scientist at the National Hurricane Center. He served as technical lead scientist for new National Weather Service storm surge products that warn the nation of impending dangers near the coast. The development of these products required close collaboration with other federal agencies, including the Federal Emergency Management Agency, U.S. Army Corps of Engineers, U.S. Geological Survey, and National Ocean Service. Lowry continues to foster these and new relationships in his role at The Weather Channel. Lowry began his career in Washington, D.C., as a tropical weather expert for the U.S. Department of Defense, working to protect U.S. interests from tropical threats around the globe. From 2004-2007, he served as a meteorologist with the state of Florida Division of Emergency Management. During this time Lowry engaged in key emergency management hurricane planning and response decisions, including seven presidentially-declared hurricane disasters. Lowry has presented tropical related research at more than 30 scientific meetings and symposia, including conferences of the American Meteorological Society (AMS) and the American Geophysical Union. He's been an active member on key boards and committees and has been an invited speaker at international meetings addressing the role of climate change on hurricanes. He's also accompanied government officials on damage assessments following major hurricane landfalls. When presenting at meetings around the world. Lowry never misses the opportunity to explore the oceans, from diving the Great Barrier Reef to deep-sea fishing. His passion for the weather is matched only by his passion for new places, local food, and music. Lowry is the recipient of numerous awards, including the 2013 National Hurricane Conference Outstanding Achievement Award in Meteorology for his work in storm surge forecasting, development, and outreach.

Dr. Alexander E. "Sandy" MacDonald, current President of the American Meteorological Society, serves as Chief Science Advisor for the National Oceanic and Atmospheric Administration's (NOAA) Office of Oceanic & Atmospheric Research (OAR) and concurrently as Director of NOAA's largest research facility, the OAR/Earth System Research Laboratory in Boulder. CO.

Dr. MacDonald earned a Ph.D. in meteorology from the University of Utah, served in the U.S. Air Force after receiving a B.S. in Math and Physics from Montana State University, and has led a distinguished career as an atmospheric scientist modeling weather and climate for almost 40 years. His contributions include the development of a high-performance computing system, a unique mesoscale weather prediction model, and the diagnosis of atmospheric water vapor distributions using global positioning systems. In addition, he worked in the White House with Vice President Al Gore to initiate the Globe program for which he received one of his four Presidential Rank Awards. His invention, Science On a Sphere. A luminous animated globe, educates thousands about Earth system science and other planets and is installed in more than 120 museums around the world.

Frank Marks



Dr. Frank D. Marks has been a Meteorologist with the Hurricane Research Division at the Atlantic Oceanographic and Meteorology Laboratories for NOAA since 1980, and Director since 2003. Marks led the development of the NOAA Hurricane Forecast Improvement Project (HFIP) since 2007. Marks also co-chaired the Working Group for Tropical Cyclone Research (WG/TCR) for the Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) since 2008. Marks joined the Society in 1971 as a student member, becoming a full member in 1973, and became a Fellow in 2000. Marks served as a member of AMS Committee on Radar Meteorology from 1984-91, and as chair from 1987-91. Marks was also the recipient of the AMS Verner E. Suomi Medal in 2011. Marks received a B.S. in Meteorology from Belknap College and both an M.S. and Sc.D. in Meteorology from the Massachusetts Institute of Technology.



"From AR. In OK. Has PhD. Pokes bears w/ sticks. Codes. Plays w/ data. Does weather. Mentors. Eats PB M&Ms. Tries to save NWS from itself. Once known as snow guy." Patrick Marsh (@pmarshwx) is a meteorologist with the National Weather Service's Storm Prediction Center in Norman, OK. Prior to joining the NWS SPC, Patrick was the National Severe Storms Laboratory's Liaison to the Hazardous Weather Testbed, a position the afforded him the opportunity to work on his doctoral degree at the University of Oklahoma. Before earning his meteorology Masters and PhD from the University of Oklahoma, he earned a Bachelors of Science in Mathematics and Physics from the University of Arkansas. Patrick has developed a reputation for "playing with data", which also serves as the name of his blog. He frequently develops visualizations of complex meteorological information that has been featured in numerous blogs, television shows, and other publications. One of the more popular software projects he founded, SHARPpy, a Sounding/Hodograph viewer written in Python, is currently used by dozens of meteorological organizations across the world. Patrick is not afraid of using his data analysis skills to contradict prevailing wisdom. earning him the reputation as a "bear poker". In addition to being a meteorologist at the NOAA/NWS SPC and software developer. Patrick frequently serves as a mentor to students. As a graduate student at OU. Patrick worked with dozens of students on capstone projects and synoptic presentations. In a more formal capacity, Patrick has supervised students under the National Weather Center Research Experience for Undergraduates and the NOAA Hollings Scholarship program. Lastly, Patrick and his wife Sarah (who holds a PhD in Mathematics from the University of Oklahoma) have been married for over 10 years and are expecting their first child this spring.

