

Hindsight in 2020: A Century of Meteorological Innovation to Inspire the Future

Saturday, January 11, 2020:

7:30–9:00 AM	STUDENT CONFERENCE REGISTRATION	North Lobby
8:00–9:00 AM	BREAKFAST	
9:00–10:10 AM	SESSION 1: Welcoming Remarks	Ballroom East
9:00–9:20 AM	Welcome from the Student Conference Planning Committee <i>Kenzie Krocak, University of Oklahoma, Norman, OK</i> <i>Gaige Kerr, Johns Hopkins University, Baltimore, MD</i> <i>Matt Flournoy, University of Oklahoma, Norman, OK</i> ¹	
9:20–9:35 AM	“Building on the Past and Creating an AMS of the Future” <i>Jenni L. Evans, AMS President, Pennsylvania State University, University Park, PA</i>	
9:35–9:50 AM	“Failing My Way to the Lorenz Award” <i>John Knox, University of Georgia, Athens, GA</i> ²	
9:50–10:10 AM	“Are we listening? Engaging with decision makers” <i>Mary Glackin, AMS President-Elect, The Weather Company/IBM, Washington, DC</i>	
10:10–10:25 AM	BREAK	
10:25 AM–12:00 PM	SESSION 2: The Geoscience MBA: Mind, Body, Attitude <i>Sometimes we get so caught up in trying to find the perfect job or get into the best graduate school that we forget to take care of our mental and physical health. These breakout sessions will focus on just that; stretching your mind, taking care of your body, and maintaining a healthy attitude towards work and personal time. There are three rotations in this session so you can visit each room in your preferred order.</i>	
	<i>Rotation 1: 10:25–10:50 AM</i>	<i>Rotation 2: 10:55–11:25 AM</i>
	<i>Rotation 3: 11:30 AM–12:00 PM</i>	
	SESSION 2A: Mind	Ballroom East
	<i>Session Chair: Lily Campbell, Pennsylvania State University, University Park, PA</i> <i>Between classes, research, and extracurriculars, finding the time to take care of our mental health can be difficult. This session will delve deeper into subjects related to mental health, including managing stress in school and the workplace, time management, maintaining hobbies, and knowing when and how to ask for help.</i>	
	“The Pursuit of Happiness: It’s not Trivial” <i>Melissa Burt, Colorado State University, Fort Collins, CO</i>	

¹ Ms. Krocak, Mr. Flournoy, and Mr. Kerr are the 2020 Student Conference chairpersons

² Dr. Knox is the recipient of the 2020 Edward N. Lorenz Teaching Excellence Award

"Put Your Oxygen Mask on First: Managing Mental Health in Meteorology"
Rick Smith, NWS Norman, Norman, OK

SESSION 2B: Body

Room 203

Session Chair: Rachel Miller, University of Oklahoma, Norman, OK

Work and stress can impact your body's health just as much as your mental health, especially during finals, field work, and thesis/dissertation writing. Finding a physical activity you enjoy such as running, yoga, hiking, or weight lifting can be an effective strategy for dealing with physical stress. This session will cover different ways our speakers have prioritized their body's health and how it helps them be better meteorologists.

"The elusive balance of work and health - suggestions for a personal toolbox"
Jens Redemann, University of Oklahoma, Norman, OK

"Mind, Body, Attitude: Learning to Respect the Connections"
Yvette Richardson, Pennsylvania State University, University Park, PA

SESSION 2c: Attitude

Room 204AB

Session Chair: Meredith Fish, Scripps Institution of Oceanography, UCSD, La Jolla, CA
Maintaining our mental and physical health are important aspects for lifelong health, but a healthy attitude can keep us happy along the way! Listen to Becky and David discuss how to stay positive through stressful times, handle negative social media comments, mitigate imposter syndrome, learn how to respectfully say no and more.

"No, I Won't #SticktoWeather: Measuring Happiness & Success in the Era of Likes, Retweets, and Harassment"
Becky DePodwin, Accuweather, State College, PA

"Research: A life of two halves, or it should be"
David Lavers, ECMWF, Reading, UK

12:05–12:30 PM

SESSION 3: Introduction to Conversations with Professionals

Ballroom East

Session Chairs: Zoey Rosen, Colorado State University, Fort Collins, CO; & Tyler Fenske, University of Miami, Miami, FL

We have a wide variety of professionals from diverse parts of the atmospheric science field ready to answer your questions! In this introduction, our speakers will briefly introduce themselves so that you can choose who you'd like to meet in the next session.

