The Student Conference Planning Committee (SCPC) is excited to feature a diverse slate of over 50 speakers for the 2020 AMS Student Conference! We are grateful that our speakers provided biographical sketches before the conference. Please take advantage of these biographies to learn more about our speakers and think about which sessions you'd like to attend in Boston.

Gaige Kerr, Kenzie Krocak, and Matt Flournoy
2020 Student Conference Chairpersons

Dr. Sean Arms:

Sean Arms is a Software Engineer at the NSF funded Unidata Program Center, one of the University Corporation for Atmospheric Research (UCAR)'s Community Programs (UCP). Born and raised in the rural karstlands of southern Indiana, Sean's interest in meteorology began before he was even in kindergarten. However, it was in the 8th grade that he learned that there was this thing called "college" where he could learn all about the science behind the weather. After graduating high school in the year 2000, he packed up and headed west to the University of Oklahoma, where he earned his BS (2004), MS (2006), and, eventually, PhD (2014). His studies at OU were focused on observational boundary layer meteorology (the "lesser whirls", if you will), and often involved deploying various types of instrumentation. During his time at OU, he was a TA for the junior level Meteorological Measurements course for multiple semesters, and taught the full course in his final fall semester on campus. With his incredible advisor (Dr. Petra Klein) and one of his committee members (Dr. Alan Shapiro) leading the way, he prioritized getting undergraduate students "into the field" as part of the regular undergraduate curriculum. He served as the first student representative to the Unidata Users committee (2007 – 2010), and, together with Dr. Brian Etherton, co-chaired the 2009

	Unidata Users Workshop titled “Using Operational and Experimental Observations in Geoscience Education.” He also served as a student and regular member of the AMS Scientific and Technological Activities Commission’s Committee on Measurements (2010 – 2019). Having fallen in love with the intersection of data, computer programming, and serving others, Sean took a position at the Unidata Program Center in 2011 (where he remotely finished his dissertation in 2014 – *not recommended*!). Currently, Sean leads the Thematic Real-time Environmental Distributed Data Services (THREDDS) project at Unidata, which includes the netCDF-Java library, the THREDDS Data Server, and Rosetta (a data format translation service focused on in-situ observational data), and participates in the development of the python library Siphon. When this code monkey is let out of his cage, he loves interacting with the community, and greatly appreciates the chance to participate in the AMS Student Conference!

Dr. Harold Brooks:

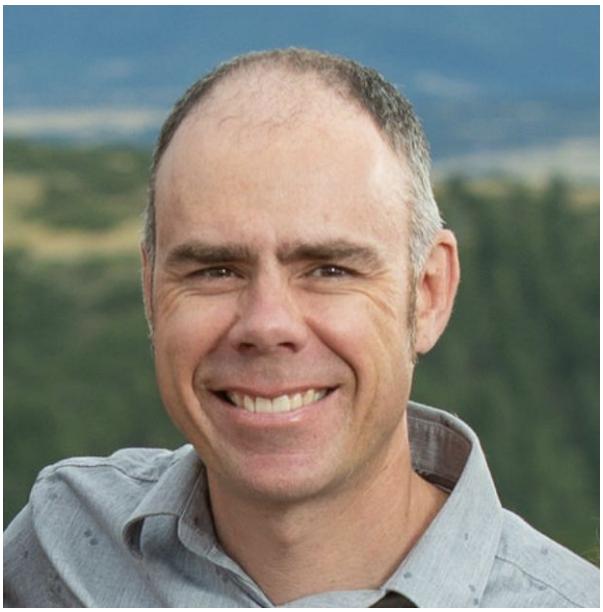
Dr. Brooks is a research meteorologist and Senior Scientist in the Forecast Research and Development Division at the National Severe Storms Laboratory (NSSL) in Norman, Oklahoma and an affiliate professor of meteorology at the University of Oklahoma. He majored in physics and math at William Jewell College and graduated in 1982, with a year at the University of Cambridge studying archaeology and anthropology. His master's degrees are from Columbia University in Atmospheric Sciences. He has a Ph.D. from the University of Illinois at Urbana-Champaign in Atmospheric Sciences. After graduating from Illinois, he was a National Research Council Research Associate at NSSL and joined the permanent staff there in 1992. During his career, a major focus of his work has been why, when, and where severe thunderstorms occur and what their effects are. A second area has been on the quality and value of forecasts, including the problem of decision making under uncertainty. He has been an author on two IPCC Assessment Reports and a US Climate Change Science Program report on extreme weather. He organized the Weather Ready Nation workshop to identify scientific priorities for severe weather forecasting in 2012. He received the United States Department of Commerce's Silver Medal for his work on the distribution of severe thunderstorms in the United States, the NOAA Administrator's Award for work on extreme weather and climate change, and the Daniel L. Albritton Award for Outstanding Science Communicator from NOAA's Oceanic and Atmospheric Research. He is a Fellow of the American Meteorological Society and Royal Meteorological Society.

Dr. Melissa Burt:

Dr. Melissa Burt is the Assistant Dean for Diversity and Inclusion in the Walter Scott, Jr. College of Engineering at Colorado State University. In this position, Dr. Burt leads the strategic planning and implementation efforts for diversity, inclusion and equity goals across the College, and has an active role in university-wide diversity and inclusion initiatives. In particular, she works with College faculty, staff and students to foster an inclusive climate for diversity in the college. Dr. Burt is also a Research Scientist in the Department of Atmospheric Science at Colorado State University. Her research focuses on the interactions of Arctic clouds, radiation, and sea ice, with interests ranging from cloud-radiation feedbacks, hydrological and energy cycles in climate, and climate change feedbacks. Outside of CSU, she is the Vice President for the non-profit organization, the Earth Science Women's Network. ESWN promotes career advancement of women scientists, builds positive science cultures, and helps young people, especially young women, view themselves as future scientists. ESWN's goal is to promote the "scientists of today, and welcome the scientists of tomorrow." Dr. Burt has a B.S. degree in Meteorology from Millersville University and a M.S. and Ph.D. in Atmospheric Science from Colorado State University.

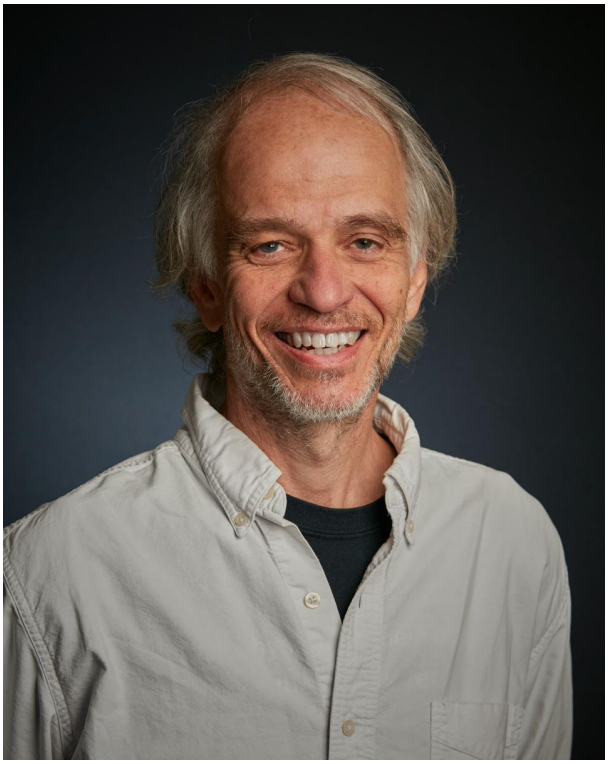
Dr. Tim Canty:

Tim Canty is an associate research professor in the Department of Atmospheric & Oceanic Science at the University of Maryland, College Park where he also serves as director of the department's undergraduate and professional master's degree programs. He received his PhD in Physics from the New Mexico Institute of Mining and Technology in 2002. Before coming to Maryland in 2007 he was a Caltech post-doctoral scholar at NASA's Jet Propulsion Laboratory and a lecturer in the Department of Atmospheric and Oceanic Sciences at UCLA. Recently, he became the Director of the Marine Estuarine and Environmental Sciences Graduate Program.
His research focuses on air quality science and policy, stratospheric ozone, and climate change. He uses observations from satellites, balloons, aircraft and ground based instruments combined with various physical and chemical modeling platforms to improve our understanding of atmospheric composition. Since 2010, he has provided air quality modeling support and data analysis to the Maryland Department of the Environment and other Ozone Transport Commission (OTC) states.



Julien Chastang:

I am a scientific software developer for the Unidata Program Center at UCAR (University Corporation for Atmospheric Research) in Boulder, Colorado. I have been employed at UCAR since 1999 and at Unidata since 2010. I obtained a bachelor's degree in molecular, cellular and developmental biology in 1994 and a master's degree in computer science in 2000. I am passionate about the application of computing technology to science and math. During my employment at Unidata I have advocated for open-source, cloud computing and Python related technologies. I began at Unidata as a software developer supporting the Integrated Data Viewer (IDV). More recently, I have been focused on Unidata science gateway efforts with the objective of facilitating science for the Unidata community with web technologies.