M



Professor Jonathan Martin joined the faculty at the University of Wisconsin-Madison in 1994 after completing his Ph.D. in atmospheric sciences at the University of Washington. He has earned recognition for his teaching, including the Underkofler Excellence in Teaching Award, a fellowship in UW's Teaching Academy, the Mark H. Ingraham Distinguished Faculty Award, and the UW Vilas Distinguished Service Professorship. His research expertise is in mid-latitude weather systems and he has authored over 50 scientific papers, as well as the leading textbook on mid-latitude atmospheric dynamics. He also appears regularly on Wisconsin Public Radio as part of the two-man "Weather Guys" segment. He recently ended a 9-year term as Chair of the Department of Atmospheric and Oceanic Sciences and was named by the Princeton Review as one of the nation's Top 300 Professors.



Angel McCov is the founder of the McCov Environmental Group. Inc. where she provides expert environmental education and consulting services. Her firm provides school programs and summer camps focused on earth system sciences for the youth; and applies their expertise in meteorology, environmental management and environmental policy to assist organizations in achieving compliance with state and federal regulations. Prior to launching McCoy Environmental Group, Inc., McCoy was a Meteorologist at the Department of the Interior's Bureau of Ocean Energy Management Office of Renewable Energy Programs where she implemented the National Environmental Policy Act (NEPA) and ensured environmental compliance specifically with respect to Air Quality in Offshore Renewable Energy. She was also a Meteorologist for the National Weather Service's Climate Prediction Center on the Famine Early Warning System Network (FEWS Net) Project funded by the U.S. Agency for International Development. While there she provided weather and climate monitoring and analysis for the purposes of food security and famine early warning for developing countries in Central America, the Caribbean, Sub-Saharan Africa and Southeast Asia. McCoy holds a Bachelor's of Science degree in Meteorology from The Pennsylvania State University. At present, she is pursuing a Master's of Science degree in Environmental Policy and Management from American Public University. She is an active member of the American Meteorological Society where she serves on multiple boards and committees. She is also a member of the Mid-Atlantic Region of Environmental Professionals.

M



Dr. Andrew Mercer is a meteorologist/climatologist whose primary research focus areas include statistical and artificial intelligence (AI) applications to large-scale meteorological and climatological problems. He has used AI methods with many different meteorological applications, including mountain windstorm forecasting, peak wind speed forecasts, warm-season precipitation quantification, tropical cyclone intensification, large-scale severe weather outbreaks, seasonal climatological forecasts, groundwater and precipitation patterns, climatological downscaling, and hemispheric teleconnections. His research interests continue to focus in the areas of artificial intelligence and statistics, with a secondary focus area on numerical weather prediction and applications of high-performance computing to meteorological and climatological problems. He has also co-authored a Physical Geography lab manual and taught a variety of meteorological, computational, and statistical courses for the department.

М

Kathleen Murphy



Kathleen Murphy is an Earth Science teacher from St. Louis, Missouri. She has been an educator for 37 years. In her spare time, she has been a peer trainer for other K-12 teachers through the AMS Education Programs for over 20 years. She has also served 2 terms on the AMS Board for Women and Minorities. She is currently finishing a 6 year term on the Board of Outreach and Pre-college Education, serving 2 years as Board Chair.