12:30–2:00 PM

LUNCH

Ballroom West

2:00–3:45 PM

SESSION 4: Conversations with Professionals

Session Chairs: Zoey Rosen, Colorado State University, Fort Collins, CO; & Tyler Fenske, University of Miami, Miami, FL

This session will give you the opportunity to ask our speakers about their education, career path, and more in a small-group, less formal setting. Choose one room for each rotation and get to know professionals in sectors of our field that interest you!

Rotation 1: 2:05–2:25 *PM*

Rotation 2: 2:30–2:50 *PM*

Rotation 3: 2:55–3:15 *PM*

Rotation 4: 3:20–3:40 *PM*

Private Sector

Bryan Engelsen, ERM, Rolling Meadows, IL

Karen Kosiba, Center for Severe Weather Research, Boulder, CO

Becky DePodwin, Accuweather, State College, PA

Erin Rinehart, Southwest Airlines, Dallas, TX

Ballroom East
Room 203
Room 204AB
Room 205A

Public Sector:

Katherine Hawley, NOAA NESDIS, Silver Spring, MD

Ashton Robinson-Cook, NOAA NWS SPC, Norman, OK

Amber Emory, NASA Headquarters, Washington, DC

Qing Liang, NASA GSFC, Greenbelt, MD

Rick Smith, NWS, Norman, MA

Ryan Rickert and Jeremy DeHart, 53d Weather Reconnaissance Squadron, Keesler AFB, MS

Room 205B
Room 206A
Room 206B
Room 207
Room 208
Room 209

Media/Broadcast:

Kathy Sabine, KUSA 9NEWS, Denver, CO

Shiri Spear, WFXT Boston 25, Boston, MA

Room 211
Room 212

Academia:

Marianna Linz, Harvard University, Cambridge, MA

Brian Tang, University at Albany (SUNY), Albany, NY

Tim Canty, University of Maryland, College Park, MD

Room 251
Room 252A
Room 252B

Graduate Student Panel:

Learn the inside scoop about graduate student life from current graduate students.

Room 253A

Lena Dziechowski, University of Massachusetts, Lowell, MA

Holly Mallinson, University of Illinois at Urbana-Champaign, Champaign, IL

A. Addison Alford, University of Oklahoma, Norman, OK

Matt Flournoy, University of Oklahoma, Norman, OK

Ryann Wakefield, University of Oklahoma, Norman, OK

*Jeremiah Otero Piersante, Colorado State University, Fort Collins, CO*³

Graduate Admissions Panel:

Speak to professionals who evaluate graduate admission materials to learn about what makes a good application and mistakes to avoid.

Room 253B

³ Ms. Dziechowski, Ms. Mallinson, and Mr. Alford will speak during Rotations 1-2; Mr. Flournoy, Ms. Wakefield, and Mr. Piersante will speak during Rotations 3-4.

*Sonia Lasher-Trapp, University of Illinois at Urbana-Champaign, Urbana, IL
Alex Gonzalez, Iowa State University, Ames, IA
Nicole Riemer, University of Illinois at Urbana-Champaign, Urbana, IL*

3:45–4:00 PM

COFFEE BREAK

4:00–5:00 PM

SESSION 5: Breakout Session: What's next?

There are so many different paths that your geoscience degree can take you. Use this session to explore just a few of the possibilities for post-grad!

4:00–5:00 PM

SESSION 5A: Integrated Warning Team, Part I

Ballroom East

Session Chairs: Massey Bartolini, University at Albany (SUNY), Albany, NY; & Quinton Lawton, University of Miami, Miami, FL

Ever wondered how a weather forecast is used to inform emergency managers and other decision-makers? This session will familiarize you with the Integrated Warning Team and provide information about how to get started with emergency management.