Dr. Phillip Chilson:

Dr. Phillip Chilson is a Professor in the School of Meteorology at the University of Oklahoma and Director of the University's Center for Autonomous Sensing and Sampling. He received a BS and PhD in Physics from Clemson University and an MS in Physics from the University of Florida. He has held positions at the Max-Planck Institut für Aeronomie in Germany, the Swedish Institute of Space Physics in Sweden, and the University of Colorado. Dr. Chilson has been with the University of Oklahoma since 2005, where he has pursued a wide variety of research topics. His current research interests include investigations of the atmospheric boundary layer, aeroecology, the advancement of remote sensing technologies, and the development of unmanned aerial systems for atmospheric studies. Before joining the University of Oklahoma, Dr. Chilson also worked in solid state physics, ultra-low temperature physics,

	and aeronomy. After receiving his BS degree, Dr. Chilson worked at a nuclear research facility in Germany on a Fulbright Scholarship.
	**Dr. Kenneth J. Davis:** Dr. Kenneth J. Davis is a Professor of Atmospheric and Climate Science in the Department of Meteorology and Atmospheric Science at Penn State University. He studies the carbon and water cycles of agricultural and forested ecosystems, energy production systems, and cities, using aircraft, towers and remote sensing, and numerical models of ecosystems and the atmosphere. He earned an A.B. degree in Physics with a Certificate in Theater and Dance, with honors, from Princeton University in 1987, and a Ph.D. in Astrophysical, Planetary and Atmospheric Sciences from the University of Colorado, Boulder in 1992. He has authored or co-authored more than 160 peer-reviewed publications.

Jeremy DeHart:

Major Jeremy DeHart is a weather officer with the U.S. Air Force Reserve. He currently serves with the 53d Weather Reconnaissance Squadron “Hurricane Hunters” at Keesler AFB, MS. Since joining the Hurricane Hunters in 2016, he has logged over 850 flying hours and performed over 75 hurricane penetrations, to include the landfall missions of Harvey, Irma, and Michael. Prior to his current assignment, Maj DeHart served over 12 years as a weather officer in the active duty Air Force, pursuing leadership opportunities and gaining operational experience in synoptic analysis & forecasting, transport & dispersion modeling, and climatology. He has Meteorology degrees from the Naval Postgraduate School (M.S.) and North Carolina State University (B.S.), and commissioned through the Air Force ROTC program at NC State in 2004.

Becky DePodwin:

Rebecca (Becky) DePodwin is a private sector meteorologist and emergency preparedness specialist with a passion for crisis and risk communication. She holds a Bachelor of Science degree in Meteorology from the University of Northern Colorado and a Master of science degree in Emergency Management from Millersville University. Her work as an operational meteorologist includes a comprehensive understanding and application of weather forecasting, effective life-saving communication, and personalizing the weather so people can improve their lives. Becky is very active within AMS as a Co-Chair of the Planning Committee for the Early Career Leadership Academy, the incoming (2020) Chair of the Board for Early Career Professionals and Co-Chair of the Board on Enterprise Strategic Topics.

Becky is an advocate for the discussion of mental health in meteorology and has discussed this topic in a personal blog post on depression, and has also released several podcast episodes talking with other meteorologists in the field about the impact of shift work, forecasting for disasters, and experiencing traumatic weather events has on their mental well-being. This work earned her a Special Appreciate Award from the National Weather Association at their 2019 annual meeting. Becky was also part of the 4-person team that received the 2018 American Meteorological Society Award for Exceptional Specific Prediction.

Dr. Amber Emory:

Dr. Amber Emory is a Program Manager for the NASA HQ Earth Science Technology Office and was a Research Radar Meteorologist at NASA Goddard Space Flight Center (GSFC) where she began working in 2009 while still finishing her dissertation. She earned a Ph.D. in Wind Science and Engineering from Texas Tech University in 2012, a Master's in Atmospheric Science from Texas A&M University in 2007, and a Bachelor of Science in Meteorology from the Pennsylvania State University in 2004. Her primary research interests involve the study of severe weather with radars of various frequencies (S-, C-, X-, Ku-, Ka-, and W-band). Amber worked on research radar data validation, analyzing precipitation estimates, dual-Doppler wind retrievals in landfalling hurricanes, and using dual-polarimetric radar variables to further understand mesoscale convective systems, cloud systems, microphysics and their relation to the hydrologic cycle. Her research also involved the quantification of rainfall and precipitation types from satellite, airborne, and ground-based radar systems. She has participated in 14 field campaigns since 2003 and continues to be active in a wide variety of field deployments including hurricanes, severe storms, and winter storm events.

Bryan Engelsen:

Bryan Engelsen currently works for Environmental Resources Management within the North American ambient air quality monitoring service line. He works within a team that is responsible for designing, installing, and operating air quality and meteorological monitoring programs for a wide variety of applications and industries. The main goal of the group is to collect reliable data of quantified accuracy and precision, and deliver it in a form that maximizes client value.

Current monitoring programs include sites in Krotz Spring, Louisiana; Williamsport, Pennsylvania; Kaukauna, Wisconsin; and Georgetown, Guyana. Data from these projects support objectives that range from satisfying permit conditions to supporting environmental impact assessments.

Prior to working as a consultant, Bryan received his Master's degree from the Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign. Bryan was advised by Dr. Sonia Lasher-Trapp, and as part of his research he performed dozens of high resolution simulations of supercell thunderstorms on the Blue Waters supercomputer to evaluate the effects storm rotation had on entrainment during the early and later stages.

Bryan's hobbies include fishing, traveling, and all things sports.

Dr. Jenni Evans:

Jenni L. Evans is a professor in the Department of Meteorology and Atmospheric Science at Penn State (PSU), director of PSU's Institute for CyberScience (ICS), and the Centennial AMS President. ICS serves as the nexus of cyber-enabled research and high-performance computing at PSU, with 21 ICS tenure-track faculty, 31 professional staff, and over 200 affiliated faculty. Evans received her degrees in applied mathematics (B.Sc. Honors, 1984; Ph.D., 1990) from Monash University. Her early research experiences included experimental fluid dynamics and planetary boundary layer observations, as well as spending 18 months at the Naval Postgraduate School (Monterey) and NASA Ames Supercomputing. Evans was a research scientist at CSIRO Atmospheric Research prior to arriving at PSU Meteorology in 1992. In the years since, Evans has held many roles at PSU, including being interim director of the Earth and Environmental Systems Institute and acting director of PSU's Institutes for Energy and the Environment, before taking up her position as director of the Institute for CyberScience. These experiences have given her a broad perspective on interdisciplinary research involving the Earth sciences, as well as applications of high-performance computing in fields including nanomaterials, cyber law, astrophysics and political science, among many others. This broad perspective is ideal for leadership in the expanding role of the AMS as a nexus between the meteorology community and the wider research and policy communities.

Cindy Fitzgibbon:

Cindy Fitzgibbon is NewsCenter 5's EyeOpener and Midday Meteorologist. Cindy joined WCVB's StormTeam 5 in April of 2013, but has been 'waking up' the Boston area with her forecast for more than 15 years! She is a familiar face on morning television in Boston, having spent a decade at WFXT where she was the FOX25 Morning News Meteorologist.

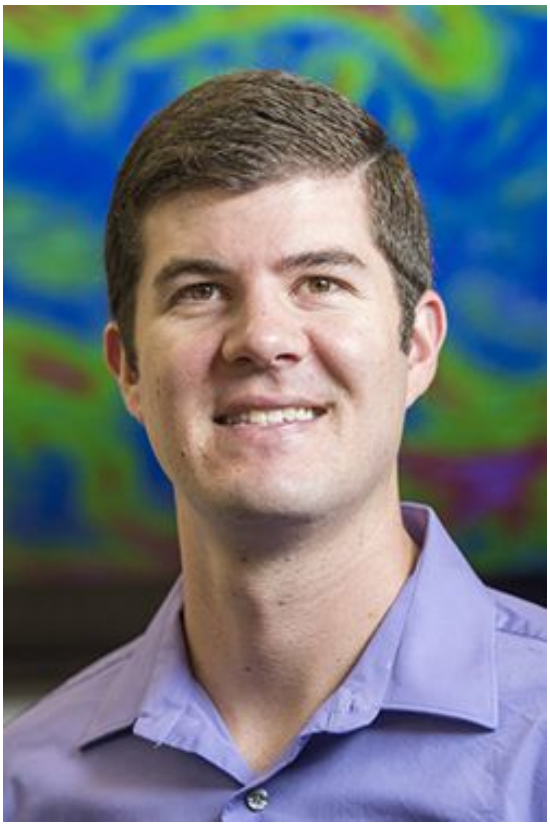
In 2017, Cindy won the regional Emmy award for outstanding achievement in weather broadcasting after being nominated several times. Cindy has also won an Associated Press award for "Best Weathercast." Prior to joining WFXT in 2002, Cindy forecasted for NBC2 in Fort Myers, Florida where she covered a tropical storm that hit Southwest Florida amidst the September 11th attacks back in 2001. Before NBC2, Cindy was the morning meteorologist for WPTZ, the Hearst NBC affiliate in Burlington, Vermont. Cindy started her meteorology career at KXMB-TV, the CBS affiliate in Bismarck, North Dakota more than 20 years ago.

A native New Englander, raised near Portland, ME, Cindy earned her Bachelor of Science degree in Meteorology from Lyndon State College in Vermont. Cindy is a member of both the American Meteorological Society (AMS) and the National Weather Association. She has been awarded the AMS Seal of Approval for Television. Cindy has also made guest appearances on ABC News filling in on World News Tonight and Good Morning America Weekend.

