Transcript of "Isha Renta, Management and Program Analyst, Oceanic and Atmospheric Research at the National Oceanic and Atmospheric Administration in Washington, DC"

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 in 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, **Isha Renta**, a Management and Program Analyst at the office of Oceanic and Atmospheric Research at the National Oceanic and Atmospheric Administration, which we will call NOAA going forward—its acronym—that's in Washington, D.C. Welcome, Isha. Thanks very much for joining us.

Isha Renta:

Thank you, Rex and Kelly for the invitation to have me. Very, very honored.

Kelly:

Isha, could you tell us a little bit about your background and what sparked your interest in science?

Isha:

So I have a bachelor's degree in mathematics and I have a master's degree in atmospheric sciences. I want to say that my interest in science goes back to when I was in elementary school. I grew up in Puerto Rico, in the Caribbean, so you might be familiar that we get a lot of threats of tropical cyclones in the Caribbean. So growing up in there being threatened constantly by these systems really sparked an interest, especially Hurricane Hugo in 1989, when it actually made landfall in the northeast part of the island. That really shocked me, seeing this system, the damage it caused.

Isha:

I was only about eight years old when that happened. And I remember very clearly how impressed I was by the damage that this system caused the island. And since then, I just started playing with the newspaper maps, tracking the storms with the lat longs [latitude and longitudes] that were shared by the news. And then obviously every year, it was the same story. All these systems constantly threatened the island. And then '98, Hurricane Georges made a direct landfall also in Puerto Rico, across it from east to west. And in that case, Georges made a lot more damage in my hometown versus the Hugo in 1989.

Isha:

So for that system, when I was already in high school, that really was what really made me think, I want to be a meteorologist. I need to understand these systems. These are scary, impressive. There's so much to know. How can I help my people? So it was just this constant threat of tropical cyclones that got me interested into science.

Rex:

And so mathematics as the starting point for your undergraduate versus I know there's other programs that maybe have a meteorological undergraduate degree in name. Why did you want to start with mathematics as your grounding in meteorological science?

Isha:

So, interesting enough, when I graduated high school in Puerto Rico, there were no programs at all in any college related to atmospheric sciences. So I actually got into college in psychology. And when I was doing the first semester in social sciences class, I realized that that wasn't really matching my interest. So I was in the department of social science and I was like, this is not for me. So what I did was try to change to engineering because I was a good grade student and all my friends and my older brother and sister, they were in engineering school. So I was like, oh, I should be an engineer too. Maybe I'll just change that.

Isha:

And actually through the registrations office in school, in college, they said, “No, you cannot change from social science to engineering. You have to go first to a science.” And I was like, “Oh, okay.” So I have to do biology, chemistry, physics. And I was like, well, I'm not super into biology. I am taking chemistry now and I'm struggling. Physics, I'm okay with physics, but I haven't taken the college level yet, so I don't know. And I'm good at math. I've always been good at math, so I was, “All right, let's go to math so that I can change to engineering,” but actually I never changed. I just stayed in math and finished my undergraduate degree in math without knowing, right, that that was going to be the best idea for this career.

Kelly:

I was going to say that. Math is the perfect foundation for meteorology courses. So you already had those under your belt for your masters.

Isha:

Yeah, it was interesting. At the University of Puerto Rico, Mayagüez, where I did my undergraduate, in the engineering department—mechanical engineering—they had a climate modeling group and the university newspaper put out one announcement about this modeling group. And they were looking for undergraduate students to help them and support them doing research. And I was like, “Oh, this is it.” I need to do this because this is going to help me learn about meteorology. So I joined them and then through joining them, I was able to learn about grad school. And I was like, “Oh, so maybe I'll go there and do my master's in meteorology.” And I'll be able to become a meteorologist. It's like I'm putting all the pieces together in my head, as things are coming up my way. And I realized that it was the best decision I could have made was be a mathematician, that it was a really good foundation for when I did my master’s. I've never been intimidated by mathematical equations and resolving these complicated—I actually enjoyed that, so I was not intimidated at all in that dynamics class.

