Transcript of "Brad Johnson, Assistant Professor in Geography at Florida State University in Tallahassee"

Clear Skies Ahead: Conversations about Careers in Meteorology and Beyond

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Kelly Savoie:

Welcome to the American Meteorological Society's podcast series, **Clear Skies Ahead: Conversations about Careers and Meteorology and Beyond**. I'm Kelly Savoie, and I'm here with Rex Herbst-Horner, and we'll be your hosts. We're excited to give you the opportunity to step into the shoes of an expert working in weather, water, and climate sciences.

Rex Herbst-Horner:

We're happy to introduce today's guest **Dr. Brad Johnson**, an Assistant Professor in Geography at Florida State University in Tallahassee. Welcome, Brad. Thanks very much for joining us today.

Brad Johnson:

Thank you, Rex and Kelly. It's an absolute privilege and pleasure to be here.

Kelly:

Brad, could you tell us a little bit about what sparked your interest in meteorology and how it influenced your educational path?

Brad:

Sure, so I'm originally from south Louisiana—Baton Rouge, Louisiana, to be exact—and I can recall my very first interest or inkling of recognizing that the weather existed and it was during first grade and it snowed and it had never snowed previously before and we got about two inches that day. And I recall even vividly until this day, the secretary coming over the intercom and saying, "Teachers and students, we need your attention, it's snowing outside." And at that point, I had never seen it before and it was just so interesting to me and I wondered why it hadn't happened before and why it didn't happen again for a long time. And it was around the time where institutions like The Weather Channel had started becoming ubiquitous so I had a place to go where I wanted to absorb information weatherwise 24/7.

Brad:

But even at that point, it really wasn't the event that made me decide that I wanted to go into meteorology, that didn't come until about five or six years later during the landfall of Hurricane Andrew. A lot of people think about Hurricane Andrew and they immediately think south Florida, but there's a second landfall along the central Gulf Coast of Louisiana and I recall there being a huge oak tree next to our home. And my mother had gone through Hurricane Betsy and seen trees uprooted, really old trees and she didn't feel comfortable with us being in the home while that storm was going on. So she took us to a local church which was holding a shelter at the time and we went there the evening before and spent the night. And I remember her waking me up the next morning and telling me to come to the front door so I could take a look across this large parking lot.

Brad:

And I just remember seeing the trees bending sideways and the rain blowing. And I was like, "What is this that I'm dropped into at this point? Now I'm super intrigued." And then finally when we were standing there, we noticed a couple, two figures in the distance on the other side of the parking lot, maybe as long as the length of a football field, and they were walking toward us and walking sideways in the wind and the rain as you have to in that sort of scenario. And so they got a little closer, noticed one figure's a little bit larger and the other was a little bit smaller. And finally we figured out it was a woman and her child whose window had blown out of their home due to the storm and they wanted to leave and come to the church and the shelter for safety.

Brad:

And from that very day, a few things really resonated with me with that one, what are these storms, why are they happening now? Very similar to the snowfall event, why don't they happen any other time? But also, what are the impacts of these storms on people's lives? And it really, from that day forward, I started asking the question why, and for better or for worse, I've still asked those questions "why" until this day. And I think that's probably what really got me going in the field and from that point on, there was no stopping me, weather was what I was going to do.

Rex:

So Brad, when did you have a chance to first learn about weather in school or outside of school to learn a little bit more about the science or start to answer some of those questions that were burning in your mind?

Brad:

That's a great question. I can't say that I had any summer camp type experiences or any segments in any particular class that I can point to. It was always just sort of an affinity towards science knowing that this was the track that I was gravitating toward. But I was really self driven. Sometimes it's very difficult for people to, especially young children, to want to aspire to be something that they don't see around themselves. And I think I was probably one of the exceptions to that rule in that most of the people who were accessible around us were either business owners or nurses or doctors or lawyers. There weren't very many meteorologists in my neighborhood, in my community in Baton Rouge, Louisiana, at the time. In fact, we didn't even have a meteorology program within the state itself.

Brad:

So when I started to think about where I wanted to go to school, I had to really—and this is pre-internet—so I had to really see what the options were that were available to me to even pursue that. But I remember specifically doing a project in junior year, through social studies class or one of these programs that were internal to school, where they ask you what profession you wanted to be and I did this entire poster board with meteorology on it. And I spent the entire day teaching people that it was not astronomy.