Cindy is involved with and devotes her time to organizations that promote science education, particularly young girls, including the Discovery Museum "Smart Gals" Program, the Jr. Sci-Tech Girl STEM Expo, and the Science Club for Girls. Cindy repeatedly donates her time to help raise money for

	local organizations to fight ALS (Lou Gehrig's disease) and MS (multiple sclerosis) and has become an ambassador in spreading awareness about Batten Disease. She makes frequent "Weather Visits" to schools across the area and has educated thousands of students about the weather over the years. Cindy is active in the Natick community where she lives with her husband and two boys. Depending on the season, you can typically find her on the basketball court, soccer or baseball field cheering on her boys.
	**Dr. Jonathan Foley:** Dr. Jonathan Foley is a world-renowned climate scientist, sustainability expert, and public speaker. He is the executive director of Project Drawdown — the world's leading resource for climate solutions. His work focuses on finding solutions to sustain the climate, ecosystems, and natural resources we all depend on. Foley's groundbreaking work has led him to become a trusted advisor to governments, foundations, non-profits, and business leaders around the world. He and his colleagues have made major contributions to our understanding of climate change, ecosystems, food systems, and the sustainability of the world's resources. He has published over 130 peer-reviewed scientific articles, including many highly cited works in *Nature* and*Science*. He is among the top 1 percent most-cited scientists in the world. A noted science communicator, his presentations have been featured at hundreds of international venues, including the Aspen Institute, the World Bank, the National Geographic Society, the Chautauqua Institution, the Commonwealth Club, the National Science March, and TED.com. He has taught at several major universities on topics

	ranging from climate change, sustainability solutions, and fixing the global food system. He has also written many popular pieces in *National Geographic*, the *New York Times*, the *Guardian*, and *Scientific American*. He is also frequently interviewed by international media outlets, and has appeared on National Public Radio, the PBS NewsHour, the BBC, CNN, and in the *New York Times*, the *Guardian*, the *Washington Post*, *WIRED,* the HBO documentary on climate change *"Too Hot Not to Handle",* and the film series*"Let Science Speak"*. Foley has won numerous awards and honors for his work, including the Presidential Early Career Award for Scientists and Engineers, awarded by President Clinton; the J.S. McDonnell Foundation's 21st Century Science Award; an Aldo Leopold Leadership Fellowship; the Sustainability Science Award from the Ecological Society of America; and the National Science Foundation's Faculty Early Career Development Award. In 2014, he was also named as the winner of the prestigious Heinz Award for the Environment. Before joining Project Drawdown, Foley led a number of world-leading environmental science and sustainability organizations. He started his career at the University of Wisconsin, where he launched the Center for Sustainability and the Global Environment (SAGE) and served as the first Gaylord Nelson Distinguished Professor of Environmental Studies. Next, he was the founding director of the Institute on the Environment (IonE) at the University of Minnesota, where he was also the McKnight Presidential Chair of Sustainability. Then he served as the Executive Director of the California Academy of Sciences, the greenest and more forward-thinking science museum on the planet. Originally from Maine, Foley enjoys nature photography, hiking, kayaking, and exploring

	new places. He lives in San Francisco.
	**Dr. Vittorio (Victor) A. Gensini:** Dr. Gensini is an Assistant Professor in the Department of Geographic and Atmospheric Sciences at Northern Illinois University. His research umbrella covers extreme weather and climate, with specific interests focused on: severe convective storms, synoptic/mesoscale meteorology, applied climatology, GIS techniques, geoscience data visualization, weather forecasting and climate change. Currently, a majority of his research is focused on examining weather and climate dynamics that explain variability in extreme weather (e.g., hail, tornadoes, heavy rain, heat waves) frequency and analyzing ways to forecast these events at sub-seasonal to seasonal time scales.
	**Mary Glackin:** Mary Glackin was recently elected President of the American Meteorological Society with a term commencing in January 2020. From 2015 until Spring 2019, she was the Vice President for Weather Business Solutions for The Weather Company, an IBM Business serving more than 5000 clients globally delivering weather and climate services. In this role, she oversaw forecasting science and operations, product development, and client relationships. Glackin also managed the company's relationships with members of the national and global weather enterprise that included national and international government agencies, academia, and other private sector providers including IBM philanthropic activities.

	Glackin served as Deputy Under Secretary at NOAA from 2007-2012 where she was responsible for day to day management of the atmospheric services, research, and coastal and marine stewardship of this then $4.9B agency. Prior to this she represented the Department of Commerce/NOAA to the U.S. Global Change Research Program (2003-2007). Glackin held a number of executive positions at NOAA including Deputy Assistant Administrator for Satellite Data and Information Services (1999-2003) and AWIPS Program Manager (1994-1999). Glackin is a Fellow of AMS and the National Academy of Public Administration and she is currently serving on the National Academies of Science's Board of Atmospheric Science and Climate. She has twice received the U.S. Presidential Rank Award, the Department of Commerce Silver and Bronze Medals and is the recipient of the AMS' Charles Brooks Award for service to the Society.

Dr. Alex Gonzalez:

My passion for meteorology began, like many, at a young age. I grew up in the suburbs of Philadelphia and spent most summers on the beautiful island of Puerto Rico, where my parents grew up. Tropical storms were aplenty and they always peaked my interest, however, I thought that hurricanes were too big of a scale to fully appreciate them. I maybe even thought it was cliché for me to study them since I have "tropical" blood. And here I am, a tropical meteorologist after all! Instead of hurricanes, I was completely entranced by tornadoes. Fittingly, my interest in meteorology really picked up after seeing the film, *Twister*. I have always been amazed by the unpredictability of natural phenomena and I love the challenges of math and physics applied to scientific problems.

I attended Penn State University for my undergraduate studies, where I majored in meteorology and minored in mathematics. During my time at Penn State, I often felt more comfortable with math classes than my meteorology classes. I tried broadcast meteorology in my first two years or so but gave up rather (too) quickly because of my uncomfortability of being in front of the green screen. I found a love for research after hearing about a summer opportunity to translate and interpret some hurricane sailing mission documents near Cuba that were in Spanish. I ended up doing more than the translations and peaked an interest in tropical meteorology and atmospheric dynamics after reading quite a bit of Holton's Dynamic Meteorology textbook. After that experience, I sought out internships involving research and applied to a multi-summer research program at the National Center for Atmospheric Research where students could work with scientists on real research projects called SOARS (Significant Opportunities in Atmospheric Research and Science). After my first summer in the SOARS program, I focused on applying to graduate school to

pursue a career in research. During my first summer at NCAR, I was fortunate to meet my future graduate school advisor from Colorado State University and the rest is history.

After graduate school and a 2.5 year stint in the megacity Los Angeles, CA working as a researcher at NASA' s Jet Propulsion Lab and UCLA, I moved to Ames, Iowa in the summer of 2018 after being chosen for an Assistant Professor of Meteorology position at Iowa State University. I am grateful to have an opportunity to combine my love for teaching, mentoring, and research in the realm of tropical meteorology and atmospheric dynamics at Iowa State. I hope to inspire young scientists to pursue graduate school, especially those from underrepresented groups.

Max Grover:

Max Grover is a graduate research assistant at the University of Illinois at Urbana-Champaign where he is working toward a Master's in Atmospheric Science. Originally from Delavan, Wisconsin, he earned his undergraduate degree in meteorology from Valparaiso University in Indiana. He is interested in severe storms, GIS, and data science. He was awarded the Bhanwar Lal Bahethi AMS Senior Named Scholarship which was presented by SSAI at last year's AMS annual meeting in Phoenix. He serves as a student member on the AMS Board on Environmental Information Processing Technologies.

At Valparaiso University, he was involved with a data science project in which he developed an interactive notebook that can be used to analyze and visualize microclimate data collected by the USGS Lake Michigan Ecological Research Station at the Indiana Dunes National Lakeshore. In a collaborative effort between the meteorology and computer science departments at Valparaiso University and the National Center for