Rex

That modeling group you took part of sounds like a great opportunity as an undergrad that helped you get more in tune with meteorology. Did you have any other opportunities in the form of a mentor or another teacher or another person out in the community in high school or in college that helped you also further pursue your goal of finding a meteorological job in that profession?

Isha:

So through that group, I did a lot of networking and through there I learned about the NOAA Educational Partnership Program's undergraduate scholarship, which is two summer internships with a scholarship. So this was 2003 and I went to a conference where I met some of the NOAA people and I was like, "Okay, so, oh, Weather Service is under NOAA." Because you hear about the Weather Service in San Juan in Puerto Rico, but I didn't connect it to NOAA. But then when I was through that group, I was like, "Oh, so then I can apply to their internship." And if I get it, then I can get to the Weather Service, which is what I wanted to do.

Isha:

And so I applied to the NOAA Educational Partnership Program's undergraduate scholarship and I got it in 2003 to 2004. And I did two internships with them. Actually, the first internship was not related to anything tropical. It was doing some research on the thermodynamics of sea ice, but I thought even though it was totally outside of what got me into meteorology, I actually learned a lot. And I presented posters, and then the next summer I did an internship at the Hurricane Research Division in Miami, Florida, in AOML. Atlantic Oceanographic and Meteorological Laboratory down there, part of NOAA. And so over there, I was in heaven.

Isha:

Basically, you're doing hurricane research. They got me the blue suit, because we're going to do calibration of their NOAA aircraft to test the instruments before the hurricane season gets busy. So over there, I had a lot of fun in that experience. So I think through that, and then going into grad school, I kept my research working with one of the scientists that was my mentor that summer, Dr. Mark Powell, using the hurricane surface with analysis tool that he developed. So it was part of what I used in my master's research.

Kelly:

Wow, that research in those internships sounds super cool.

Rex:

I think it's interesting that instead of working from the bottom up to learn about the National Weather Service, you went to the umbrella organization and then found your way back down to specifically what you had your eye on. I think that's an interesting path and a good way to say that you can think outside the box on how to find your way to what you want. And I also noticed you were talking about how you were already going to conferences as an undergraduate. Was that something you did with other classmates?

Isha:

Yeah, it's part of the climate modeling group students. They were grad students that I was working with. What I was doing with them was basically supporting one of the grad students with the research. And they just offered us to go to this NOAA EPP conference, which was at FAMU—the Florida A&M University. And it was my first conference. I had no idea what I was gonna be going into, but I guess meeting the people, seeing the science here, listening to the talks, it was just very cool. You're getting an undergrad student that has all these dreams and all these things in your head or all the things she wants to accomplish. So I was just super excited to go to that conference.

Kelly:

So you're saying that the conferences and the internships were great ways to network. So how did those help you get your first job in the field? And then how did you end up in the position that you're in now?

Isha:

So I can say that based off the experience of my first internship, I remember when I got to a job fair, right after two months of internship and I compare it to the previous job fair when I didn't have an internship. It's like the interview offers during that second job fair increase a lot. So definitely I could see that having that internship definitely made a difference in the interest from the different companies and agencies. From there, I finished my master's and then I started my PhD. And then actually didn't finish it because I was working full time. I had my first daughter. I was driving an hour to work. Then from work, I was going driving an hour and a half to go to take my classes because they were not virtual. I had to be in person. I come back to work, finish my working hours, pick up my daughter from daycare, go back home. It was a lot.

Isha:

So I had to make some balance, even though I finished all the course work, but I needed some sanity in my life, but I started working. My first job was at the Naval Surface Warfare Center Dahlgren Division. That's a mouthful. It's a Navy base, part of the Department of the Navy and the Department of Defense. And over there, I was working doing research on radar refraction and how the atmosphere affects the Navy ship radars. And then studying different positions. Where would you have Navy ships around the world? Give them forecasts, also doing forecasts for the test sites, whatever they would be testing new radar developments for the Navy ships, also supporting them with actual measurements, giving them forecasts and trying to understand and provide forecasts using some other tools.