Rex:

So you were educating others already in high school and you were the one offering the opportunity to others to learn about meteorology.

Kelly:

And so how did you narrow down your school choices?

Brad:

Oh, well that's an interesting question because I feel like it was transposed and my school choice narrowed me down in a way. So I'm sitting here in high school and I'm in a high school that's in the inner city and we really don't have, at that time, secondary education was not necessarily emphasized by a lot of our counselors and our educators. It was really develop a skill set and college wasn't really something that was pushed to the level that we are accustomed to in mainstream society. So I do recall a recruiter coming to our school from Iowa State University—I still do not know who this recruiter is—in my junior year and bringing us into the library. We had a small cohort that had just started a computer magnet program and they introduced Iowa State University to us.

Brad:

And at that point we're all looking around like Iowa State University, where in the world, where is that? Of course we hear Iowa, but we have no framework for what that really means. I know where it is on a map, but I know nothing about the school or the region and city what so have you. And I just remember asking the question, "Do you have a meteorology program?" And he said, "Yes, we do." So I put that in the back of my mind and when it came around time to actually start to apply to different institutions, I applied to Iowa State and the first black student at Iowa State University is George Washington Carver. And they had a scholarship for tuition in honor of him.

Brad:

So Iowa State University offered me, after applying to that school, that scholarship program. And after looking at my other options, which were a myriad of other meteorology programs that are again, out of state, it became pretty clear early on that fiscally Iowa State is where I would have to go to actually achieve at least my short term goal of retaining a degree in meteorology.

Kelly:

Yeah, well that was a great opportunity. And then after you were in school for a little while, did you decide right away that you wanted to pursue a graduate degree and a PhD? Or did that happen after you worked a little bit or how did that go?

Brad:

Yeah, that wasn't actually something that occurred until after I even left Iowa State. I was not absolutely sure that furthering my education beyond a bachelor's was what I would need to do. Early on my freshman year, I did an internship at a local weather station in Baton Rouge, and I realized that that wasn't necessarily for me. So I ruled that component out of it. I did have some exposure to, of course my professors who were conducting research, but I had only done one undergraduate research-related opportunity, but it ironically was at a summer program at University of Missouri and that was really my first time getting an opportunity to understand what the research process was and how it even worked.

Brad:

So I knew it was a possibility after that point. It wasn't until I came to Florida and was actually just working outside the field that I decided to reach out to Dr. Krishnamurthy, who was at Florida State University and has passed away since that time. And he effectively took a chance on me and I thought as not only an obligation to myself, but to him to see it through and to see if research was really something that I wanted to do moving forward. Beyond that, I told myself when I graduated with my master's, I would never go back to school again. And we see how that worked out.

Kelly:

Yes.

Rex:

So what did it feel like having so many classes and other opportunities once you were in Iowa State and around a lot of fellow meteorologists? Did you have new peer mentors and other folks around that helped develop and build your interest in the science at that point?

Brad:

That's interesting because my experience parallels a lot of people of color's experience—particularly in the hard sciences—in that oftentimes we felt sort of alone because of cultural differences. So I can't say I necessarily can point back to any particular peer mentors. As a matter of fact, I spent a lot of my time really just trying to develop a community, so to speak, finding people of similar interests that I had, even outside of the field. And frankly, just to get through that experience, to give you an idea: at Iowa State University, the average black person who attended did not graduate that institution.

Brad:

So first and foremost, my objective was to make sure that I had some type of community I could lean on, I was able to attain the information that I needed to be successful in the program, but also to graduate from that program in good standing. And I think that I was able to achieve all of those objectives. Even still at the time that I graduated, I recall I think it was right around the time there was a hiring freeze in the National Weather Service so there are very few opportunities for employment, which is one of the motivating factors that encouraged me to go forward into graduate school immediately.

Rex:

Interesting.

Kelly:

So Brad, what was your first job in the field and how did you end up at Florida State?

Brad:

So my first job—official job within the field, I guess—outside of being a research assistant or a teaching assistant didn't actually come until after I was at University of Georgia for some time and I had already completed the requirements, the coursework, with my PhD and had begun my research. And my first opportunity came about as a contractor at NOAA in OAR in what is now is called the Weather Program Office. And if I'm honest, if I consider all the occupations I've had across a variety of different fields and industries and we can get into that if you want to, but I think that that situation and that office probably

helped to develop me faster than any other situation or any other place of employment that I've ever been in before. And not even from a negative sense. Sometimes people will say that I learned a lot of lessons by learning what not to do.