	Atmospheric Research in Boulder, he successfully obtained funding for a Raspberry Pi based project through the Valparaiso University Guild Grant. The work resulted in the ability to compile and run the Weather Research and Forecasting (WRF) numerical model on a Rasberry Pi cluster, which is actively used by the Numerical Weather Prediction class at Valparaiso University. This past summer, Max worked as an intern at Unidata in Boulder, Colorado, where he added grammar driven functionality to MetPy. In addition to contributing to MetPy, he co-taught a Unidata Python Workshop at State University of New York at Albany. In graduate school, he is working on analyzing data from the RELAMAPGO-CACTI field campaign to characterize severe storms and their environments in the southern hemisphere. After graduate school, he hopes to use his skills in Python, GIS, and atmospheric science in a career as a weather data scientist.
	**Dr. Meredith Hastings:** Dr. Meredith Hastings is an Associate Professor in the Department of Earth, Environmental, and Planetary Sciences at Brown University. She has a joint appointment with the Institute at Brown for Environment and Society, an interdisciplinary research center focused on understanding interactions between natural, human and social systems. Prior to joining the faculty at Brown in 2008, Meredith was a postdoctoral fellow at the University of Washington's Joint Institute for Study of the Atmosphere and Ocean (JISAO) and completed her Ph.D. at Princeton University. Professor Hastings' research interests span air quality, atmospheric chemistry, acid deposition and biogeochemistry. In 2014, she was awarded an NSF CAREER Award entitled *Quantifying the Isotopic Signatures of Nitrogen Oxides Emissions Sources*. This award supports both

	research and education initiatives that highlight Hastings' dedication as a researcher, mentor, and teacher. She has also served as a principal investigator on NSF ADVANCE awards dedicated to professional support and development of diverse geoscientists. She is currently President and a co-founder of the non-profit Earth Science Women's Network (ESWN, www.eswnonline.org). She is the recipient of the American Geophysical Union's Atmospheric Science Ascent Award and she was also recently named one of Insight into Diversity's 100 Most Inspiring Women in STEM.
	**Kat Hawley:** Kat Hawley is an User Engagement Specialist for NOAA Satellite and Information Service (NESDIS) Center for Satellite Applications and Research (STAR). Prior to joining STAR, Ms. Hawley was a Management and Program Analyst for NESDIS Headquarters where she was the Low Earth Orbit (LEO) Liaison and the Education Coordinator for NESDIS. Prior to joining NESDIS Headquarters, Hawley was a Meteorologist for the National Weather Service. Originally from Dewey, Oklahoma, Hawley fell in love with extreme weather patterns, which attracted her to the skies. Ms. Hawley received her B.S. in Meteorology from the University of Oklahoma. Hawley is a Chair member for the local D.C. AMS Chapter, and is a FEMA Certified Type 1 Meteorologist. Hawley works with the weather enterprise to understand how Earth observations are used and how STAR can serve the weather community better. Until late 2019, Hawley coordinated Life Cycle Reviews and provided technical and programmatic status and health updates of key points in life cycles of million dollar satellite programs, prepared NESDIS Leadership attendant to LEO programs for DOC/NOAA/NASA meetings,

	and coordinated OMB and Hill requests. Hawley was the NESDIS Representative for NOAA Education Council, NOAA Education Coordination Committee, and NOAA Scholarship Team while working as the Education Coordinator at NESDIS Headquarters. She also has a strong passion for severe weather and research and is a contributor for two Collaborative Science, Technology, and Applied Science (CSTAR) projects with The State University of New York, University at Albany. While she worked for the NWS, she participated as a forecaster/nowcaster for projects such as Aviation for NOAA's Twin Otter project and the Ontario Winter Lake-effect Systems (OWLES) Lake effect (LE) now research project. In her free time, Kat loves to snowboard, read and hike.
	**Janice Huff:** One of the nation's most recognized and trusted weather forecasters, Janice Huff serves as Chief Meteorologist for NBC 4 New York, delivering weather reports for the station's 5 p.m., 6 p.m. and 11 p.m. newscasts. A member of the New York State Broadcasters Association's Hall of Fame, Huff has provided accurate and informative weather information to Tri-State viewers for more than 20 years. She joined NBC 4 New York in January, 1995 and held a variety of positions at NBC. Huff came to WNBC from KRON-TV, the NBC affiliate in San Francisco, where she was the primary on-air meteorologist for the station since 1991. She joined that station in 1990. Huff has been regularly recognized for her

	professional contributions to broadcast journalism and to the field of meteorology. In addition to her induction into the New York State Broadcasters Association's Hall of Fame, Huff was awarded the prestigious Allen B. Dumont Broadcaster of the Year Award from Montclair State University in 2015. Known for her passion for children in foster care, Huff is the host of *Wednesday's Child*, a quarterly adoption feature known for shining a bright spotlight on foster children and families. She has received numerous accolades for her work on *Wednesday's Child*, such as: ● In 2011, Huff was honored at 1199 SEIU / Employer Child Care Corporation's "5th Annual Care for Kids Gala" for her dedication to children in the New York City area and to children around the world. The funds from the "Kids Gala" went directly to supporting education programs and services for children. ● Additionally in 2011, Huff was recognized at the "Family Focus Adoption Services (FFAS) Gala" for her work on behalf of adoptable children in the New York City area through "Wednesday's Child." ● In 2012, Huff received high recognition for her dedication to foster care children at the New York City Court Appointed Special Advocates Spring Reception (CASA-NYC)." Huff works with CASA- NYC to help protect the needs and well-being of children in foster care, making sure that they are placed in safe permanent homes. Huff has served as a mentor to young journalists throughout her career and believes strongly in giving back to the community. She was awarded the McDonald's "2011 Black Media Legends" award, and was honored by McDonald's as one of 24 esteemed 'Black Media Legends'. Huff's image appeared on McDonald's 2011

	Faces of Black History Poster as well as on food tray-liners throughout New York, New Jersey and Connecticut. Additional awards also include the YWCA of New York City's 2008 "W" award; the New York Chapter National Black Journalist Association's "2007 Community Service Award;" the "2006 Golden Apple Award" from the New York City Chapter of American Women in Radio & Television (AWRT); the Federation of Protestant Welfare Agencies' "2006 Laura Parsons Pratt Award;" the Administration for Children's Services' "2004 Golden Heart Award;" the 2004 "Miracle Makers Media Award" for her commitment and dedication to helping New York City's Foster Care children; and the Second Annual "Nicholas Scoppetta Award for Service to Children." Huff was cited in 2002 as a "Grad Made Good" by her Alma Mater, Florida State University. She has also received the Police Athletic League's "2002 Woman of the Year Award;" a 2000 YMCA "Champion for Youth" honor; and the City of Hope's "Spirit of Life" award for her professional and personal example to New York City youth. The American Lung Association named Huff a "Clean Air Hero" for her work in promoting cleaner air and healthier lungs. Additional professional awards include Bronx Community College's 1995 "Kaleidoscope Award" for excellence in television meteorology; a St. Louis Emmy Award for "Best Weathercaster" in 1988; and the American Meteorological Society's Seal of Approval for Television Weather casting in 1985. Huff is a member of the National Weather Association, The American Meteorological

	Society, the National Association of Black Journalists, the National Academy of Television Arts and Sciences, Alpha Kappa Alpha Sorority, and the Friars Club. A native of Manhattan, Huff graduated from Florida State University at Tallahassee with a major in Meteorology. She is married and resides in New Jersey.
	**Pam Knox:** Pam Knox is the current Director of the University of Georgia Weather Network and an agricultural climatologist in the College of Agricultural and Environmental Sciences at UGA. She is also a Certified Consulting Meteorologist and the incoming chair of the AMS Board of CCMs. In the past Pam has been the Wisconsin State Climatologist and Georgia Assistant State Climatologist and served as President of the American Association of State Climatologists. In addition to these jobs, Pam has also worked as a college lecturer in physics and astronomy, National Weather Service hydrologist, tax preparer, hospital inventory specialist, NPR Science Friday intern, and physics lab instructor.

Dr. Karen Kosiba:

As an atmospheric scientist at the Center for Severe Weather Research in Boulder, Colorado, Karen Kosiba has studied some of the most powerful tornadoes and hurricanes close up from inside the sophisticated Doppler on Wheels (DOW) mobile radars. Key to her research is executing field projects to collect data (including wind structure of tornadoes and hurricanes, and supercell storm dynamics) that can be characterized and analyzed to better understand and predict these hazardous weather events.

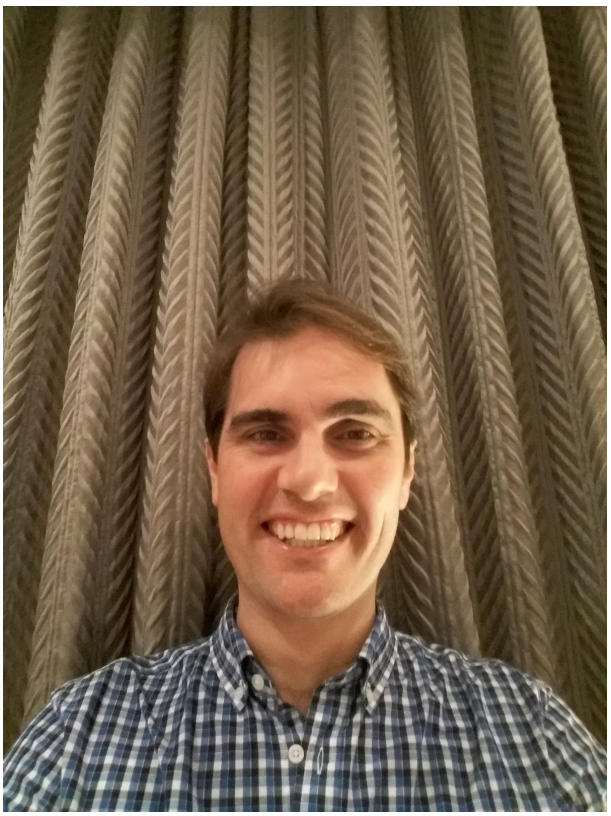
She has participated as project scientist, radar operator, and project leader in over a dozen field projects with the DOWs, both nationally and internationally, including observing and studying surface winds and damage of Hurricane Harvey in 2017, and investigating the Goshen County (Wyoming) tornadic supercell of 2009. Additionally, Karen is passionate about sharing the excitement and importance of atmospheric science with others through various venues and media outlets. This includes appearing on the Weather Channel, various science education programs, and participating in science education regularly through outreach activities at schools, museums and festivals.