Isha:

We would put the Navy model, the COAMPS [Coupled Ocean / Atmosphere Mesoscale Prediction System] model data, we would put it into these other software to try to produce forecasts of what the environment—how it would affect the Navy ships and depending on their locations around the world. So it was very interesting. I also did some studies about the impacts of the weather on the nuclear warheads released from the Navy submarines. So it was very different, outside of my comfort, coming from doing internships at NOAA to then having to change my mind to a military mindset. It was a little bit of a shock, but it was very interesting to learn all the perspectives and the interests that the military has from that weather side.

Isha:

So I worked for the Navy for five years. And then from there, I got a job at the National Weather Service [in] Sterling. That's the Baltimore/Washington Forecast Office located just west of Washington, D.C. And I was there for about five years. So I was a forecaster just doing regular duties of forecasting, long term, short term, balloon release, aviation forecast, marine forecast. That office is responsible for the Chesapeake Bay, doing also briefings for emergency managers. So anything that is done in the National Weather Service I was doing there for five years. And I love my job there. I had a great experience. I think being in Washington, providing forecasts to one of the largest cities in the country was very, very challenging at times, but I really, really love my job there.

Isha:

But I think also as an individual, I started asking myself, "Okay, what's next? What's my next challenge?" I've been doing this for this long, so what's going to be my next path in my career? Through being in that job, while I was in that National Weather Service job, I was part of the AMS [Summer] Policy Colloquium. And in that policy colloquium, one of the days, they brought a lot of SES [Senior Executive Service] as the senior executives to speak to us about their career path. And I was like, "Is that something I want to do in my career? Do I want to become a senior executive?" I don't know, but I met somebody that had the position title that I have today, a Management and Program Analyst. And so I started digging a little bit more on that position and what they do. And then I saw this opportunity come up on USA Jobs and I applied. And it was in the office of Oceanic and Atmospheric Research, or OAR. And I started in this job about a year ago and that's how I ended up with my current position.

Rex:

That's great. So having the opportunity to see someone who was doing your specific job, did you have a chance to ask that person questions about what's it really like? Because I know the job descriptions on a website can sometimes not really give you a clear picture of what the job actually is. There's maybe some unspoken rules or subtext. Did that person help you actually understand more than you would've gotten from just internet research?

Isha:

Yeah. I spoke a little bit. She was actually in NESDIS [National Environmental Satellite, Data, and Information Service], the satellites line office. So I spoke a little bit about what she did. So I was like, "That's something I think I can do." And I think you guys know that I started a nonprofit. So when I saw the job description came up, I was like, "That's the things that I do with my nonprofit." So it was like, "All right, okay. I'll take the challenge. I'm going to apply." And I got it.

Rex:

That's great and we'll get to that nonprofit a little bit later and how that ties in. And I think you've given us a teaser already, but tell us a little bit more about some of the duties and responsibilities you have now at your current job, the Management and Program Analyst at the OAR. How do you spend your day?

Isha:

In this position, what I'm doing is I'm leading and supporting the NOAA Science Council. So anything related with the NOAA-wide science. So one of the super interesting things about this job is it takes my mind outside of only the meteorology and weather, but all of NOAA science, like ocean marine fisheries.

It also gets me to work with the NOAA Chief Scientist very closely because he is the chair of the NOAA Science Council. I'm able to communicate science through different mediums like congressional reports. One of the main things, I also work with the NOAA Research & Development Enterprise Committee where I'm also a lead there. So anything, also, across all the line offices of NOAA—science, research and development, in this case—is also part of the things that I support and do.

Isha:

And within the research and development enterprise committee, we developed what is called the NOAA Science Report. So it's a report that goes out every year. It's been going on for a couple of years and it highlights all of NOAA science. And this is a product that is for the public in general. Anybody from my grandma to staff or the congressmen and women, they can read that report about what NOAA is doing and how the money is being used, the tax dollars are being used.

Isha:

But one of the cool things that we're doing with the Science Report more recently is instead of just highlighting and mentioning what are the science successes of NOAA of the last year, we are converting it using a logic model. And the logic model, basically putting this story together, how NOAA's vision and strategic plans goes together with the actions that are going within NOAA and how that is also impacting our communities.