Moderators

*Melissa Di Spigna, NOAA/NWS Eastern Region Headquarters, Bohemia, NY
Tom Bedard, AccuWeather Enterprise Solutions, Wichita, KS*

Speakers

Joe Dellicarpini, NWS Boston/Norton, Norton, MA

4:00–5:00 PM

SESSION 5B: Resume Workshop, Part I

Room 203

Session Chair: Aaron Alexander, University of California, Davis, Davis CA

In today's competitive job market, recruiters get hundreds of applications. A great resume is the first step to standing out and securing the job of your dreams. Come to this session to learn the elements of a great resume or CV, ask questions on the hiring process, and receive specialized tips on how to customize your resume for different sectors in meteorology.

4:00–5:00 PM

SESSION 5c: Mastering Your Doctorate

Room 204AB

Session Chair: Elena Fernandez, Cornell University, Ithaca, NY

So you're planning on going to graduate school? Great! But what does that entail exactly? This session features individuals with experience in that realm, helping to answer questions like, "What is expected of a good advisor?", "What kind of work will I do?", or even "Should I get my PhD?"

"Master Your Life, Then Go For Your Doctorate!"

Marcela Loria-Salazar, University of Oklahoma, Norman, OK

"What to look for in a graduate school experience"

Matt Kumjian, Pennsylvania State University, University Park, PA

"Trials and Tribulations of Earning a PhD"

Dave Stensrud, Pennsylvania State University, University Park, PA

"Navigating Life as a Grad Student and Early Career Scientist"

Philippe Papin, Naval Research Laboratory, Monterey, CA

4:00–5:00 PM

SESSION 5D: Non-Traditional Jobs in the Geosciences

Room 205A

Session Chair: Keenan Eure, Pennsylvania State University, University Park, PA

Think that all you can do with your degree is forecast or research? Think again! The weather is relevant to nearly every profession, and this session will highlight just a few of the types of jobs students may not think of when deciding to get a geoscience degree.

"Career Choices and Opportunities They Don't Tell You About"

Lorena Medina Luna, NCAR, Boulder, CO

"Flight Cancelled Due to Weather"

Erin Rinehart, Southwest Airlines, Dallas, TX

"Becoming a Certified Consulting Meteorologist: A Flexible Way to Work for Yourself or Supplement Your Income"

Pam Knox, University of Georgia, Athens, GA

"Finding your Freedom: Weaving Research, Business, and Leadership"

Elise Schultz, CFD Research Corporation, Huntsville, AL

5:30–7:30 PM

Resource Fair & Graduate School Reception

East Registration

Sunday, January 12, 2020:

8:00–9:00 AM

COFFEE: MEET AND GREET WITH COFFEE AND PASTRIES

9:00–9:45 AM

SESSION 6: Hindcasts, Nowcasts, and Forecasts: How Extreme Weather has Shaped the Enterprise

Ballroom East

Session Chair: Holly Mallinson, University of Illinois at Urbana-Champaign, Champaign, IL

In keeping with the theme for the centennial meeting, this session will discuss progress in the community's understanding of extreme weather over the last hundred years, our current understanding of extreme events, and the impacts of climate change on extreme events in a look towards the future.

"Understanding Severe Convective Storms: What a Long, Strange Trip It's Been"

Harold Brooks, NOAA NSSL, Norman, OK

"The 22000 Mile View Every 60 Seconds: Advances in Geostationary Observations of Extreme Weather"

Kimberly Wood, Mississippi State University, Mississippi State, MS

“The Future: NOAA's Role In Preparing Society”
Andy Nash, NWS Boston/Norton, Norton, MA

9:50–10:45 AM

SESSION 7: Breakout Session: Skills for the Field

In addition to knowing all about how the atmosphere works, it's also important to develop professional skills that will help you land that dream job. This session will feature four rotations to allow you to choose what skills are most important for your chosen career path.

Rotation 1: 9:50–10:00 AM

Rotation 2: 10:05–10:15 AM

Rotation 3: 10:20–10:30 AM

Rotation 4: 10:35–10:45 AM

“9 Tips For Communicating Science To Non-Scientists”

Ballroom East

Session Chair: Lena Dziechowski, University of Massachusetts Lowell

Social media can be both a powerful and daunting platform for science communication! Stop by this rotation to learn how to navigate through it effectively. Topics to be discussed include conveying sensitive but important subjects in a respectful manner, sharing your work and networking, building a following, and social media verbiage/etiquette both with the general public and the scientific community.