Karen has always been fascinated by the physical world around her. As a child she collected caterpillars, built balsa bridges (the prize-winning bridge may still be on display at Homer Jr. High School), took photographs, and stayed up late watching lightning. She considered careers in architecture, patent law, and engineering, but ultimately decided that observational studies of severe weather (somehow) combined all of her interests.

She has a B.S. in Physics from Loyola University, an M.S. in Physics and an M.A.T in Teacher Education from Miami University, and a Ph.D. in Atmospheric Science from

	Purdue University. In her free time, she is an avid TV watcher, traveler, yogi, reader, photographer, hiker, coffee drinker, and sleeper. A native of the Chicago suburbs, she currently resides along the front range in Colorado with her husband and greyhound.
	**Dr. Matthew R. Kumjian:** Dr. Matthew Kumjian is an Associate Professor of Meteorology in the Department of Meteorology and Atmospheric Science at The Pennsylvania State University. At Penn State, Dr. Kumjian has taught undergraduate and graduate courses on Radar Meteorology, Mesoscale Meteorology, Cloud Physics, Precipitation Physics, Snow and Ice Physics, and Aerosol-Cloud-Precipitation interactions. He recently won the Wilson Award for Excellence in Teaching from the Penn State College of Earth and Mineral Sciences. His research is in novel applications of dual-polarization Doppler radar observations and numerical modeling to study precipitation physics in high-impact storms, especially hailstorms and winter storms. On these and other topics, he and his students have over 60 peer-reviewed publications. Currently, Dr. Kumjian's research group comprises 6 graduate students and 4 undergraduate students. Dr. Kumjian recently won the AMS Henry G. Houghton Award for "outstanding and pioneering contributions that have advanced our understanding of precipitation physics through the novel use and application of dual-polarization radar observations." Dr. Kumjian grew up in the Virginia Beach area, and received his B.S., M.S., and Ph.D. in meteorology from the University of Oklahoma. Prior to arriving at Penn State, he was a postdoctoral fellow at the National Severe Storms Laboratory an Advanced Study

	Program Postdoctoral Researcher at the National Center for Atmospheric Research. He currently lives in State College, PA, with his fiancée Kelly and step-daughter Emily. Outside of meteorology, Dr. Kumjian enjoys music (and is principal violist in the Nittany Valley Symphony Orchestra), traveling, and sampling exotic foods and craft beer.
	**Dr. Sonia Lasher-Trapp:** Sonia Lasher-Trapp is a Blue Waters Professor in the Department of Atmospheric Sciences at the University of Illinois. She leads a research group that studies the details of precipitation processes in warm and mixed-phase clouds, using not only observational data sets acquired with radar and aircraft during field programs, but also hierarchies of high-resolution numerical models. She has studied the microphysics of clouds that may lead to aircraft icing, warm rain formation in tropical cumulus clouds, cumulus entrainment, ice nucleation, secondary ice production, and changes in precipitation and hailstorms in future climates. She has also collaborated with science education experts to evaluate the effects of introducing authentic research experiences into undergraduate courses. Dr. Lasher-Trapp received a B.S. with Honors in Meteorology from Saint Louis University in 1990, and a M.S. and Ph.D. in Meteorology from the University of Oklahoma in 1993 and 1998, respectively. She was an Advanced Study Program postdoctoral fellow at the National Center for Atmospheric Research from 1998-2000, and continued as a visiting scientist there until joining the faculty at Purdue University in 2003. She joined the faculty at the University of Illinois in 2014.



Dr. David Lavers:

David is a scientist at the European Centre for Medium-Range Weather Forecasts working on the diagnosis of model errors and the forecasting of hydrological extremes. A current interest is on the use of observational campaign data in numerical weather prediction. Previous research has focussed on hydrometeorology, and in particular, atmospheric rivers and flood events across Europe and the United States. He has previously held appointments at the Scripps Institution of Oceanography, the University of Iowa, Princeton University, and the University of Reading UK. His PhD on seasonal hydrological prediction, awarded in 2011, was undertaken at the Centre for Ecology and Hydrology UK, and the University of Birmingham UK. To keep a healthy life balance, David enjoys spending time in the outdoors especially walking and cycling.

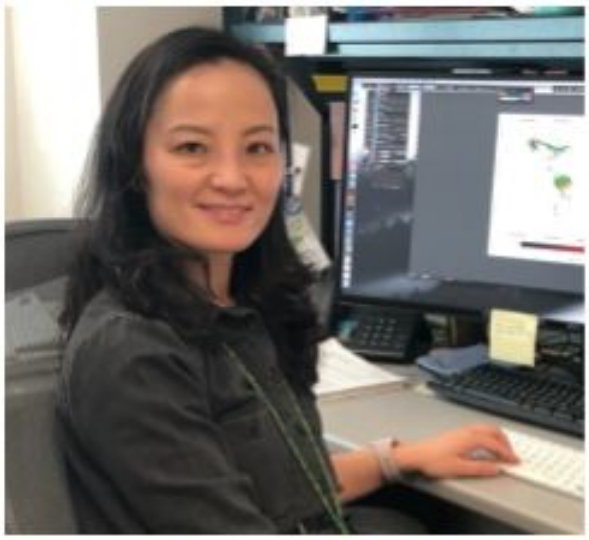
Kevin Lemanowicz:

Kevin Lemanowicz has been the only chief meteorologist for Boston 25 since the first newscast aired in 1996. In his career, he has guided viewers through all the twists and turns of New England weather for more than 28 years! Kevin is a Certified Broadcast Meteorologist (CBM) and a Silver Circle Honoree, a special recognition from the Boston/New England chapter of the National Academy of Television Arts & Sciences honoring veteran television professionals who've made significant contributions to their community and in their field of expertise.

Kevin keeps New Englanders on track with changing weather beyond Boston 25 News' on-air and digital platforms. He and the Boston 25 News Weather Team provide forecasts to the Boston Red Sox, Magic 106.7 WMJX, Country 102.5 WKLB, and WCRN AM 830. Additionally, Kevin has done in-depth stories related to weather and science. Most recently, Kevin and his team put together a one-hour primetime special examining the impacts of climate change in southern New England called "Climate Matters."

Active in the community, Kevin has visited hundreds of schools from New Hampshire to Cape Cod. Additionally, he shares his love of meteorology and science expertise with a variety of groups and at the annual STEM Day at Fenway Park. He also serves as the spokesperson for the annual Cox Conserves Heroes Awards.

Prior to working at Boston 25, Kevin was chief meteorologist at WTIC in Hartford, CT. He has also worked at the New England Weather Service in Hartford, providing forecasts for private industry and radio stations and was a staff meteorologist at Fleetweather, Inc., where he tracked storms for radio, schools, private industry and the Weather Channel.

	Kevin began his career as a meteorologist at WVIT-TV in Hartford, CT. Kevin is a strong supporter of the Juvenile Diabetes Research Foundation, The Jimmy Fund, and The Salvation Army of MA. Kevin graduated from Cornell University with a Bachelor of Science degree in Meteorology.
	**Dr. Qing Liang:** Dr. Qing Liang is a research physical scientist in the Atmospheric Chemistry and Dynamics Laboratory. She is a core member of the NASA Goddard chemistry climate model, GEOSCCM. Dr. Liang received her Ph.D. in Atmospheric Sciences in 2006 from University of Washington, Seattle, and has been at the NASA Goddard Space Flight Center since graduation. Her primary research focuses on combining global 3-dimensional chemistry/climate models with NASA data from various observation platforms, surface, airborne, and satellite, to improve our understanding of atmospheric composition and its model representation. She has published over 30 peer-reviewed papers on understanding the atmospheric budget and transport of many trace gases that are crucial to stratospheric, tropospheric ozone and chemistry-climate interaction, e.g., the man-made chlorofluorocarbons (CFCs) and hydrochlorofluocarbons (HFCs), the naturally emitted very-short-lived halogen compounds, and surface air quality related ozone and hydroxyl radical precursor gases. Dr. Liang has also served as co-lead authors on two Assessment Report sponsored by Stratospheric Processes And their Role in Climate (SPARC) organization (SPARC 2013, SPARC 2016), a contributing author for the WMO/UNEP Scientific Assessments of Ozone Depletion (2014), and the Chapter 1 review editor for WMO/UNEP Scientific Assessments of Ozone Depletion (2018). In addition, she has also participated as a science member in

	several NASA and NSF aircraft field missions, that were conducted to examine the impact of human and natural emissions on atmospheric composition.
	**Dr. Marianna Linz:** Marianna Linz completed her PhD in the Massachusetts Institute of Technology-Woods Hole Oceanographic Institute Joint Program in Physical Oceanography in 2017. She was then a postdoctoral researcher at UCLA in the Atmospheric and Oceanic Sciences Department for two years before starting as an Assistant Professor in Earth and Planetary Sciences and the School of Engineering and Applied Sciences at Harvard in July of 2019. Her work focuses on transport of tracers in the atmosphere, and her PhD research was about the circulation of the stratosphere and how we can observe it from satellite data. Her recent stratospheric work has focused on the detection of ozone trends and the relationships between different metrics of the stratospheric circulation. There is still a fundamental question of whether/how the circulation of the stratosphere is changing in response to climate change, and she is working with a range of approaches to address this question. Other work in her group is focused on explaining the detailed shape of the near-surface temperature and relative humidity distributions in terms of transport by the local winds. Prof. Linz has been involved in a number of outreach activities, including being a founding member of the Women in Course 12 group at MIT and writing a children's book that explains the basics of climate physics in rhyming couplets.