Isha:

So now this year, the upcoming 2021 Science Report will have the story told in a little different way. So we have a logic model related to hazardous weather. We most recently this summer developed the climate logic model. So all that, we're just putting together stories of NOAA in a way that it connects to strategic plans and it connects to our communities. So that's one of the cool things that I'm doing, having a lot of fun developing those connections between NOAA strategies and the communities to that logic model.

Rex:

That sounds great.

Kelly:

So how does NOAA actually get that information out to the public? What avenues do they use to reach the public, to have them be aware of the things that are going on?

Isha:

So obviously nowadays with social media is one of the big things, but the report once it is released, it's shared through the different [ways] like social media. I also go through the NOAA website. It's shared through a NOAA-wide email that I also share with our stakeholders and partners so that everybody can know that that report is out and know that this information is available for the community to see.

Rex:

And are there any public forums or press release events for the public?

Isha:

There is a press. Yeah. Yeah. Every time. At least my first year was this time when it was released in April of this year and I know that different line offices. We work closely with the communications departments of the different line offices. So they also can help us put the word out that the NOAA Science Report is released.

Kelly:

So it sounds like the position's pretty varied, which is good. So what do you like most about the job?

Isha:

I think I like the most is that I get to communicate science in a different way than what I was thinking about when I was in the Weather Service. When I was at the Weather Service, it would be briefing emergency managers, briefing or giving interviews to the media, or putting a social media post about the upcoming weather. But over here, it is more like, you do a congressional report, so you have to keep it a certain way and certain formats. Or where you're doing the NOAA science report. So now we're testing this logic model way. So now we're looking into new avenues and stepping outside of the box of how things have been done before.

Isha:

So I think it's something very interesting is how science and not only weather science, but all of science is being communicated through NOAA. So, that's what I'm enjoying the most. And also that I'm learning outside of the weather world. I've always been a weather geek. So having now to read about what NOAA does in fisheries, what NOAA does in the ocean service, what NOAA does in terms of the research and development, and how the transition plan goes into operations. So all of that, I'm just learning. And I always say that I'm a student for life, so I'm enjoying my journey here as I'm learning more about NOAA.

Rex:

And is there something that is more of a challenge that you face or that NOAA as an organization you feel faces? I know you don't have to speak for them, but from your perspective. Or that you feel that others that you interact with face in your field, either science-wide or more specifically the NOAA mission?

Isha:

There's so much to do. I can talk about my perspective from coming from the weather world and how there's a lot of ... how to reach underrepresented or marginalized groups is something in the terms of science communication. I think sometimes that we don't think about the deaf or the blind. How are they getting the weather messages? And I'm talking about that weather perspective, non-English, non-native English speakers. They understand when their phone rings with a hazardous weather alert. Do they know what they have to do? And I know that NOAA is working to try to address some of these things. They're not easy and they're not a one way out or one answer to do them right. It's also a learning path. So I know that's definitely a challenge in terms, but that doesn't only apply to weather.

Isha:

I've seen even safety messages from all perspectives of the NOAA science in other languages to reach those underserved or disabilities people is something that we need to think about more. And I think nowadays it's a great time to be reaching to those communities and learning because I feel that the society is more open to learn. I realize that even though we have thought that we have been doing enough, we maybe more recently realized that we haven't done enough. So we really need to open our ears and our minds to learn and see how we can improve.

Rex:

Are there any specific initiatives or offices at NOAA or within your communication-oriented network of people at NOAA that are specifically breaking down these different groups? And how they can target information towards them and effectively reach them?

Isha:

I know that at least the National Weather Service is doing a big effort with the Spanish communities. That is something that I've been involved with when I was part of the Weather Service in my previous job. And I've been following them as I am now not with the Weather Service anymore, but I still follow what's been going on with them. So I know they are trying to provide several ... they have the network of Spanish-speaking forecasters, where they can do interviews, they can do ... so trying to address those things. And I know they're having meetings and discussions to try to solve these issues. And I know that NOAA leadership as well is well aware of many things that could be done. And they're looking for ways to learn and to address them.