Brad:

In that particular situation, being surrounded by individuals. At the time, WPO was led by Dr. John Cortinas, and I've never been around a team that really personified the example of what that should look like before, from individuals who were either senior to me or even other contractors, they really sought out opportunities to leverage your skill sets, encourage you to leverage their own skill sets, to develop and embrace what your philosophies are, even outside of necessarily what the strategic plans and initiatives of the organizations are, but also give the opportunity to engage with people across the federal enterprise and even across professionally and encouraging you to participate in professional societies like AMS and AGU and things of that nature.

Brad:

I've learned so much from not only Dr. Cortinas, but also other individuals in that office as well and later on, [such as] the late Dr. Bill Lapenta, he was there just before I left and came to Florida State. And they really just pour into you incrementally. And what that taught me is that you can lead and be effective and also build your people at the same time. And those are the most effective leaders, the ones that don't necessarily try to wring their people dry, but the ones who pour into them and recognize that when you pour into them, that even more will be poured out of them.

Kelly:

Did you do anything in that position that made you decide that “I want to be a professor and I want to teach?” Were you doing anything like that on the side or did you just all of a sudden decide, "I think I'm going to try this?"

Brad:

Well no, it's a very interesting story because I always told myself that I would want to be a professor, but I didn't want to do that for another 10–15 years. I said if I was going to jump into the tenure track game, then that would be something I wanted to do later on after I've already solidified and made my impact. Here I am. The position that I was in really focused on a lot of interagency coordination. As a matter of fact, we worked looking at our numerical modeling suites across the National Weather Service, across NASA, DOE—don't want leave anyone out—the Navy and also in support of Air Force as well, and finding out how we can get our subject matter experts who are maybe working on different components of them, such as data simulation, or such as working on couplers between the modeling suites or cumulus parameterizations to help them be able to speak back and forth between one another because none of those agencies really had a monopoly on expertise.

Brad:

So if the Weather Service needed an ocean model, they would go to the Navy who had the state-of-the-art ocean model. We figured out how to incorporate that model in the new GFS, which was under development at that time. So I played a role on really just trying to help organize what was being done in that region and really just making the resources known about what was going on across the agencies when it came to modeling and even internally within NOAA. Another opportunity that we had was to actually facilitate the subseasonal program. So from the program management side of things, we were

really trying to push forward what we were able to learn, what the research was saying, and how we can implement that into an operational framework.

Brad:

So it was really exciting work because I could interface with a lot of different people and I really enjoyed doing it. So I got to talk with people who were knee deep into the sciences on one day and the very next meeting I can be talking to leaders of NOAA about strategic plans. So it really kept you on your toes. It wasn't until later on that I was approached by the former chair of my department about my interest in potentially going into academia. And it sort of blindsided me, to be frank with you, but it turned out to be an opportunity that I really could not pass up.

Rex:

So you briefly touched on tenure. It seems to be a goal that you hear a lot about, becoming tenured in academia. Could you explain to us how that happens for a professor and why or why not it might be something someone would want to pursue?

Brad:

Sure, so tenure, I guess to define it, it's a state where you've proven your worth, not only to the department and to the university but also to your field, and then you're effectively giving the status within the university that allows you to pursue other ventures, either weather research wise or service wise or even teaching related that you might not be able to do without some sort of security. So the tenure track is basically the process that you go through to obtain tenure. And that process really is heavily related to, particularly in the institutions that are research ones like Florida State University is, is really heavily dependent on the amount of research and peer review publications that you're able to get out. So in the process of doing that, you may obtain external funding from different agencies or different entities, but you also make your name more known throughout the community because you're participating in these processes for other individuals.

Brad:

You're also helping to review other individuals' publications and papers and their grant proposals. You're participating also on committees and things of that nature. So it really just allows you the opportunity to engage with other people throughout the field and also to meet other people who are doing incredible science as well. So you can operate in this pool where you leverage expertise one to another, and that's one of the most engaging things about it and encouraging things about it is that's different from the PhD process where it's really all on you in the PhD process. But when you finally are in a position as a researcher or a tenure-type professor or a tenured professor, you really get to reach out to other people in collaborative ways and ask really complex questions.