Dr. Marcela Loria-Salazar:

Marcela Loria-Salazar is currently a post-doctoral scholar in the School of Meteorology at the University of Oklahoma (OU). She completed my doctoral (2018) and master's (2013) degrees at the University of Nevada, Reno (UNR) in Atmospheric Sciences. Her undergraduate degree is a collection of Major in Meteorology and minors in Physics and Mathematics from the University of Costa Rica. In line with her academic experience,she worked for two years as a software developer.

Her research interests include: 1) interdisciplinary research to investigate atmospheric aerosol physics, 2) atmospheric boundary layer and turbulence, 3) transport phenomenon over irregular terrain, 4) data assimilation using numerical weather prediction models and satellite retrievals, 5) numerical simulations, 6) extreme aerosol events (e.g. fires and dust storms), and 7) some field experiments. To conduct her research, she analyzed data from multiple weather, satellite, and aerosol instruments. Moreover, she has expertise in manipulating large data sets (approximately 50 TB of data); becoming an empirical big data scientist. She graduated from her PhD with nine publications and a citation index of 5. She was awarded a NASA NESSF fellowship, as a Latin American. She notes this award as “a great achievement for her personal life” because the NASA NESSF program prioritizes U.S. citizens.

She describes her life interests as “ignoring less, cats, working out, nutrition, makeup, hiking, and traveling. As my Instagram page describes me Physicist 😎, data analyst 👇🏻, fitness enthusiastic 🏋️‍♀️, makeup junkie 💄, crazy cat lady 😻, and maybe one day (if I work very hard) I’ll be a professor.”

Dr. Lorena Medina Luna:

Dr. Lorena Medina Luna is an Education and Outreach Specialist at the National Center for Atmospheric Research. She is the lead organizer for the NCAR Explorer Series, which consists of quarterly lectures that feature NCAR scientists and short videos that highlight careers and the science taking place during field campaigns; supports the new NCAR Traveling Climate exhibit; and works on increasing bilingual (Spanish-English) science communication in the earth and related sciences. For three summers (2017-2019), Dr. Medina Luna led the scientific communication workshop for the Significant Opportunities in the Atmospheric Research and Sciences (SOARS) program. Prior to NCAR, Dr. Medina Luna worked at the Denver Museum of Nature and Science as a bilingual educator leading classes for k-12 school groups in topics ranging from biological sciences to space sciences. Dr. Medina Luna received her PhD in Geology (Geophysics) from the University of Michigan investigating the stresses that generate earthquakes. She received her
M.S. in Geology from California State University, Northridge studying the southern San Andreas fault stratigraphy, using Optically Stimulated Luminescence (OSL) geochronology. She received her B.S. in Earth and Environmental Science from the University of California, Irvine.

Andy Nash:

Andy Nash is currently the Meteorologist-in-Charge of the National Weather Service (NWS) Forecast Office in Norton MA where he oversees a staff of 23 that has the responsibility to issue weather forecasts and severe weather warnings for much of southern New England. Andy grew up in Connecticut, and earned his BS and MS degrees in Meteorology from the University of Hawaii. After graduating in 1992, he started his career with the NWS in Montgomery AL. Over the next 6 years he held meteorologist positions at the offices in Tampa FL and Taunton (now Norton) MA. Andy then spent 3 years overseeing the aviation and severe weather forecast programs at the NWS Regional Office on Long Island. In 2002 he moved back to Hawaii to work as the Science Officer at the combined Central Pacific Hurricane Center/NWS Honolulu Forecast Office, and later became the Deputy Director of the office. In 2007 he was selected as the Meteorologist-in-Charge of the NWS Forecast Office in Burlington VT. While in Burlington, he was one of the original developers of the Winter Storm Severity Index (WSSI) which is an impact based and graphical approach to depicting potential societal impacts related to winter weather events. The WSSI is now being produced by the Weather Prediction Center. In October 2018, he moved back to Massachusetts to start his current position.

Dr. Holly Oldroyd:

Holly Oldroyd has held an appointment as Assistant Professor of Water Resources in the Department of Civil and Environmental Engineering at the University of California, Davis since 2016, and heads meteorological research at the Tahoe Environmental Research Center (TERC) at Incline Village. She holds a Ph.D. in Civil and Environmental Engineering from École Polytechnique Fédérale de Lausanne (EPFL, Switzerland), and BS and MS Degrees in Mechanical Engineering from the University of Utah. She studies a wide range of turbulent transport in environmental flows and in particular, land-atmosphere interactions over mountainous terrain. She is also involved in a wide range of educational-outreach and mentoring programs, including the Society of Women Engineers, AvenueE, UC Davis First-Gen, and the TERC Youth Science Institute. Recently, she was awarded the NSF-CAREER award to continue her research on land-atmosphere interactions in the Sierra-Nevada Mountains.

Dr. Philippe Papin:

Philippe Papin is currently a National Research Council (NRC) Postdoctoral Scholar at the Naval Research Laboratory in Monterey, California. He received his B.S. in atmospheric science at the University of North Carolina: Asheville, before moving north to get his M.S. and Ph.D. in at the University of Albany in New York. While at Albany, Philippe spent time as a research and teaching assistant, the latter of which earned him the Bernard Vonnegut Teaching Award from the university. Philippe has also received numerous accolades for presentations given at AMS and AGU conferences over his graduate career, and is currently an Associate Editor for Monthly Weather Review, an AMS journal. Philippe is

	an avid weather forecaster, winning more than 10 trophies in the WxChallenge collegiate competition, including one as the 2016 tournament champion. When not involved in all things weather, Philippe enjoys hiking, visiting national parks, consuming cheese of all varieties, and trying very hard not to be the worst golfer in California. You can reach out to him by email at pppapin@gmail.com or via twitter at @pppapin where he's always up for a good weather debate.
	**Dr. Erik Rasmussen**: Erik Rasmussen's interest in severe storms began in Hutchinson, Kansas in the 1960s and 1970s as his storm chasing vehicles progressed from feet to bicycle to Volkswagen SuperBeetle. He worked with Dr. Howie Bluestein at the University of Oklahoma, where he earned his B.S. degree, in some of the early storm intercept projects in the 1970s. While working on his M.S. degree at Texas Tech in the early 1980s, he recorded 16 mm movies, and performed extensive photogrammetric analysis, of tornadoes in a cyclic supercell dubbed the "Tulia Outbreak Storm". Later in the 1980s he was involved in work at NSSL aimed at recording tornado sounds for subsequent audio spectrum analysis and windspeed estimation. After earning his Ph.D. at Colorado State in 1992, with a dissertation based on radar observations of tropical squall lines in Northern Australia, he joined NSSL (CIMMS) and worked to organize and lead the first large, organized tornado field program: VORTEX94-95. He was a co-leader of VORTEX-2 in 2009-10. In 2015 he became the Coordinating Scientist for VORTEX-SE, and is a Principal Investigator in the Targeted Observations using Radar and UAS in Supercells (TORUS) project (2019-20).

Dr. Jens Redemann:

Jens Redemann is the Director of the School of Meteorology at the University of Oklahoma. He is a Professor in the School and holds the Mark and Kandi McCasland Endowed Chair in Meteorology. Until July 2018, he was a Physical Research Scientist in the Atmospheric Science Branch at NASA Ames Research Center. He received an MS in Physics from the Free University of Berlin in 1995, and an MS and PhD in Atmospheric Sciences from UCLA in 1996 and 1999, respectively (but he wishes he had a better understanding of Behavioral Psychology). In his career, he has led several groups of scientists and engineers, with the goal of making "model-relevant" observations of aerosol-cloud-climate interactions. He has authored more than 85 peer-reviewed journal articles on aerosols and clouds. He was the PI for the NASA Earth-Venture-Suborbital-2 project ORACLES (ObseRvations of Aerosols above CLouds and their intEractionS), which according to Forbes magazine is the NASA mission that "arguably has the worst acronym ever".

