

The AMS Board for Early Career Professionals wants to highlight members of the weather, water and climate enterprise who exemplify the AMS Mission just a few years into their career. Our “Perspectives from Early Career Professionals” segment aims to highlight early career achievements in multiple sectors of meteorology.

This segment features Dr. Melissa Burt, a research scientist and Diversity and Education Manager for the Department of Atmospheric Science at Colorado State. Dr. Burt has served on multiple AMS boards and is currently co-chair of the AMS Centennial Planning Committee. Dr. Burt was also the recipient of this year's AMS Award for Early Career Achievement, awarded at the annual conference in Austin, Texas.

BECP: What path did you take to get to the position you are currently in today?

MB: I have a B.S. degree in Meteorology from Millersville University and a M.S. and Ph.D. in Atmospheric Science from Colorado State University. After completing my M.S. at CSU, I started looking for jobs in the areas of science education. I applied for a number of positions and accepted a job with the NSF Science and Technology Center for Multiscale Modeling of Atmospheric Processes at CSU as their Education and Diversity Manager. In this position, I focused on working to enhance understanding of global climate through K-12, undergraduate, and graduate study as well as informal education and public presentations. In this position, I worked with a variety of scientists and educators which really helped me expand my network. During this time, I also decided to work on my PhD in Atmospheric Science. After finishing my PhD, I took a Research Scientist position in the ATS department and also became the Education and Diversity Director for the College of Engineering.

BECP: How important were internships early on to get to where you are today?

MB: I cannot even express how important participating in an internship was for me. At one point during undergrad, I was ready to change my major [from Meteorology]. After a number of conversations about what I would or would not change my major to, my advisor suggested that I apply for the SOARS program at UCAR/NCAR. This was a life changing experience for me and is one of the many reasons that I wanted to start an REU (Research Experiences for Undergraduates) program at Colorado State University.

BECP: When applying to your first (or subsequent) job, what was the interview process like?

MB: Depending on the position, there is typically a round of phone interviews and if I made it to the next round I would go in for an in-person interview. I really enjoyed going in for the in-person interview to 1) Learn more about the company and company dynamics 2) to connect with the hiring committee and for them to get to know me beyond what was written on my CV.

BECP: Do you have any helpful tips for someone going through the job search right now?

MB: Keep your options open and do not cut yourself short. I would suggest applying for jobs that seem interesting to you even if you do not meet 100% of the qualifications.

BECP: Where do you currently work and what is your position?

MB: I work at Colorado State University. I am a Research Scientist in the Department of Atmospheric Science. My 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.

I also serve as the Education and Diversity Director in the Walter Scott Jr. College of Engineering. In this position I am committed to improving and increasing diversity in STEM by designing programs to encourage participation, and increase access and retention for members of historically underrepresented groups.

BECP: What is something unique you've been able to accomplish/experience so far in your career?

MB: I have worked really hard over the last few years designing programs that highlights the importance of diversity in the field of atmospheric science. In particular, working to increase the diversity of the atmospheric science graduate program at CSU. Through a very concerted and intentional effort, nurturing a culture of support and community of practice that understands and embraces diversity.

BECP: To reach this point in your career, what role have mentors and advisors played?

MB: An invaluable role in my career. Without the guidance of mentors, I am not sure that I would be in the place that I am in today. I think many of the mentors in my life have really helped me understand my potential and encouraged me to go outside of my comfort zone.

BECP: Who do you seek out for advice and why? To whom do you routinely provide advice, if anyone?

MB: I serve as the Vice President for the Earth Science Women's Network (ESWN), a non-profit organization dedicated to career development, peer mentoring and community building for women in the geosciences. We have an amazing group of women at a variety of different levels and stages in their career. I have met a number of colleagues (and friends) through this network who I can reach out to for advice and vice versa. Also, I have mentored a number of students from my REU program over the years and I am always available to provide any advice that they need.

BECP: Whom do you admire in our profession? Why do you feel that way?

MB: Dr. Warren Washington who is a Senior Scientist at the National Center for Atmospheric Research. He was one of the first African-Americans (second) to receive his PhD in Atmospheric Science. Since meeting him in 2003 during my time as a SOARS protégé, we have had lots of conversations over the years related to science, my journey, and aspirations. Whenever I see him at an AMS or AGU meeting, he makes a point to come over a say hello and check in. It really shows how much he cares. It means the world to me.

BECP: How do you feel the field has changed? Where do you think it's going?

MB: The field is becoming more diverse and inclusive. Members of our community are seeing that we do our best work if we have a diverse team in an environment that is both nurturing, and welcoming to all, valuing and appreciating the various identities, skills, ideas, talents and contributions. It is really important that we think about diversity and inclusion not as an afterthought but that it is within everything that we do.

BECP: What advice would you give to an early career professional starting in this field?

MB: Network. Network. Network. Say yes to opportunities that will put you slightly outside of your comfort zone. It is pretty amazing how much you can learn about yourself and grow as an individual.