Kelly:

So what would be the average amount of time if you were in a position, a tenure track professor, how long does that usually take? Is it five years, two years, or longer than that?

Brad:

So normally for someone coming straight out of say a postdoc or getting hired as a junior professor, an assistant professor, the process is typically six years. So it could be shorter depending on your level of

productivity or what you are doing and any agreements you might have in place prior to coming to the institution. Let's say for instance you were working at an agency where research was 100% your job. So you already had a research agenda and program going so the university is fairly confident that you would be able to continue that when you came, you could potentially accelerate that tenure process down to three or four years instead. So it's sort of a case-by-case basis, but the norm again is about every six years or so.

Rex:

What about the flip side of entering as an assistant professor but not initially deciding if you do want to pursue tenure, do you find that assistant professors will wait and then decide maybe a few years down the line if they want to [pursue tenure], or is it kind of good to enter with that intent clear already when you start your relationship with a new institution or university?

Brad:

So that's a great question. So typically when a university advertises a position such as an assistant professor, it comes with the stipulations that it is a tenure track position. So when you're applying for it, you're opting into this timeline upfront. Now there may be certain circumstances where you might be able to pause your clock, like recently with COVID, a lot of people have had their tenure clocks paused for a year or a lot of universities are a lot better now with allowing you to have family and medical leaves, like say if you have the birth of a child, things of that nature, to bake in a little bit of extra time. But the standards should remain the same. One thing you'll notice that the standard, it's not consistent from university to university, just like it's not consistent from department to department.

Brad:

Some schools might not emphasize research as much so a lot of your teaching and service responsibilities might bear more weight than research. Whereas some departments might say, "Well teaching is fine. You still have to do this, but we really expect you to be productive in your research agenda and we expect you to obtain external funding." So there are nuances and those are some of the things if you're considering joining a department or you have an offer on the table, you want to be very clear up front in what the expectations for tenure are, because those are going to be expectations that you're going to be held to for the next X number of years.

Kelly:

So for our listeners who are interested in possibly becoming professors at a university, what are some of the duties and responsibilities you have as an assistant professor? How do you spend your day?

Brad:

My duties and responsibilities really have three pillars. Those pillars are first and foremost research and then teaching and in service, you can say in that order. So in a typical day for me, if I'm planning on teaching that day, in the morning, I might do some research and I have a meeting with a colleague either internally from another institution to talk about our research. Also have some time for writing set aside as well, some time for class preparation, then going to class, engaging with students, having office hours. A lot of office hours are actually virtual now. So people actually utilize them a lot more than they do with the traditional “come to my office on Wednesday from 1:30 to 2:30” type of approach. I think that's thankfully deprecated at this point, at least the pandemic has normalized the access of professors to their students.

Brad:

And then on the other side, there are service obligations that are spread out as well. So it could be any given day. Like one of my obligations is running the social media for our department. So highlighting some of the actual occurrences in our department, whether it be graduate student success or awards or even publications that might be, or faculty members that might attain new grant funding, highlighting some of those things. Also a component of my service is really related to the work that I'm doing with AMS and the boards that I'm on there and the actual subcommittees that I'm involved in here in addition to research-related [activities]. So things like organizing sessions at conferences that aren't necessarily productive research wise, but can lead to more productivity down the road because of collaborations that you are able to utilize and develop through those processes.

Brad:

So there are a myriad of ways that our time is split and no day is absolutely the same. That's one thing that you can be sure of. And I actually find that pretty attractive in that you can really set your schedule as an academic. Of course you have to be in class when you're in class, but if you have something that's family related, you can be present for that. But as long as you get your job done, you have the flexibility to be able to do it when you want to do it. So that is by far and away one of the more attractive things about academia. Not only that, for the most part you get summers off.

Kelly:

Which is always nice.

Brad:

Oh, it's absolutely outstanding. There's nothing like not having the obligation to teach in the summer and just focus on your research, being able to spend time with your family and jump starting the next nine months or so and even using that time to prepare for classes that you might have coming up to help make you a better teacher, to make you someone who's not necessarily have the stress of doing that 24/7 each and every day of the year.

Kelly:

It sounds very flexible, but certainly very busy.