Kweilyn Murphy



Kweilyn joins the WDSU Exact Weather Team from Greenville, North Carolina where she served as Weekend Meteorologist. Prior to that, she served as a freelance meteorologist at KDKA-TV. Kweilyn was introduced to television and began sharpening her skills at WQED Multimedia, where she worked with the likes of Mister Rogers and helped to produce several national Doo Wop television productions and station events. Kweilyn holds a Broadcast Journalism degree from Ohio University with a specialization in English and Children's Television and obtained her Certificate of Meteorology from Mississippi State University. When she's not watching her Steelers, you can often find Kweilyn exercising. Kweilyn takes an active role in her community. She enjoys teaching Public Speaking/Communications and Professional Development to high school students. Kweilyn loves to dance and is an active member of Alpha Kappa Alpha Sorority, Incorporated.



Dr. Paul A. Newman studies the Earth's atmosphere and, particularly, the ozone layer. He is a leader in the use of airplanes for atmospheric research, and is the Chief Scientist for Earth Sciences in the Earth Sciences Division at NASA's Goddard Space Flight Center in Greenbelt, Md. Newman has been the co-chair of the Scientific Assessment Panel for the Montreal Protocol since 2007, the landmark international treaty banning ozone-depleting substances to protect Earth's ozone layer. A native of Seattle, he graduated from O'Dea High School and earned a bachelor's in physics at Seattle U. He completed his physics Phd at Iowa State University in 1984. Newman was a National Research Council postdoctoral researcher at NASA Goddard, then worked for several years as science contractor, and became a NASA civil servant scientist in 1990. Newman has authored or co-authored more than 177 refereed scientific papers and reports, including several significant studies of atmospheric ozone. He helps direct Goddard's analysis of the dynamics, chemistry, and radiative properties of the atmosphere. He was a lead author for the polar ozone chapters of the WMO/UNEP Scientific Assessment of Ozone Depletion: 2002 and 2006, and was Assessment co-chair for the 2010 and 2014 Assessments. These Assessments are the scientific basis for the Montreal Protocol Agreement. He has participated in or led more than 17 aircraft field campaigns. During the SAGE III Ozone Loss and Validation Experiment (SOLVE), Newman directed the first flight of the NASA ER-2 over Russia, a civilian version of the U-2 reconnaissance plane that was converted to scientific research. He was also the co-project scientist for the Global Hawk Pacific Mission, the 1st mission that used the Global Hawk unmanned aircraft system for science. He is a Fellow of the American Meteorological Society, a Fellow of the American Geophysical Union, a Goddard Senior Fellow, and a member of the International Ozone Commission (IOC). He has been part of 13 NASA Group Achievement awards and has twice been chosen by his Goddard colleagues for peer awards. In 2002, he was awarded the George Washington University's Arthur S. Flemming Award. In 2009, he was awarded the EPA's Stratospheric Ozone Protection Award. In 2011 he has given the William Nordberg Memorial Award for Earth Sciences, and the American Geophysical Union Bierknes Lecturer. In 2012 he was given the Seattle University Alumni Professional Achievement Award.



Margaret grew up in New Orleans, and is married with three grown children and three dogs. If she has any spare time, she likes to garden and paint. She is involved in planting orchards in schools and communities.

Margaret has worked at WDSU-TV for 36 years, has been involved in weather forecasting for about 37 years, and is currently the WDSU Chief Meteorologist. She has seen a lot of changes in the business of presenting weather. She's gone from using a pointer on a satellite set up on an easel, to using markers and stickers on a plexiglass map to WSI computer graphics. Weather is now a 24/7 business, and Margaret is on social media 24/7. The future of communicating weather is changing.

Margaret co-hosted and forecast for the morning show in New Orleans for years, but also forecast for the noon, four pm, five pm, and weekend shows. In January 2009 she became the Chief Meteorologist at WDSU-TV. She now does the 5pm, 6pm and 10pm shows along with radio and Airport weather reports.

Margaret graduated from LSU with a BA in English. She completed the Mississippi State Broadcast Meteorology Program. She has the NWS Seal of Approval and the AMS Seal of Approval.