Marshall Shepherd, University of Georgia, Athens, GA

“Demonstrating Your Excellence: Giving Noteworthy Presentations”

Room 203

Session Chair: Aaron Alexander, University of California, Davis, Davis, CA

Presentations are how we communicate our scientific findings to other scientists and the general public. Ensuring that these presentations are not only effective communicating the main point of your work, but also interesting is a talent that this session will address. Come by for tips and tricks to make sure your next presentation is stellar!

Sonia Lasher-Trapp, University of Illinois at Urbana-Champaign, Urbana, IL

“An Early-Career Perspective on Navigating the Academic Job Search” **Room 204AB**

Session Chair: Kristofer Tuftedal, Stony Brook University, Stony Brook, NY

Getting a job can be an arduous process. Getting a faculty position at any university is no exception. Understanding the ins and outs of applying and interviewing for a faculty position could make the difference between getting your dream professor position or having to look elsewhere. Stop in to learn about the process from someone who has already gone through it all.

Victor Gensini, Northern Illinois University, DeKalb, IL

“Dispatch from the Field: Designing and Managing Effective Large and Small Scale Field Campaigns” **Room 205A**

Session Chair: Zoey Rosen, Colorado State University, Fort Collins, CO

To conduct field work is an achievement in itself, let alone managing a project. Stop by and learn about the process of conducting and managing successful field work campaigns and managing workers in a unique environment.

Anna Wilson, Scripps Institution of Oceanography, San Diego, CA

“Write to think: How writing drives your research forward”

Room 205B

Session Chair: Ryann Wakefield, University of Oklahoma, Norman, OK

How do you tell a scientific story with your writing? As meteorologists, we must effectively communicate challenging concepts to a variety of audiences. This session will address the hidden link between engaging narratives and technical writing. Come learn how to make hydrostatic balance sound as exciting as Harry Potter.

Nicole Riemer, University of Illinois at Urbana-Champaign, Urbana, IL

“One step past your comfort zone: Initiating and building professional relationships”

Room 206A

Session Chair: Margaret Orr, University of Georgia, Athens, GA

Stacey Hitchcock, University of Melbourne, Australia

“Staying Relevant: Forecast Trends In Broadcasting”

Room 206B

Session Chair: Nicholas S. Grondin, University of Tennessee Knoxville, TN

What is it like to be the face of the weather enterprise? What is it like to spend time every day conveying weather information to the public? This session will give you an opportunity to learn about having a career in the public eye and skills you need to be successful talking to the public.

Cindy Fitzgibbon, WCVB 5, Boston, MA

10:45–10:55 AM

BREAK

10:55–11:50 AM

SESSION 8: It All Starts with Observations: Stories from the Field Ballroom East

Session Chair: Jeremiah Otero Piersante, Colorado State University, Fort Collins, CO

Why participate in field work? While observation is critical for research, skills and insights gained from experience in the field offer many areas for professional development. This session touches on a day in the life in the field and explores how it can be a valuable experience for students and early career professionals.

“Moments of Aha and Revelation in the Field: Things You Will Not Learn Behind a Computer”

Phil Chilson, University of Oklahoma, Norman, OK

“N good reasons for students to get involved in field work”

Ken Davis, Pennsylvania State University, University Park, PA

“Field notes from measurement campaigns for complex terrain meteorology”

Holly Oldroyd, University of California, Davis, Davis, CA

“Getting to Know Tornadoes”
Erik Rasmussen, NOAA NSSL, Norman, OK

10:55–11:55 AM **Joint Session with the Board of Early Career Professionals (BECP)** **Room 255**

Breaking In: Surviving the Early Career Transition
Moderators: Jordan Bell, Rebecca DePodwin, and Elise Schultz

Bradford Johnson, Florida State University, Tallahassee, FL
Elise Schultz, CFD Research Corporation, Huntsville, AL

11:50 AM–12:00 PM **BREAK**

12:00–12:30 PM **SESSION 9: Keynote Presentation** **Ballroom East**

Session Chairs: Kenzie Krocak, University of Oklahoma, Norman, OK; Gaige Kerr, Johns Hopkins University, Baltimore, MD; & Matt Flournoy, University of Oklahoma, Norman, OK