Brad:

Absolutely. There are downsides to flexibility, because then it leaves room for procrastination. Some people have to deal with that, but depending on who you are, if you're a night person, you like to work at night, then you can actually work at night. If you feel that's the time you're the most productive, and for a lot of us, we have families and we would like to be present. So oftentimes we think about our normal schedules day to day. If you have a family, your kids will get out of school around three and then you'll have dinner around maybe five or six, and then by 7:30 or 8:00, they're going to bed.

Brad:

In between there, they might have soccer or gymnastics. How much time do you really get to spend with your family on an average day? Most of us spend the majority of our waking hours at work. They spend the majority of their waking hours at school. So if we can squeeze out an extra thirty minutes here or

there to be able to figure out how to live a more balanced life, then I think that that's definitely a benefit of it and something that I don't take for granted.

Rex:

Did you [create] your schedule as an assistant professor with a template to figure out how to break up the day or is it totally up to you? And I know some folks might feel like it would be helpful to know, "What do I do on Monday or Tuesday or Wednesday?" It's a little bit amorphous, I guess. Or did you kind of develop a template over the time you've been an assistant professor?

Brad:

So you're mentioning there's a template out there that you can give me.

Rex:

I don't know if there is, but if you have one I'm sure someone else wants it.

Brad:

No, I think what it really comes down to is you learn through these processes and you pick up breadcrumbs as you go along from what works for other people and then figure out how it might actually be incorporated in your own lives. I remember one of my professors mentioned to me that he does not schedule any meetings in the mornings at all because he uses that as his writing time. But I know for me, I'm most effective with my writing late at night after everyone else goes to sleep because it minimizes distractions. Everything's quiet. So the point there is not necessarily what time you do it, the point is that you actually get those things done in the manner that's most effective and most efficient for you. There are some things like some people will actually go and work out during the day because they recognize that they're going to do the majority of their work in the evening.

Brad:

And that's just how their schedule works out. A lot of things go into play. In particular, we have a two-body household where my wife is also a professor on campus. So we have to understand the ebb and flows and what works for each of us. In our case, what's a busy season for her and when do I have to lean forward a little bit at home? And thankfully, again, that flexibility plays into it. So when you have a conference, what are they going to be doing? When they have one, are you going to be able to go along? And those are some of the responsibilities, but also the perks, to be honest with you, about academia that makes it somewhat attractive to people. But not only that, it really puts you an environment where you're are surrounded by really smart people.

Brad:

And all of them will figure out what works for them. You figure out a lot of that through the PhD process as well, what works and definitely what does not work, but you really put yourself in a place where you realize that, "Hey, I have an area that I'm really good at and I deserve to be here and how I execute it and how I perform in this space is really up to me." And I think that's one of the things that some people, in the beginning it can be very difficult, but if you come along, you recognize that it's definitely something that you can do.

Rex:

You've given a lot of hints already about what you like most about your job, but I'll just ask directly again, what do you like most about your job if you can pick one thing? I've heard so much from you about different things that are inspiring about it.

Brad:

So I have talked at length about research and the ability to ask those questions. Remember these really all stemmed from me being able to ask “why” when it comes to phenomena. But if I really had to think about the moments that I like the most, it's simple things that we sometimes take for granted. When it comes to research, it's when the code runs, it's when the statistics bear out something and they show you something that you didn't expect to see. But when it comes to the actual teaching side, and I think this is probably the more rewarding part, it's when the lights turn on for a student and you can see it happen or you can see a progression over the course of say several weeks where their questions are getting closer and closer to the objective, then closer and closer to the main point, because one of the things that I recognize, particularly when you're teaching classes that don't have majors in them.

Brad:

I think teaching classes with majors in them is somewhat a little bit easier because you know that they're self-motivated because they want to be a part of this field. But when you're teaching to more general education type students, you may be their only exposure they have to science or some type of applied mathematics at all in their matriculation of the university. And helping them to understand how, yes, you may never go into the weather and climate industry, but you may find yourself sitting around a table and ideas are being shared and dollar figures are being thrown out and you may be able to point back to something in this class or this perspective and be able to understand how science actually operates and be able to say, "Hey, this wouldn't work this way, or it might benefit us on our bottom line to go another direction based on this information or this perspective or approach," that you picked up in my class.