LT Jeffrey Pereira is the Field Recruiting Officer for the NOAA Commissioned Officer Corps responsible for organizing recruiting events and ensuring that a pool of qualified applicants is available for selection to the Corps. The NOAA Corps is the uniformed component of the National Oceanic and Atmospheric Administration. The service consists of approximately 321 commissioned officers. NOAA Corps officers operate ships, fly aircraft, lead mobile field parties, conduct diving operations, manage research projects, and serve in staff positions throughout NOAA, LT Pereira is a Senior Watch Officer and has enjoyed a diverse career since joining the NOAA Corps in 2006. His permanent sea assignments include tours aboard the NOAA Ship Rainier and Henry B. Bigelow with temporary duty aboard the NOAA Ship Oregon II, Nancy Foster, and R/V Gloria Michelle. These opportunities have provided him with hydrographic, oceanographic, and fisheries research experience in the Atlantic, Pacific, Caribbean and Alaskan waters. In addition to currently serving at NOAA Corps Headquarters in Silver Spring, MD, he also served at the National Hurricane Center in Miami, FL. There, LT Pereira was responsible for producing operational storm surge model calculations for land-falling hurricanes using NOAA's SLOSH model. He provided data to Emergency Management, as well as the general public. LT Pereira modeled storm surge due to hypothetical storms for federal, state, and local emergency managers for use in evacuation planning and preparation and participated in various National Hurricane Center led training/outreach activities. LT Pereira has been recognized for his service receiving two NOAA Corps Achievement Medals, NOAA Corps Director's Ribbon, NOAA Unit Citation Award, National Hurricane Conference Outstanding Achievement in Meteorology, and a Letter of Commendation for his service during Hurricane Irene. He received a dual Bachelor of Science degree in Aircraft Engineering Technology and Applied Research Meteorology from Embry-Riddle Aeronautical University and a Graduate Certificate in Geographic Information Systems from Pennsylvania State University. LT Pereira is from Pawtucket, RI. He and his wife Suzanne currently reside in Maryland with their two daughters, Kaylee and Zoev.

Erik Pytlak



Erik Pytlak is the Manager of Weather and Streamflow Forecasting at the Bonneville Power Administration in Portland, OR. He holds a B.S. in Meteorology from Penn State University, and is currently President Elect of the Penn State Graduates of Earth and Mineral Sciences (GEMS) as he works closely with undergraduate students on leadership and career development. He also earned his MPA at the University of Arizona, and served 21 years in the NOAA/National Weather Service, including the Tucson office here he was the Science and Operations Officer and served as co-leader of the Forecast Operations Center for the North American Monsoon Experiment (NAME). Currently, Erik leads the team which forecasts weather and streamflow for hydroelectric power planning, and serves as the agency's technical lead for climate change research.



Matt Rogers is President and co-founder of the Commodity Weather Group, LLC, in Bethesda, MD, which focuses on weather risks for the energy and agriculture sectors. Along with his team of a dozen meteorologists, Matt consults for about 260 companies to manage their energy and agriculture-related weather risk. His expertise includes short, medium, and long-range forecasting and has significant experience developing tools and products to support the commodity sector. Matt was previously the Director of Weather for MDA EarthSat in Rockville, MD. He has been involved in hiring meteorologists for at least 15 years in his roles at both companies. Matt is a twenty-one year veteran of the energy industry, a degreed meteorologist (Penn State '94) and holds an MBA (George Mason '01). He is also a blogging contributor to the Washington Post's Capital Weather Gang and has appeared on numerous television media outlets.



Kim Runk is Director of the National Weather Service Operations Proving Ground in Kansas City, Missouri. The OPG's primary mission is to enhance the research-to-operations process for innovations in both science and services.

Kim's career in meteorology spans more than 30 years, with experiences ranging from serving on a combat weather team to providing incident support in the aftermath of major disasters. Before being selected to lead the Proving Ground, Mr. Runk held several NWS roles – including Science and Operations Officer, Meteorologist-in-Charge, and Regional Chief of Services

Chief of Services.

Two things Kim is passionate about are learning and leadership. He assisted in the development of two NWS leadership development programs, and has served for four years as a Department of Commerce mentor. He was the primary driver behind the creation of an interactive training course known as DSS Deployment Boot Camp — a week-long in-residence workshop that prepares forecasters to provide effective support services at Emergency Operations Centers operating under the Incident Command System structure. More than 100 forecasters have now completed this course, and it continues to rank among the highest rated training experiences in the National Weather Service.