Rex:

Great.

Kelly:

So you mentioned you did lots of internships. You also took part in the AMS Policy Colloquium. So was there an exciting moment during any of these things that influenced your career?

Isha:

I would say being in Miami and seeing the hurricane research and how it contributes to operations. For example, when they were like, “Oh, we have a storm, we have to go fly into it.” So you have all these researchers coordinating, “Okay, who's going to go to fly into the storms?” And then seeing how they communicate with NHC, the Hurricane Center, and how they support their forecast, I was kind of like ... when I was in grad school, I was saying, “Oh, I want to be the director of the Hurricane Center one day.” And then when I was there, I was like, “No, maybe I want to be the one that flies into the storm.”

Kelly:

Right.

Isha:

So it's like those little experiences have opened my mind to possibilities and into the things that I can do in my career. So even though I have not done any of this, I think that it's just the opportunities that present themselves, and also my willingness to experience and learn and do different things. And I feel

that I have fulfilled my childhood dream of being a meteorologist. I feel that I was able to do that, and I am satisfied with the way that my life has turned out. And I'm very happy about how things have happened. I don't know. I'm just so open and positive to the things. “Oh, that's an opportunity. All right, let's take it. Let's see what happens.” It's like, “What's the worst that can happen for me?” Nothing. You learn a lesson.

Kelly:

It sounds like you definitely enjoyed your professional journey so far.

Isha:

I do. I'm very proud of it and I'm very happy with it.

Rex:

In addition to your career as a scientist, you founded Semilla Cultural as a nonprofit organization that teaches and performs Puerto Rican music and dance in the Washington, D.C., Maryland and Virginia regions. Can you tell us about how you decided to start and then grow this grassroots organization alongside your work in meteorology? We already have a hint in that you told us that it helped develop your sense of leadership, which you took into your current position that you hold in the meteorology world.

Isha:

So this nonprofit started ... so I moved from Puerto Rico to Washington, D.C. to go to graduate school. Obviously, there's a cultural shock that I was not expecting, because I'm so focused. I'm going to go to grad school where everything's going to be great, but there's this social cultural that you don't think about too much when you're just making those changes. At least that was my experience at that time. I come in, obviously different languages. I couldn't even find ingredients in life to cook my own food. There was only one radio station in Spanish and it didn't play all of the artists that I liked. But you know what? I made my way forward. It didn't affect me much.

Isha:

However, in 2006, my roommate comes directly from Puerto Rico and we meet through a common friend from grad school. And she joins the dance group in Washington, D.C. named Raíces de Boriken. That translates to “Boriken” is Puerto Rico, and that was Taíno language of the name of the island and “Raices” means roots. So “Puerto Rico Roots,” basically. That's the name of the group. And she joins the group and they start doing Bomba dance, and Bomba dance is this genre that was practiced by the enslaved people of Puerto Rico. So it has more than 400 years of history. And I went to see their first performance. She goes and grabbed me at the end of the performance. When they open for audience participation, she goes and grabbed me by the arm. And she said, “You want to come and dance?” And I'm like, “I don't know what I'm doing. Oh, my God, what is this?”

Isha:

So I ended up joining the group and that was in 2007. And by being part of that group, I learned that actually, even though I was raised in Puerto Rico—born and raised in Puerto Rico—I didn't learn too much about this genre. I have heard the name, I have seen it on the TV or maybe on the stage, but I had not experienced it or learned more about it because this music was practiced by our African ancestors. Obviously it was very marginalized and it didn't have a lot of exposure. So there, I just started a quest for

knowledge, a quest to answer questions. Why was I denied this genre? Why didn't I learn about it before?