Brad:

So I tell them that from day one. I might teach a lot of students who are business or even in public policy, I tell them that, "You may never have to make a climate-related decision, but you may be sitting around a table where a climate-related decision has to be made. And you can point back to the principles that you developed in this class and that you learned here and leverage those and make yourself indispensable in that moment." So if for no other reason, absorb what we're doing here, but always think critically about how it can apply to your profession moving forward.

Kelly:

Oh if I would've heard that explanation when I was in college, I would've taken more interest in my science classes, Brad. That's inspiring, seriously, because I was one of those people that wasn't a science major and I'm like, "Okay, I have to take these science courses. I'll just get through them." But you make a really good point. And it was, it was the only time that I was introduced to science.

Brad:

It goes both ways though, because when we're sitting in creative writing in our English classes as our requirement, we wish someone would've told us that we need to be great and effective communicators

and writers because a lot of scientists are great at writing science, but we're terrible at communicating to decision makers and policy makers. So there's two sides of this equation and one of the things that I really try to push forward on my students is yes, you have to be able to write me a scientific paper, but you also need to be capable of writing an op-ed. You have to be able to tell me exactly what this means not only to the people who can dissect it, but also people who are going to have to utilize it and you're trying to convince that it actually matters.

Kelly:

Very true. So now what are some of the challenges you face working at a university? It sounds like there's so many positives, but there has to be some things that are very challenging.

Brad:

Well of course, and a lot of them have really come to a head recently. And one of the things and the challenges, which some people would argue is a benefit, is that you have so many different peoples and different perspectives at universities. And oftentimes those perspectives and positions cross the line into areas of insensitivity, disrespect, and flat out, in some cases, sexism, racism, ageism, and those rear their head not only in policies that remain from long ago, but also sometimes within the student body. And you find yourself trying to support students who are navigating these areas sometimes for the first time in their lives. One of these areas that is clear to me is that oftentimes students of color disproportionately go to faculty of color who are very small in proportion at the university when you think about percentages wise in other people in our profession, they tend to lean on them more often.

Brad:

So you find the faculty of color while they have service requirements already that are dictated by their departments, we tend to have these unassigned responsibilities as well because we operate as mentors to students who aren't necessarily our formal mentees. And that's fine. That's part of the burden that we have by being in the position and the privilege that we have as well, but helping them to understand that there's a place for them here. Oftentimes you can walk into a room and not see anyone that looks like you and feel like it's just you, the activities and the events, the dialogue, you don't necessarily even relate to even some of the professors and they don't necessarily explain things or try to help you understand what the importance of certain engagements are and just helping them just being a mentor and understanding that they're there because they want to be successful, but what are the tools that they need in order to be that way?

Brad:

So I often find that that's a challenge because you don't have time to give everyone the energy that you would like to give them, or in fact that they deserve. So more often than not, you try to make yourself available and letting them know like, "Hey, if something's going on, let me know what's happening in your life." And this isn't necessarily just for students of color, but for students in general, because we're in a day and time where life is going to be going on and most of them don't believe that we're accessible to the point where we understand that life is supposed to be happening alongside the classroom. I think that while we have responsibilities and we have expectations in the classroom, we're also human beings and we have things going on ourselves.

Brad:

We're not so jaded that we don't understand that things will get difficult for you. And they will. There's no way you're going to go four years or two years or probably a semester without something significant happening in your life. But opening the gates and portals of communication from the very beginning and letting them know of what you expect from them but also what they should expect from you and that you are also imperfect. I think that goes a long way to developing trust with those students and really just leaning forward into developing those relationships. You never know exactly where it's going to lead, but pouring into people, pouring into people is so critical. But there are way too many people who are either silently or intentionally working against or drawing from people and we really need to get rid of that, not only in the university, but also in the profession as well.

Rex:

And if you had to forecast the future of some of these issues at the university, what do you see as far as how things might or might not change?

Brad:

I would say we're always hopeful. We're always hopeful. And we think that the arc of morality trends towards justice. It will always trend that way, but we also recognize it as cyclical. If we point back to the stimuli from last spring and last summer that really caused a lot of people to question why these things were happening in communities that didn't look like theirs. How long does that momentum last, where that critical self-analysis steps in and people make the next step into actually being advocates for creating spaces for people who don't come from backgrounds that look like them? We recognize that eventually steam will run out on it, but there'll be another period of time where it'll pick back up. Unfortunately the impetus for those things being picked up or for those things to be grabbing attention are usually involved in someone's life or livelihoods being lost.