In his leisure time, Kim enjoys golf, sketching, playing with his grandkids, and watching

Valerie Sloan



Valerie Sloan is part of the UCAR-SOARS Center for Higher Education where she helps to run NCAR internships, including teaching workshops on scientific writing and career preparation. Valerie organizes the nation's community of undergraduate research internship leaders in the atmospheric, Earth, and ocean sciences that are funded by the National Science Foundation. Formerly director of the RESESS internship program at UNAVCO. Valerie taught several courses at the University of Colorado at Boulder and the University of Denver in the Departments of Geology and Geography. She has also worked in the private sector for environmental consulting firms, using GIS. Her graduate research was on glacier history in the Pakistan Himalayas and Arctic Canada, and her postdoctoral research looked at Arctic sea ice using satellite imagery. Much of her current effort focuses on workforce development in the geosciences.



Eric Snodgrass is the Director of Undergraduate Studies for the Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign, Each year, he guides over 1500 students through the wild side of weather in ATMS 120: Severe and Hazardous Weather. He teaches advanced courses on General Physical Meteorology (ATMS 201), Meteorological Instrumentation (ATMS 315), Economics of Weather (ATMS 491) and supervises numerous Capstone Research projects. Snodgrass also teaches ENSU 310: Renewable and Alternative Energy for the Environmental Sustainability Program. He advises all undergraduate majors and minors in atmospheric science (~100 students) and supervises graduate teaching assistants and master's students. He serves on numerous committees and boards on campus including the Provost's Teaching Advancement Board (Chair), Student Sustainability Committee and the Provost Task Force on Improving Large Enrollment Courses, Snodgrass' research initiatives focus on K-12 science education as well as weather forecasting applications in financial markets. He is the co-founder of Global Weather and Climate Logistics, LLC. which is a private company that provides logistical guidance and solutions to weather sensitive financial institutions. Recently, his company has merged with Agrible Inc., a precision farm management and predictive analytics company, where he is also co-founder and senior atmospheric scientist. He has recently been awarded the LAS Teaching Excellence award and the Campus Teaching Excellence Award. Also, his online version of ATMS 120 was awarded the 2012 "Best Online Course" from the University Professional Continuing Education Association (a national organization). This course is also being prepared to become a MOOC through Coursea. Currently, his research efforts focus on weather risk involving land-falling tropical cyclones and global agricultural yield projections.



Nick is originally from Westchester County, NY - where he grew up and attended school during the first 18 years of his life. After developing a passion for the weather at a young age, he ultimately decided to pursue a career in meteorology. After graduating from the University at Albany, State University of New York with a degree in Atmospheric Science in 2008, Nick went on to pursue graduate work the following year. He attended Plymouth State University in New Hampshire through 2010 and went on to receive his Master's in Applied Meteorology at that time. From there, Nick went on to serve as the Lead Long-Range Weather Expert at WeatherWorks, and was responsible for issuing the company's seasonal and tropical weather outlooks. He was also the primary forecaster in charge of maintaining some of WeatherWorks newest products, which he helped develop from the ground up. After serving this role for several years, Nick went on to accept an offer from Mars Incorporated as a member of the Commercial Applied Research Team. In his role as Commodity Research Manager & Lead Meteorologist, Nick is currently responsible for delivering all the global seasonal weather outlooks in support of all raw material categories the business sources. He is also the sole analyst responsible for supporting the coffee category and assisting in price risk management decisions related to supply-side market volatility.

Kevin Tyle is a Senior Programmer/Analyst in the Department of Atmospheric and Environmental Sciences (DAES) at the University at Albany (UAlbany). He received his M.S. in Atmospheric Science from UAlbany in 1995. He spent two years working at NCEP. developing software for N-AWIPS and GEMPAK. Kevin then worked as a software developer and system administrator for MESO. Inc. in Troy, New York from 1997-2001, before returning to his alma mater in 2001. He has used a wide variety of data analysis and visualization software in his student and professional careers. He co-teaches a course each spring intended for atmospheric science majors, "Meteorological Data Analysis and Visualization", where students use programs such as IDV and GEMPAK to analyze and display weather data in a variety of formats. Kevin has always had an interest in computing and all things related to data analysis and visualization, but things really caught fire following his attendance at a Unidata IDV regional training workshop in 2008 at Plymouth State University. He joined the Unidata Users Committee in 2009 and co-chaired the 2012 Unidata Triennial Users Workshop, "Navigating Earth System Science Data". From 2012 to 2015, he served as Chair of the Users Committee, and played a key role in organizing the 2015 Unidata Triennial Users Workshop, "Data-Driven Geoscience: Applications. Opportunities, Trends and Challenges". Kevin is actively involved in promoting awareness of and aptitude in tools that relate to meteorological data analysis and visualization. Besides his class, he is co-leader of a department-based computing and data interest group which meets monthly. The group serves as a place for students, faculty, and staff both inside and outside the department to master tools such as databases, Python, Javascript and GitHub in their classes and research