Isha:

So once I moved away from Washington, D.C., I moved to Fredericksburg, further south from D.C. I couldn't go to rehearsals of the group as often. My daughter was born around that time as well. And I was like, “It was a lot for me to be driving at night.” I-95, it's jammed with traffic and travelers. And no, I can't do this. So the organization is born outside of the thought of, first of all, if I was born and raised in Puerto Rico and I come here and I learned about it outside of Puerto Rico, “How many other Puerto Ricans like me have the same experience and they could learn about the little bit that I know?” And even though I'm not an expert, I'm not claiming that I'm an expert, but I know a little bit more. So, that's one thing.

Isha:

The other thing is I need to share what I know. It doesn't belong to me. And I need to enlighten people with a little bit of knowledge that I have. Plus, also, I could educate the local community about this musical genre. So at the same time that I'm learning about it, I'm sharing what I know with the local community that are not necessarily Puerto Rican. So, that's how the whole thought process started. So I started first with the pilot workshop in my basement. I invited just a couple of my friends that were in the group of Raíces de Boriken. I told them, “Can you come over so you can play the drums while I teach the dance? And then can one of you then help me teach the drumming?” Because I'm not a percussionist, so we did that.

Isha:

And there was enough interest. My basement had about thirty people in that pilot workshop.

Kelly:

Wow. That's pretty good.

Isha:

Yes. And then I put like, “Okay, there's a sign here if you want to take this a little bit further than just a workshop.” And there was people that signed up. So from there, I saw there was enough interest and I did all the paperwork to then start organization. I started by myself teaching the little bit that I knew in percussion and dance and the songs. So I wasn't a singer, but I started singing. So it just started escalating from there to a very humble beginnings of a basement pilot to not even a year as an organization, to being invited to perform at the Millennium Stadium of the Kennedy Center.

Kelly:

Oh, wow.

Isha:

And that was so intimidating. I was like, “We're not ready.” We have to wait. We cannot accept that invitation yet because we are not ready, but we eventually did. And we went to the Millennium stage and we performed at the Kennedy Center. And from there it's just been a program that educates. So the main mission is to educate through classes, workshops. And we do performance as well, lectures and

the history of it, now that a lot more people are doing research on it and investigating about our roots and the drums and the genre and the songs. These songs are telling us a story, listen to it. Who are these people that these traditional songs that have been passed through oral history are? So now I'm in this organization that is basically sharing knowledge, history.

Isha:

So what I've been doing is basically taking what I've been doing in science, answering questions and communicating. Then I have applied all that into my nonprofit. And then at the same time, as I'm developing the nonprofit from the ground up as the director of this nonprofit, coordinating events, managing budgets, planning financial state, everything, applying for grants, anything related to a nonprofit. Then when I applied to this position, I was like, "Oh, look, you're talking about managing stuff." They're talking about coordinating. They're talking about ... oh, I do all this here, so I've been able to have a feedback loop between my science career and my non-profit career. So it's like a feedback loop and I keep learning and growing from both sides. So I'm going a little crazy because my schedule is very busy. And like I said, I'm a life learner and I'm just enjoying the journey as I'm learning in both sides of the world since seeing how they connect and how they don't. But I feel that there's a lot more that they connect than they don't.

Kelly:

Well, it certainly sounds fun. And it's amazing how far you went with this in such a short period of time. So for the dancing at the Kennedy Center, do you choreograph the routines, or do you do that with someone else? Do you work with another person that's part of the program?

Isha:

So no. So Bomba—the dance part—is usually traditionally improvised. There is a beautiful connection and this happens with Bomba and it happens with all other Afro-Caribbean genres, where the dancer is moving and improvising movement. And one of the drummers is called the lead drummer, a *primo o subidor* in Spanish. That drummer will be following your movements. So as you're moving, the drummer has to anticipate the movement and makes the music. So most of the time we don't choreograph stuff. However, for big performances that we have had in that theater, like the Kennedy Center, or some other large stages, because we have a one hour show, I incorporate a couple of choreographs. I'm not a choreographer, but I have experimented that phase. And we have done ... just to add our ability and to add different seasoning to the performance, then I put some choreographs in the shows.

Kelly:

It sounds so interesting. How do you spell the type of dance? Because I need to look this up on YouTube, because I have to watch it.

Isha:

Bomba is going to be B-O-M-B-A. Bomba.