Brad:

And that's what we don't need to have and we need to have a baseline of a respect between one another. We understand that we are all out here trying to navigate a very difficult world with very rigid structures, in some cases, more rigid for one set of people than another. If we're going to find ourselves in a better place, moving forward, we can consider ourselves being a better generation, every generation tries to say that they want to leave this place a better one for their kids and for their grandkids, then a part of it is understanding what our roles and our places are and helping to move the needle forward.

Rex:

So returning to your service side, you are a member of the AMS Board for Early Career Professionals and to an extent that board is about drawing in rather than pulling back. Could you tell us about the board's mission and some of the activities that you are involved in as a part of the board?

Brad:

Yeah, so I actually love this board and I'll say this for this reason. This is my fifth year so I'm in the second year of my second term. So next year will be my last year on the board. And I'm maybe one of the last people who's still directly involved who went to the very first Early Career Conference at AMS in Austin many moons ago. So I remember seeing it from the perspective on the outside of someone who needed

that information, who needed those resources and now being in position where we can help to better understand what people need even more is such a privilege. The board itself, our mission is really designed in keeping early career scientists and professionals engaged with AMS and within the weather and water and climate community because AMS has a well documented issue of losing people after the student level, after student years, and then they'll come back, if ever, later on in their careers.

Brad:

So how do you communicate the value of AMS to your peers? How do you communicate what the actual benefits and the costs are and letting them know that this could actually be a springboard for your career moving forward? The people that I've met through this are by far the most invaluable component of this, whether it be through the early career professionals on the board or through the Early Career Leadership Academy of which I was one of the inaugural members of. Just the quality of people in our field, the genuineness I think is just impressive all around. I mean one thing I think that we can really work together as a community toward, it's just making it more accessible to people at this stage in their career and really helping them to understand why do they even need it?

Brad:

And I think that most of it is not necessarily what AMS can offer, but more so of how we market it. We have a product that's useful and beneficial to our constituents. It's just a matter of getting out to them, engaging them, and letting them know that they can use this platform not only to help build something in their own careers but they can also help to build the careers of others. I'm very keen and very aware of the number of African Americans who are in this field and recognizing that we lose a lot of them sometimes permanently at this level. And it's very important to me that we are at least visible for them and we at least hear what some of their issues are, even if we can't necessarily fix them at that moment. But we have a better understanding and that lives on in our practices and the events that we actually make available to them.

Kelly:

Yeah, it's a great board and you're also very active and influential and it's inspiring for a lot of these early career professionals to be engaged. And I know that there are so many people who want to be involved in that board. So thanks so much for your efforts. It's definitely something that's helping and working. So thank you for that.

Brad:

Oh, you're welcome. And honestly, it's really a privilege because I remember how small it was when we started and its growth to this point and even spawning other things or being a part of spawning other things like ECLA, it's just incredible the reach and, like you mentioned, the support that this board has garnered. And to be honest with you, I would never be on this board if it were not for Matt Parker. At that very first conference, I remember Matt Parker pulled me aside, I actually met him through Marshall Shepherd, and he pulled me aside. At that point, I think he was the Commissioner of the Weather, Water, and Climate Enterprise. And he basically said, "Okay, you're here and this is your first AMS. You're going to go sit in on this committee." It wasn't the early career board at this point, it was a different committee, but I'm like, "Wait, you mean you want me to just go sit in the committee? How does that work? What am I supposed to do?”

Brad:

He said, "Don't worry about it. I just need you to go and be engaged." Because he realized that the best way to keep someone locked into this society is to have them serve within it. And I never forget that lesson and how he actually poured into me during that experience and even continually moving forward. And it was just so unfortunate how things turned out, but I'm a real advocate of telling how not only had he been an influence in my life and my professional career early on then, but he's done the same thing for many early career professionals along with other mentors right alongside it.

Kelly:

So now that you're pretty established in your career and through your experience on the board for early career professionals, what final advice do you have for students looking to pursue careers in academia?