Dr. Louis W. Uccellini is the National Oceanic and Atmospheric Administration's Assistant Administrator for Weather Services, and Director of the National Weather Service. In this role, he is responsible for the day-to-day civilian weather operations for the United States, its territories, adjacent waters, and ocean areas. Prior to this position, he served as the Director of the National Centers for Environmental Prediction (NCEP) for 14 years. He was responsible for directing and planning the science, technology, and operations related to NCEP's nine centers: Central Operations, Environmental Modeling Center, Ocean Prediction Center, Hydrometeorological Prediction Center, Climate Prediction Center, all in Camp Springs, MD: the National Hurricane Center in Miami, FL: Storm Prediction Center in Norman, OK; Space Weather Prediction Center in Boulder, CO; and the Aviation Weather Center in Kansas City, MO. Dr. Uccellini was the Director of the National Weather Service's Office of Meteorology from 1994 to 1999. Chief of the National Weather Service's Meteorological Operations Division from 1989 to 1994, and section head for the Mesoscale Analysis and Modeling Section at the Goddard Space Flight Center's Laboratory for Atmospheres from 1978 to 1989. Dr. Uccellini received his Ph.D. (1977). Master (1972) and Bachelor of Science (1971) degrees in meteorology from the University of Wisconsin-Madison. He has published more than 60 peer-reviewed articles and chapters in books on subjects including analysis of severe weather outbreaks, snowstorms, gravity waves, jet streaks, cyclones, and the use of satellite data in analysis and modeling applications. He is the co-author of a widely acclaimed two-volume American Meteorological Society (AMS) monograph Northeast Snowstorms, published in 2004, and authored chapters in the 1990 AMS publication Extratropical Cyclones, the 1999 AMS publication The Life Cycles of Extratropical Cyclones, and the 2008 AMS publication Synoptic Dynamic Meteorology and Weather Analysis and Forecasting. Dr. Uccellini has served on many national and international research and field experiment programs. He has received many awards in recognition of his research and operational achievements including the Maryland Academy of Sciences Distinguished Young Scientist Award (1981), the NASA Medal for Exceptional Scientific Achievement (1985), the AMS's prestigious Clarence Leroy Meisinger Award (1985), and the National Weather Association's Research Achievement Awards for Significant Contributions to Operational Meteorology (1996). He was elected as a Fellow to the AMS in 1987 and served as Co-Chief Editor of Weather and Forecasting from 1988-1992. In 2001 he received the U.S. Presidential Meritorious Executive Rank Award and in 2006 he received the U.S. Presidential Distinguished Rank Award. In January 2012, Dr. Uccellini was elected the President of the AMS and served from 2012 to 2013.