Dr. Yvette Richardson:

Dr. Yvette Richardson is a professor in the Meteorology and Atmospheric Science Department at Penn State University and is the Associate Dean for Undergraduate Education in the College of Earth and Mineral Sciences. Dr. Richardson's research focuses on understanding the formation and evolution of severe storms through both numerical modeling and observations. In particular, her numerical modeling studies investigate the influence of temporal and spatial variations in environmental shear and/or convective available potential energy on storm strength, rotational properties, and longevity. Her observational work has focused on understanding storm rotation, in particular tornado genesis and maintenance, using mobile radars and other instruments to collect fine-scale observations of thunderstorms and tornadoes. She served as a steering committee member and a principal investigator for the second phase of the Verification of the Origins of Rotation in Tornadoes Experiment (VORTEX2) in 2009 and 2010. Dr. Richardson served as the chair of the University Corporation for Atmospheric Research (UCAR) President's Advisory Committee on University Relations, as an editor of the American Meteorological Society (AMS) journal Monthly Weather Review, as an elected Councilor for the AMS, as the chair of the AMS Committee on Severe Local Storms, and as a member of the writing team for the National Academy Report *Integrating Social and Behavioral Sciences within the Weather Enterprise*. She currently serves on the National Center for Atmospheric Research (NCAR) Advisory Panel, on the Advisory Council for the European Severe Storms Laboratory, as the Planning Commissioner for the AMS, and as the chair of the UCAR Nominating Committee. She earned her Masters and Ph.D. in Meteorology from the University of Oklahoma in 1993 and 1999, respectively, and her B.S. in Physics from the

	University of Wisconsin-River Falls in 1990. She enjoys teaching and mentoring and has been a professor at Penn State since 2002.
	**Ryan Rickert:** Lt Col Ryan Rickert is a weather officer with the U.S. Air Force Reserve. Ryan has a Meteorology degree from Pennsylvania State University (B.S.) and a Masters in Business Administration from Trident University (MBA), and commissioned through the Air Force Officer Training School at Maxwell AFB, AL in 2002. After commissioning, he became a weather officer for the Active Duty Air Force for 13 years. His first duty station was Shaw AFB, SC forecasting the weather for the Middle East. He then was stationed at Osan Air Base, South Korea providing weather support for F-16s, A-10s and U-2s. His follow-on to Korea was a 4 year tour in Germany, where he was doing Army Weather Support in Europe. While he was in Germany, he deployed to Baghdad, Iraq and supported US and Coalition forces with weather forecasting for the entire country of Iraq and Kuwait. In 2009, he took command of a large weather flight at Seymour Johnson AFB, NC where he supported 4 squadrons of F-15Es and KC-135 tankers. He deployed to Pakistan and Afghanistan while he was stationed in North Carolina supporting the US commanders in charge of operations in each of those countries. His last active duty tour was to Hickam AFB, HI where he provided weather operations support to all Pacific weather units. After completing that tour, he transitioned into the Air Force Reserves and currently serves with the 53d Weather Reconnaissance Squadron "Hurricane Hunters" at Keesler AFB, MS. Since joining the Hurricane Hunters in 2015, he has logged over 950 flying hours and performed over 70 hurricane penetrations, to

	include Category five hurricanes M
	**Erin Rinehart:** Erin's curiosity in meteorology began at the age of three when a tornado narrowly missed her grandparent's house during an outbreak across East Texas. By the time she was looking at college opportunities, she was a full-blown weather nerd. She attended Baylor University in Texas and earned a bachelor's degree in Earth Science in 2005. Erin's aviation career began when she joined the Air Force after college and spent eight years forecasting for the Air Force and Army. There she provided forecasts directly to pilots and briefed ground units during troop movement operations. Following her military service, Erin studied at Plymouth State University in New Hampshire, where she earned a master's degree in Applied Meteorology. These days, Erin is an aviation meteorologist at Southwest Airlines, where she has worked since 2016. She spends her work days crafting weather maps and products for customers within the airline, such as dispatchers, ATC, and ground operations managers. In her spare time, Erin is a member of a hobby group dedicated to preserving medieval history and practices. There she researches medieval weather forecasting and observation techniques, as well as applications of herbs in medieval food and medicinal compounds. She also enjoys reading sci-fi/fantasy novels, playing RPG video games, and spending time outside with her German Shepherd, Tesla.

Kathy Sabine:

Kathy Sabine has won awards for storm chasing and was named best weathercaster by the Douglas County Newspaper organization in several editions. *Westword* and *5280* have named her "favorite news personality" and "best weather anchor" numerous times over the years. Kathy was featured in S*ports Illustrated* (the swimsuit edition! Heidi Klum is on the cover straddling the Equator), *Men's Health*, *Zenith Woman*, *Colorado Dogs and Cats magazine*, *Rockies Magazine*, *The Weather Channel Calendar*, and *HerLife Magazine*.

Kathy is married with two sons and a daughter. When she is not at 9NEWS you can find her enjoying the beautiful Colorado outdoors riding her horses, running, skiing or hiking. Kathy also donates time to local charities and animal shelters. She enjoys visiting school classrooms sharing her knowledge of weather and the environment with children .. hopefully inspiring girls to pursue a career in math and science. Kathy is proud to be a foundation board member for Teen With A Dream, a youth cancer organization. She is involved with the National Western Stock Show, Colorado Horse Council and local 4H and FFA organizations.

Kathy is proud to announce she has been appointed to the Board of Directors for the Colorado Horse Council and the Colorado State Fair Foundation.

Elise Schultz:

Ms. Elise Schultz is a Research Scientist with CFD Research Corporation in Huntsville, AL delivering breakthrough meteorological solutions by transitioning research to applications for our customers. Elise leads several projects from defense applications to aid our warfighters to civilian applications to build better tools and solutions for members of our communities. She enjoys her current position which provides her the flexibility to work on a number of research challenges in the atmospheric science community, collaborate with professionals in other disciplines, and shape the company's weather vision. Elise has a B.S. in Meteorology at Iowa State University and M.S. in Atmospheric Science at the University of Alabama in Huntsville (UAH). Between graduate school and as a Research Associate, Elise spent 10 years researching meteorological applications of lightning and radar data in convective weather environments at UAH. During these years, Elise opportunities included researching tornadoes, tropical storms, operating research radars, and visiting many locations for field studies. Looking for a better fit, Elise left academic research to focus on WxIntegrations, LLC, a weather analytics start-up company she co-founded in 2015. While only involved for just over two years, Elise gained valuable insight into application development and business which are great assests as she continues her work in the private sector. Elise is active in the AMS and NWA where she has served on numerous committees. Most notably, she served as the first NWA Council Student Member and helped encourage and launch the AMS and NWA's social media presence. Currently, Elise serves as an ad-hoc member on the AMS Board of Early Career Professionals.

Elise lives in Madison, AL with her husband Chris, also a meteorologist, and their three children. She is an advocate for women in

	STEM and women's rights. She lives by her mission to continue to empower others with knowledge so they can make the best decision for their situation.
	**Dr. J. Marshall Shepherd:** Marshall Shepherd is the Georgia Athletic Association Distinguished Professor of Geography and Atmospheric Sciences at the University of Georgia and Director of its Atmospheric Sciences Program. Dr. Shepherd was 2013 President of American Meteorological Society (AMS). Prior to academia, he spent 12 years as a scientist at NASA Goddard Space Flight Center and was Deputy Project Scientist of the Global Precipitation Measurement Mission. Dr. Shepherd is the host of The Weather Channel's Weather Geeks Podcast and a contributor to Forbes Magazine. He chairs the NASA Earth Science Advisory Committee and has previously served on NOAA's Science Advisory Board. His research primarily centers around hydrometeorological extremes, urban climate, and the intersection of weather and society. He has received numerous awards including the 2004 White House PECASE Award, the Captain Planet Foundation Protector of the Earth Award, the 2019 AGU Climate Communication Prize and the 2018 AMS Helmut Landsberg Award. He received his B.S., M.S. and PhD in meteorology from Florida State University. He has two TEDx talks on climate science and communication that collectively exceed one million viewers. He is routinely asked to brief the media, Congress, and the White House on weather-climate-science related topics.

Rick Smith:

Rick Smith is the Warning Coordination Meteorologist at the National Weather Service's Norman Forecast Office. He manages NWS Norman's hazardous weather preparedness, outreach and decision support services activities for the office's 56 county area of responsibility. Rick and the NWS Norman staff work closely with the media, emergency managers and other state, county, tribal and local government officials to ensure that communities in central and western Oklahoma and western north Texas are ready when hazardous weather threatens.

Rick has been recognized for his work with several awards, including the American Meteorological Society's Francis W. Reichelderfer Award in 2015, and the National Weather Association's Individual Operational Achievement Award in 2013. Rick was also awarded with the Department of Commerce's Bronze Medal Award in 2015 for his vision and application to social media to advance the goals for a Weather Ready Nation. Rick is a member of the National Weather Association, the American Meteorological Society and the Oklahoma Emergency Management Association.

Rick has been a meteorologist with the National Weather Service since 1992, and worked at the forecast offices in Memphis, Tennessee and Tulsa, Oklahoma, as well as the NWS Southern Region Headquarters in Fort Worth, Texas before assuming his position in Norman in January of 2002.

Shiri Spear:

Shiri Spear joined WFXT in November 2012 as the Boston 25 Morning News meteorologist. She is a native New Englander, raised in Hollis, NH. Shiri is no stranger to the challenges of forecasting New England weather. She has forecasted and reported on everything from Nor'easters to ice storms to spring flooding and major droughts during her time at Boston 25 News.

Shiri's studies to become a meteorologist started at McGill University in Montreal, Canada. She then relocated to Camp Lejeune, NC where her husband, a US Marine, was stationed. While in North Carolina, Shiri's focus turned to education.

Shiri moved back to her hometown in New Hampshire when her husband Matt was deployed. She completed her B.A. in Secondary Mathematics Education at Rivier University in Nashua and taught preschool full time. Shiri traded 7th grade pre-algebra to follow her passion for weather and forecasting. She earned a M.S. in Atmospheric and Environmental Science from UMass Lowell in 2007.

Prior to WFXT, Shiri was a meteorologist at WTVJ, NBC6 Miami from 2010-2012 where she was able to sharpen her tropical forecasting skills. Before that she was a meteorologist and environmental reporter at WWLP-TV22 News, the NBC affiliate in western Massachusetts.

Shiri was awarded her CBM accreditation from the American Meteorological Society in 2012.

She and her husband have two daughters. Shiri loves to bake and follows the moto: more chocolate, more delicious!