Brad:

First and foremost, if you're going to pursue a career in academia, you should really decide what component of it really is a draw to you. Are you really drawn toward teaching or is it the research that truly speaks to you? And helping to identify, that will basically help you identify what type of institutions you will want to apply it. But even before that, if you're interested in the research side of it, a postdoc is an invaluable experience because it's a research experience that allows you to effectively get your agenda off the ground. It allows you to understand where you fit in and really become an expert very quickly within your field. And then you can carry that momentum over into a research oriented or a tenure track position at a university.

Brad:

On the other side of it, if teaching is exactly what you love and you just decide that, "Hey, research, it just really, isn't my thing," then maybe you can find yourself at a institution that emphasizes the impact of teaching within a community so it really focuses on your engagement with students. There are bunches of students who now is becoming less taboo to go through the community college track and then go to a four year institution after the fact. There are a lot of professors with master's degrees or even PhDs at community colleges who can have impacts on what those students do later on. So there are opportunities I think at different levels for those who may be kind of skittish on the PhD and the commitment it might take to go into that area. If you have a master's degree, you can still contribute to educating people in this field.

Brad:

If you're really looking to make an impact on underserved or underrepresented communities, consider going to an HBCU. Howard has an excellent program for atmospheric scientists, so does Jackson State. And those are a couple that most people really don't know about. So it doesn't matter if you are African American or white or Hispanic or Asian those kids still need those mentors who care about them on that level and we want to make sure that they aren't forgotten about either. So there's plenty of space for you if academia is what you decide that you want to do. And even if it's something that you decide that you have an inkling about, you don't necessarily have to go straight into academia.

Brad:

Find a position that fits what your objectives and your goals are. If your goal is something necessarily bigger than necessarily tenure, what if one of your goals is to become a fellow of the AMS? If one of

your goals to become a fellow of the AMS and you want to do it via your research, then find a research-only position and you work with it and allow the opportunities and individuals that you collaborate with open up doors and opportunities for you. And if one of those doors happens to be academia and that serves where your larger vision is, then you can go in academia. I don't think the academia for me isn't necessarily a goal, but it's more so a conduit to what I want to accomplish on a larger scale.

Rex:

Brad, thank you so much. We're so grateful for everything you've told us about your career and emphasizing the ways that you can personally connect with and nurture others as well. However, before you go, we always like to ask our guests one last non-meteorological question to give another side of who you are as a person. And so we're just going to ask: what is your favorite food and why?

Brad:

Okay, so this is sort of an unfair question because I come from the greatest food state in the country in Louisiana.

Kelly:

You do, you do.

Brad:

So it's sort of unfair in the sense that I have to choose from across that cuisine.

Rex:

Ah, sorry to ask you to make a choice.

Brad:

No, it's fine. So if I chose right now, this is really about what I want at this moment probably. I would love to have a nice bowl of crawfish étouffée with some white rice and some French bread on the side right now. And maybe some sweet tea to go along with it. That sounds absolutely perfect right now. If I can't absolutely have that, I guess I'll have to go with some jambalaya or maybe a po'boy or some char-broiled oysters. Whenever we go to New Orleans for AMS, I make sure that I hit Dragos, which is the restaurant that's in the host hotel right there—I believe it's the Sheraton—and they have a great restaurant that has char-broiled oysters right there and fried alligator. Try all of it. So I gave you one, two three, eight, nine foods right there.

Kelly:

So étouffée, is that spicy?

Brad:

It can be. Typically it is. And it is usually—not to really go into it—it has a roux base sort of thing, so it's really gravy based and depending on how you season it, it can be spicy. But the foundation is really the roux, which is a gravy, and it has onions, bell peppers, and celery. You can do crawfish, you can do a shrimp version too. It's great.

Kelly:

Oh, sounds so good. Well thanks so much for joining us, Brad, and sharing your work experiences with us.

Brad:

Thank you, Kelly. And thank you, Rex. It really was a pleasure. It was a lot of fun talking to you.

Kelly:

Well that's our show for today. Please join us next time. Rain or shine.

Rex:

Clear Skies Ahead: Conversations About Careers in Meteorology and Beyond is a podcast by the American Meteorological Society. Our show is produced by Brandon Crose and edited by Peter Trepke. Our theme music is composed and formed by Steve Savoie and the show is hosted by Rex Horner and Kelly Savoie. You can learn more about the show online at www.ametsoc.org/clearskies and can contact us at skypodcast@ametsoc.org if you have any feedback or if you would like to become a future guest.