Suzanne Van Cooten



Dr. Suzanne Van Cooten is the Hydrologist In Charge (HIC) of the National Weather Service Lower Mississippi River Forecast Center (LMRFC) located in Slidell. Louisiana. The LMRFC is responsible for hydrologic guidance and river forecasts for a 220,000 square mile area encompassing the lower Mississippi River and its tributaries in addition to river systems in Louisiana and Mississippi that flow into the Gulf of Mexico. Prior to assuming leadership of the LMRFC on October 24, 2011, she was the Deputy Chief of the Warning Research Development Division (WRDD) at NOAA's National Severe Storms Laboratory (NSSL) in Norman, Oklahoma, In addition to these activities during her 24 years as a NOAA employee, she has been an operational weather forecaster for NWS offices in Fort Worth and New Orleans/Baton Rouge, a Hydrometeorological Analysis and Support (HAS) forecaster and hydrologist at LMRFC, and a regional and national NWS program manager in observing systems at NWS Southern Region HQ. As Chief Scientist at the NWS National Data Buov Center (NDBC), she was awarded a Department of Commerce (DoC) Bronze Medal for leading the design and deployment of ocean buoys in NOAA's coastal storms program. She was a team member awarded a DoC Gold Medal for the transition of the tsunami buov program from a NOAA laboratory to NWS operations at NDBC. Dr. Van Cooten received a B.S. in Meteorology from the University of Oklahoma, an M.S. in Civil and Environmental Engineering from the University of New Orleans-LSU, and completed her Ph.D. In recognition of her career achievements and citizenship in the Chickasaw Nation, she accepted a three year term in 2013 to serve on the American Meteorological Society's Board on Women and Minorities. Dr. Van Cooten is a Life Member of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) and an American Indian Science and Engineering Society (AISES) Sequoyah Fellow. She frequently serves as a career and academic mentor for minorities, especially Native Americans, to encourage their success in science and engineering programs and careers.



Dr. Susan van den Heever is an associate professor in the Department of Atmospheric Science at Colorado State University. She obtained her BS in Mathematics from the University of the Witwatersrand in Johannesburg, South Africa, and her PhD in Atmospheric Science from CSU. After working for several years as a post-doctoral student and research scientist, she then joined the CSU faculty in 2008. Professor van den Heever manages a research group that typically consists of six to eight graduate students, two post-doctoral students and two research scientists. The group's focus is on cloud processes, specifically the microphysical and dynamical characteristics of deep convective cloud systems, the feedbacks between them, and the representation of such processes in numerical models (http://reef.atmos.colostate.edu/~sue/). Funding from NASA, the NSF, the DOE and the ONR supports their research. Professor van den Heever teaches graduate classes in synoptic and mesoscale meteorology, mesoscale modeling, cloud physics, and advanced cloud physics and cloud dynamics. She is a co-author of the book. Storm and Cloud Dynamics, and she also oversees the development and evaluation of the Regional Atmospheric Modeling System (RAMS), a highly sophisticated cloud-resolving numerical model developed at CSU. She and members of her research group have also served in various capacities in numerous field campaigns.

Dr. van den Heever was named Outstanding Professor of the Year three times by the students of the Department of Atmospheric Science, and she has also received the Graduate Student Council Award for Graduate Student Advising and Mentorship. She won the George T. Abell Outstanding Early-Career Faculty Award in 2012, and in 2015 she was made a Monfort Professor, which is CSU's most prestigious award for mid-career faculty. Dr. van den Heever is a board member of the AMS Committee on Mesoscale Processes, and recently chaired the 16th AMS Conference on Mesoscale Processes. She is also a member of several NASA and GEWEX science panels, and serves on the scientific advisory committees of a number of field campaigns.

Lieutenant Commander Rebecca



LCDR Rebecca J. Waddington is an officer of the NOAA Commissioned Corps currently serving as the Executive Officer at the NOAA Aviation Weather Center in addition to being an Aircraft Commander on NOAA's King Air (B300C) aircraft. This assignment combines her aviation experience with her meteorological education. As Executive Officer, LCDR Waddington oversees several special projects and is also trained to work shifts on the Convective SIGMET forecast desk. LCDR Waddington works with aviation partners to determine how best deliver weather information to keep the aviation community and the public safely flying. LCDR Waddington earned her Bachelor of Science degree in Meteorology from San Jose State University in 2004. She began her scientific career by working as a student intern at the National Weather Service Monterey, CA forecast office. Following graduation, LCDR Waddington received her commission and began Basic Officer Training Class in March 2005. LCDR Waddington's initial assignment was aboard the NOAA Ship Ka'Imimoana, an oceanographic research vessel. During her sea tour, LCDR Waddington became the ship's Navigation Officer and received her working diver certification. LCDR Waddington's first shore assignment was in the Storm Surge unit at the National Hurricane Center. In addition to predicting storm surge for all tropical cyclones impacting the US, she also spent time creating forecast products in the Tropical Analysis and Forecast Branch. During her final year at the National Hurricane Center, LCDR Waddington applied for and was accepted to NOAA's flight program. By May 2010, she had earned her Commercial Multi-engine with Instrument pilot certificate. She moved to Silver Spring, MD and began her operational assignment aboard the King Air, NOAA's King Air is the premiere remote sensing airborne platform. LCDR Waddington has been involved in conducting surveys following major hurricane landfalls, tornados, and flooding events. In January 2013, she upgraded to Aircraft Commander. During this time she also earned her Master Degree in Aviation Science from Everglades University.