Dr. David J. Stensrud

David Stensrud is Professor and Head of the Department of Meteorology and Atmospheric Science at The Pennsylvania State University. Dr. Stensrud is well known for his studies on short-range ensemble forecasting and data assimilation, severe weather prediction, convective-scale predictability, and the North American monsoon. For 27 years prior to his transition to Penn State, Dr. Stensrud was a Research Meteorologist at the National Oceanic and Atmospheric Administration's National Severe Storms Laboratory in Norman, Oklahoma. He received his BS in Mathematics and Meteorology from the University of Wisconsin-Madison, and his MS and PhD in Meteorology from The Pennsylvania State University. He is a recipient of the White House Presidential Early Career Award for Scientists and Engineers, the American Meteorological Society's Clarence Leroy Meisinger and Charles Franklin Brooks awards, the NOAA Distinguished Career Award, and is a Fellow of the American Meteorological Society. Dr. Stensrud has authored over 130 formal peer-reviewed publications and the book Parameterization Schemes: Keys to Understanding Numerical Weather Prediction Models.

Dr. Brian Tang:

Brian Tang's love for weather grew out of being fascinated with the wild swings in weather while he lived in Colorado and Texas. He also lived in southern California for 12 years. He received his B.S. in atmospheric science and B.S. in applied mathematics from the University of California – Los Angeles in 2004, and his Ph.D. in atmospheric science from the Massachusetts Institute of Technology in 2010. He was then a postdoctoral fellow at the National Center for Atmospheric Research.

Brian Tang is currently an associate professor at the University at Albany – State University of New York. His research foci are in tropical cyclones (formation, intensification, structure, and environmental interactions) and severe weather (terrain interactions in the Northeast and hail frequency). Brian mentors both undergraduate and graduate students on a range of research topics. He also teaches courses on atmospheric dynamics, general circulation, climate change, and how weather and climate affect society. Brian is chair of his department's Inclusion and Diversity Committee, which strives to increase opportunities for everyone in our community. He maintains a popular tropical cyclone guidance webpage, and is a former WxChallenge competition champion. Outside of academia, Brian enjoys playing ice hockey, skiing, hiking, and swimming.

Jonathon Thielen:

Jonathon Thielen is a graduate student in the Department of Geological and Atmospheric Sciences at Iowa State University. His research background includes sensitivity studies of the Weather Research and Forecasting (WRF) Model in mesoscale convective system cases and turbulence depiction, as well as application of machine learning to the classification of mesoscale convective systems and other problems in the area of severe storms. He has interned for Unidata/UCAR, where he focused on xarray integration and cross section implementation in the MetPy project, and he has remained an active open-source contributor to MetPy and other software in the atmospheric sciences Python ecosystem. He graduated with his B.S. in Meteorology and Mathematics from Iowa State University in 2019 and is an NSF Graduate Research Fellow.

Howard Van Dam:

Howard Van Dam is a software engineer at Unidata, part of the University Corporation for Atmospheric Research (UCAR) Community Programs. His primary focus is development of the THREDDS data server, but he contribute in other areas such as Rosetta and cybersecurity, and he is currently developing WRF support for THREDDS which will simplify the WRF initialization workflow. Howard has over 30 years of software development experience in diverse areas such as medical information systems, columnar databases and audio/video processing and use the Java language for THREDDS, but have written software in many languages including assembly (several processors), C/C++, Python, Pascal and FORTH. While his education is in Computer Science, working for Unidata is a great opportunity to pursue his passion for physics

	and earth sciences. When not at work, you might find Howard in the high country of Colorado fishing, hiking or photographing.
	**Dr. Nicole Riemer:** Nicole Riemer is a Professor at the Department of Atmospheric Sciences and an Affiliate of the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign. She received her Doctorate degree in Meteorology from the University of Karlsruhe, Germany. Professor Riemer's research focus is the development of computer simulations that describe how aerosol particles are created, transported, and transformed in the atmosphere. Her group uses these simulations, together with observational and satellite data, to understand how aerosol particles impact human health, weather, and climate. Her teaching portfolio at the University of Illinois includes courses at the undergraduate as well as the graduate level, such as Atmospheric Thermodynamics, Cloud Physics, Atmospheric Radiation, Atmospheric Chemistry, Physical Meteorology, and Aerosol Dynamics and Chemistry. She has been listed for several courses on the "List of Teachers Ranked as Excellent" at the University of Illinois. Professor Riemer is a member of the German National Academic Foundation and received the NSF CAREER award. She was designated as the 2014-2015 I. C. Gunsalus Scholar, is recipient of the 2014 Distinguished Promotion Award and received a Fellowship from the National Center for Supercomputing Applications (NCSA) for 2017. She served as a councilor of the American Meteorological Society from 2016-2019 and is co-chair of the Aerosol Processes Working Group of the Department of Energy, Atmospheric System Research

	Program. She held the position of editor for the journal *Atmospheric Chemistry and Physics*, and is currently an editor for *Aerosol Science and Technology*.
	**Dr. Stacey Hitchcock:** Stacey is a postdoctoral research fellow with the Australian Research Council's Centre of Excellence for Climate Extremes (CLEX) and the School of Earth Sciences at the University of Melbourne in Melbourne, Australia. Her current research aims to improve understanding of the processes that support extreme rainfall in organized deep convection and the representation of those processes in numerical weather and climate models. Prior to moving to Melbourne, Stacey completed a PhD in atmospheric science at Colorado State University (2018), a BS (2012), and MS (2014) in meteorology at the University of Oklahoma. While the specific projects she has been involved with have varied, her research past and present centers around the analysis of numerical models and observations to improve forecasts and understanding of deep convection, with a special focus on mechanisms that support organization conducive to heavy rainfall. To this end, she has participated in 7 field campaigns with a focus on some aspect of organized deep convection in the last 7 years (DC3, MPEX, PECAN, VORTEX-SE, C3LOUD-Ex, RELAMPAGO, and YMC) Stacey has been involved in a number of professional service activities in the AMS and broader atmospheric science community since she was an undergraduate. Most notably, this includes the 2017 AMS Program Committee, and six years on the AMS Student Conference Planning Committee, of which she served as a co-chair for the 2018 Annual Meeting. She has also run mentoring programs, mentored students, and served as a representative at various levels of different

	university student organizations. Last year, she served as the early career representative to CLEX from the University of Melbourne, on the AMS 2020 Early Career Task Force, the AMS Annual Meeting Oversight committee, and is currently on the newly formed AGU Atmospheric Science Section Early Career Committee. In whatever spare time remains, she enjoys ultimate frisbee, running, hiking, cooking, reading, percussion, and tennis. Stacey is also an avid traveller, and is enjoying exploring her new home on the other side of the world.
	**Dr. Anna M. Wilson:** Anna Wilson is the Field Research Manager with the Center for Western Weather and Water Extremes at the Scripps Institution of Oceanography. She earned her Ph.D. in Civil and Environmental Engineering under the direction of Dr. Ana Barros at Duke University in 2016. Her dissertation research focused on understanding the space-time structure of low level warm season precipitation processes in complex terrain, using an approach integrating numerical models and in situ and remote observations. During her Ph.D., Anna was able to amass extensive experience working with ground based instruments in the field through participation in a number of different NASA Global Precipitation Mission Ground Validation field campaigns. At CW3E, her interests are in supporting the development of physically based, accurate representations of atmospheric rivers and other extreme events in forecasts and projections through integration of in situ and remote sensing observations. Her responsibilities include overseeing ground-based field programs in California and coordinating airborne field campaigns over the northeast Pacific.

Dr. Kimberly Wood:

Dr. Kimberly Wood is an assistant professor of meteorology in the Department of Geosciences at Mississippi State University. She earned a H.B.S. in physics from Oregon State University in 2007 and then transitioned to graduate school in atmospheric science at the University of Arizona, where she received her M.S. in 2009 and her Ph.D. (with a remote sensing minor) in 2012. She participated in the first AMS Early Career Leadership Academy in 2018 and is a member of the 2019 cohort of the American Geophysical Union's Voices for Science. She also joined the Unidata Users Committee in 2019.

Dr. Wood's research focuses on tropical cyclone intensity change, structural evolution, and hazards. She is fascinated by the environment's effect on a tropical cyclone's short-term evolution and strives to extract more insight into these interactions using satellite observations and reanalysis data. The Python programming language serves as a key tool in her research, particularly Unidata packages such as MetPy.

Python also supports Dr. Wood's educational and outreach efforts. Visualizations of high-resolution observations from the latest generation of geostationary satellites more readily demonstrate the dynamic nature of our atmosphere, so she has developed storm-centered animations of tropical cyclones. In addition, the ability to map atmospheric fields – both observed and modeled – enables her to craft myriad examples to teach interpretation and foster discussion.

With ever-expanding computational resources at our fingertips and increasing ease of remote data access, Dr. Wood often highlights the benefits of Python experience for meteorological applications. However, programming is just one of many potentially

	useful skills. Our field is constantly evolving, which increases the range of career options available to meteorologists. She enjoys learning about students' career goals and discussing ways their interests and skills could be applied in the workforce, whether it be in the public or private sector or in academia. As an example of the storm-centered animations mentioned in the bio, here is the 2-week tropical lifecycle of Hurricane Dorian observed from the GOES-16 ABI (showing Band 13 cloud-top temperatures): http://arashi.geosci.msstate.edu/images/2019Dorian.mp4