Kelly:

Okay, awesome.

Isha:

Yeah. Google it, you'll find lots of videos that are very entertaining.

Kelly:

So getting back to your positions in your professional journey, what advice would you have for students, job seekers, our listeners right now who are interested in working for the National Weather Service or NOAA? What's the future job outlook? Is it positive? How should people prepare for positions if they're interested?

Isha:

From my experience, USA Jobs can be not that easy at first. I would say, when you put your resume in USA Jobs, just put everything. Everything. There's not a word limit in how many pages your resume needs to have there. So just put everything that you can. When you're applying to one position, make sure that you look for those keywords that are describing that position and make sure that your resume somehow reflects those keywords as well. I would also say that at least from when I was trying to get the National Weather Service job at that time, where there was a hiring freeze and it was very, very competitive.

Isha:

I am seeing in the last years that more and more recent graduates are getting hired into NOAA. So I think that there's hope. And I think that now is a good time to try to join the agency because it seems, from my perspective, there are more lot opportunities now for recent graduates versus when I was coming out of grad school, it was very hard to get in. So I definitely encourage them to apply. I encourage them to be open to any careers because I always say that careers will give you a step into your next career path. So it doesn't matter that your first job is not your dream job. It'll be a stepping stone into your next step. It'll give you experience that nobody can take away. And it'll keep molding you and will be getting you to where you want to be, if you keep being persistent and focused on where you want to be.

Isha:

In my case, it was like, “Oh yeah, I want to be a meteorologist for the National Weather Service. Oh, I didn't finish this in one office, but I did finish in another National Weather Service office.” So I just think that the persistency and being focused on where I wanted to end helped. So I definitely encourage younger people to be very persistent, be very patient. And don't blindfold themselves to opportunities that may knock on their door because those may be experiences that will definitely be shaping them and getting them ready for the next position.

Rex:

Thank you so much for sharing all of that advice. I think anyone would be hard pressed not to be motivated, listening to how you've described seeking out the next step and being willing to say yes to some things, to everything along the way—to be honest. We're so grateful for everything you've told us about your career. However, before you go, we do want to ask you an off-topic question, a fun question before we end our show. I'd just like to know what's your all time favorite book or one of your favorite books?

Isha:

And I have read this book several times, and it's *The Alchemist*. *El Alquimista.* I read it in Spanish though. And I read that book when I was maybe an undergrad student and I remember that they had several quotes in it that really got me thinking about ... I know there's one popular one that "if you want something, the universe conspires to get it to you," or something around those lines. And I think that that phrase really resonated with me because it's like, oh, this will be my career. I want to be a meteorologist. It was like that dream of becoming a meteorologist and becoming a scientist. And so I really like that book because of that. And I reread it a couple of years ago and it still resonates with me, and all of the phrases.

Isha:

And I'm one of the persons that think that when you do things for the right reasons, blessings will come your way. And that's how I feel that that has happened to me. And I'm so grateful, and I feel so thankful to life, to God too, because I feel that I have done things out of my personal happiness. And then more things keep coming and blessings keep falling my way. Most recently, and I just remember this as I'm talking to you and I have it here, this book—*Who Is a Scientist*?—is going to be released next month. This is one of those blessings. I was contacted by the author of this book because she wanted to feature fourteen scientists in different careers. And I got a copy of the book, and I am in the book.

Kelly:

Wow. That's so great.

Isha:

So when you open the book, it's a picture book for kids and it shows not only the professional part of being a scientist, of the different careers that they highlight here, but it also show the personal side for each person. So in my case, I appear in the book dancing and then preparing the weather balloon at the forecast office. So this is one of the many blessings that has happened on the way.

Kelly:

And what is the title of the book and the author?

Isha:

The title of the book is *Who Is a Scientist?* by Laura Gehl.

Kelly:

Great.

Rex:

Great. Thanks so much for joining us, Isha, and sharing your work experiences and all of your thoughts and perspectives with us.

Isha:

Thank you. Thank you so much.

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 performed 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@ametesoc.org if you have any feedback, or if you would like to become a future guest.