More information about NOAA Corps and aviation weather can be found in the following locations:

http://www.noaacorps.noaa.gov/ http://www.aoc.noaa.gov/

http://www.aviationweather.gov/



Dr. Roger M. Wakimoto is assistant director for the National Science Foundation's (NSF) Directorate for Geosciences (GEO). Prior to coming to NSF, Wakimoto served as director of the National Center for Atmospheric Research (NCAR), which is sponsored by NSF. Prior to becoming NCAR director, he served as associate director for NCAR's Earth Observing Laboratory. Wakimoto is a geophysicist with expertise in tornadoes, thunderstorms and other types of severe weather.

As the principal source of federal funding for university-based fundamental research in the geosciences, the GEO Directorate addresses the nation's need to understand, predict and respond to environmental events and changes and to use the Earth's resources wisely. Basic research in the geosciences dispress advances research in production of the Earth's environment.

geosciences, the GEO Directorate addresses the nation's need to understand, predict and respond to environmental events and changes and to use the Earth's resources wisely. Basic research in the geosciences advances scientific knowledge of the Earth's environment including resources such as water, energy, minerals and biological diversity. GEO-supported research also advances our ability to predict natural phenomena of economic and human significance, such as climate change, weather, earthquakes, fish-stock fluctuations and disruptive events in the solar-terrestrial environment. Wakimoto was a professor in the Department of Atmospheric Science at the University of California, Los Angeles, where he chaired the department. He has written or co-authored more than 100 peer-reviewed papers and served on numerous committees, panels and boards for NSF, the National Academy of Sciences, the American Meteorological Society and other organizations. He has won numerous awards and honors, including a scientific and technical achievement award from the Environmental Protection Agency for observations of air pollution and the Meisinger Award from the American Meteorological Society in recognition of his contributions to understanding mesoscale weather events.



Curtis Walker is a 2nd year doctorate student in Atmospheric Science at the University of Nebraska-Lincoln (UNL). He graduated in May 2012 from the State University of New York College at Oneonta with his B.S. in Meteorology and obtained his M.S. in Atmospheric Science from UNL in December 2014. Prior to graduate school at UNL, he completed his third year as part of the Significant Opportunities in Atmospheric Research and Science (SOARS) Program at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado. Since, he has interned during the summer at NCAR independent of SOARS and collaborated with former SOARS mentors in numerous professional projects. Curtis' research interests include weather risk assessment and hazards management for transportation concerns. He is passionate about developing solutions to mitigate the impacts of adverse weather conditions on transportation infrastructure. Through his academic career and subsequent professional career he remains optimistic that our nation's highways, railroads and skies will be weather ready.

For more information on Curtis' work, please visit:

https://www.soars.ucar.edu/people/proteges/Curtis_Walker.php and http://eas2.unl.edu/~cwalker/

Emily Wilson



I was born and raised in Alpharetta, Georgia, a suburb on the north side of Atlanta. I decided at the age of 7 that I wanted to become a meteorologist. I was terrified of thunderstorms as a small child, and I wanted to face that fear. I started reading books about weather to learn about thunderstorms, and the more I read, the more fascinated I became. My interest in weather continued all the way through high school, and when the time came to apply for college, there was no doubt in my mind that I wanted to study meteorology. I earned a Bachelor's degree in Atmospheric Science/Geography from the University of Georgia in 2010. I also earned a Master's degree in Atmospheric Science/Geography from the University of Georgia (2012), where I wrote a thesis about clear air turbulence forecasting. I started working at Delta in August of 2012 as a Contract Meteorologist, and in January of 2015, I was promoted to Senior Meteorologist. Being an aviation meteorologist for an airline is both challenging and exciting, and I truly believe that I have the best job in the world!