“Building a Climate-Safe Future”
Jonathan Foley, Project Drawdown

12:35–2:00 PM **LUNCH (grab a to-go meal and attend the Presidential Forum!)**

12:35–2:00 PM **Student Conference Presidential Forum** **Room 210AB**

A Climatologist, an Engineer, a Social Scientist, and a Policy Maker Walk into a Bar... Tough Choices on a Warming Planet

2:00–3:45 PM **SESSION 10: Breakout Session: Hands-on Experiences**

Dive into a new subject and join the fun with these interactive sessions. From learning python to becoming an ally, we have an option for everyone. Note that you need to have signed up in advance for some of these sessions. If you didn't sign up prior to attending, please feel free to join the audience in the broadcast tape swap or see if there are any additional slots in the resume workshop.

SESSION 10A: Resume Workshop, Part II **Room 203**

Session Chair: Aaron Alexander, University of California, Davis, Davis, CA

For attendees who signed up at the time of registration, bring your resume to get tailored, one-on-one feedback from job recruiters and professionals across the many sectors of the geoscience nexus. You do not need to attend the first part of the workshop in order to sign-up.

SESSION 10B: Broadcast Tape Swap **Room 204AB**

Session Chair: Nicholas S. Grondin, University of Tennessee

Selected students will present pre-recorded broadcasts to a panel of professional broadcast meteorologists. All are welcome to watch the next generation of broadcasters and learn from our experienced panel of TV meteorologists!

*Kathy Sabine, KUSA 9NEWS, Denver, CO
Kevin Lemanowicz, WFXT Boston 25, Boston, MA
Janice Huff, WNBC New York 4, New York, NY*

SESSION 10c: Bystander Training

Room 205A

Session Chair: A. Addison Alford, University of Oklahoma, Norman, OK

Harassment and bullying endanger the professional and personal well-being of individuals and their communities, and create hostile climates. This interactive workshop, led by the ADVANCEGeo Partnership team, will identify factors that contribute to hostile and exclusionary behaviors in scientific research environments, and provide community bystander intervention strategies and active practice of interventions through discussion of scenarios.

*Meredith Hastings, Brown University, Providence, RI
Melissa Burt, Colorado State University, Fort Collins, CO*

SESSION 10D: Python Workshop

Room 205B

Session Chair: Eli Dennis, University of Maryland, College Park, MD

Are you looking to make the transition to Python but unsure of where to start? Do you already know Python but want to see atmospheric science specific applications? Are you looking for data? If so, then please join us for a hands-on Python Users' Workshop where beginners and experts alike will learn skills that will enhance your ability to find, analyze, and explore data, all while doing so in the cloud. Specialized local software installations are not necessary. All you need is a laptop or tablet (a keyboard may be helpful) to participate. In-person follow-up help will be available all week, as well as remotely once our time together as a community in Boston comes to an end.

*Sean Arms, Unidata, Boulder, CO
Julian Chastang, Unidata, Boulder, CO
Max Grover, Unidata, Boulder, CO
Jonathon Thielen, Unidata, Boulder, CO*

SESSION 10E: Integrated Warning Team, Part II: In Their Rainboots

Room 205C

Session Chairs: Massey Bartolini, University at Albany (SUNY), Albany, NY; & Quinton Lawton, University of Miami, Miami, FL

Ensuring public safety during hazardous weather events is no solo performance. Join professionals from the broadcast and public sectors of meteorology, emergency managers, and other leaders in an interactive Integrated Warning Team exercise. With the guidance of these professionals, you will learn how these groups collaborate to protect the public and how physical science and social science intertwine to support decision-making.

Melissa Di Spigna, NOAA/NWS Eastern Region Headquarters, Bohemia, NY

19th Annual Student Conference

Tom Bedard, AccuWeather Enterprise Solutions, Wichita, KS

4:00–6:30 PM

Presidential Forum & Awards Ceremony

Ballroom East

6:30–8:30 PM

Poster Session

Hall B

Session Chair: Matt Flournoy, University of Oklahoma, Norman, OK