

**Howard University**

**CapComm Lab**

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**Podcast 3 Transcript - Segayle Thompson**

**Dr. Tyree:** [00:00:06] Welcome to the third installment of students, scientists and stakeholders. The NCAS-M podcast gives listeners the opportunity to learn more about the NOAA Center for Atmospheric Sciences and meteorology. And hear from the most important people who make the center work: our students, our scientists and our stakeholders. Our first series focused on students, the second on faculty, and this series spotlights our alum. We'll hear from some of our alum about how the NCAS-M or NCAS grant impacted them and where they are now. I'm your host, Dr. Tia C. M. Tyree. I'm a professor in the Cathy Hughes School of Communications at Howard University and a longtime member of the NCAS NCAS-M grant. My role within the grant is to communicate the various activities of the center, showcase what we do, how we do it and share our success stories. Today, we're excited to sit down with an alum of the center and hear her story. Since 2000, we have changed the scientific landscape by fostering a culture of fellowship, collaboration, and interdisciplinary studies through our multiple partnerships with minority serving institutions or MSI, and historically black colleges and universities or HBCUs, across the country and beyond all because of the support of NOAA. Our center has supported diverse alum of more than 150 individuals, preparing them for careers in STEM, natural resource management, and policy fields. Today, I am so pleased and excited to have Segayle Thompson with me! She is a physical scientist and phased array radar Acquisition Program Manager at NOAA, she was a part of the NCAS part of our grant from 2002 to 2009. Of course, has a PhD, she has a couple of universities under her belt, but we're gonna focus on the NCAS related one, which is Howard University, where she became The Segayle Thompson, doctor, no less, and with a PhD in atmospheric scientists, thank you so much for joining us today.

**Segayle:** [00:02:11] Thank you so much for having me.

**Dr. Tyree:** [00:02:13] Absolutely, we're gonna hop right into it. As a Howard University alum as well, j ust tell me a little bit about your experience at Howard University, and how you are attached to the grant.

**Segayle:** [00:02:28] Yes, well, I became a student in 2002, as you indicated, I learned about the program through my advisor at, in undergrad Dr. Greg Jenkins, Gregory Jenkins, he told me about the wonderful program and I was really excited about the program. And once I came to… once I graduated undergrad, with my bachelor's in meteorology, I applied and was accepted into the NCAS program. As a graduate student. I came in in 2002, and was very excited to get started. There were us, it was a small cohort of us, and we came in and worked together really well, to continue our education.

**Dr. Tyree:** [00:03:16] Tell me a little bit about your love for atmospheric sciences in meteorology. What made you choose that as a career field?

**Segayle:** [00:03:24] Well, it actually started in high school I, in high school, I was required to do a science fair project, and I was walking home from school, I live pretty close to my high school, Oxon Hill High School. And I looked up it was right before a storm was coming and I noticed that there were some beautiful clouds that were billowing and just they were changing as I was walking. So I figured that's how, that's what I was going to study for my science fair project. So that's how I got into Meteorology is actually through the science fair project.

**Dr. Tyree:** [00:04:03] That's amazing. I know as a professor or teacher, sometimes you wonder, you know, is this busy work? Or is this gonna be… right? Is this going to be an impactful thing for my students? And you I think you just proved something to the high school science teachers around the country that something like a science fair project can be meaningful!

**Segayle:** [00:04:25] Yes, I was very excited once I figured out what I wanted to do for the project. I actually reached out to a local meteorologist in our area and wrote him a letter, told him I was interested in learning more about atmospheric science and meteorology. He wrote me back and that's kind of where my love for meteorology and atmospheric science started.

**Dr. Tyree:** [00:04:50] Yes, and kudos for someone taking the time to respond to a high school student. I often get curious emails and I always, Segayle, always answer because you never know what you could say to really positively steer a student in the right direction. So whoever that person was, if you're listening, thank you for that. So let's talk a little bit about your time on the grant. Will you tell us like maybe who your mentor was or who you worked with and some of the projects you did?

**Segayle:** [00:05:24] Yes. So I worked with Dr. Everette Joseph. He was my major dissertation advisor, we did a number of different projects, including boundary layer studies. My actual dissertation was really around LIDAR observations and trying to see the impact of LIDAR observations on forecasting. And with that particular project, I worked closely with Balide Demos, who was a faculty member at Howard also, Dr. Gregory Jenkins, also participated in my dissertation committee, he left Penn State and came to Howard during my dissertation during my time at Howard University. So he was also very involved in that. I also participated in a number of summer projects that aided and kind of helped me form my dissertation topic, and helped me to learn a little bit more about science and atmospheric science in particular, and helping me understand observations and how they can be incorporated to assist in modeling work.

**Dr. Tyree:** [00:06:35] Amazing. Now, this is the moment where I've usually been asking our guests, okay, so how did you get NOAA? But I think for you, I asked a slightly different question, which is, how did you get to NASA First? Then, we'll ask how you got to NOAA.

**Segayle:** [00:06:52] Yeah, so right after I graduated, I applied for a visiting scientist position at NASA and I was accepted in that program. And during that program, I worked on Cloud microphysics. And with their their modeling group, it was a wonderful experience. From there, I actually took a position with the DOD, Department of Defense and worked there for a little while. And then after DOD, I ended up back at Howard as a adjunct faculty where I taught atmospheric science to graduate students and interacted also with undergrads during mainly during the summer teaching them math and some physics courses.

**Dr. Tyree:** [00:07:39] Well, first, I have to say that once you're a part of the Mecca, it just draws you back. So we'll get back to you coming back to the Mecca in a minute. But I think the point I want to work here, before we dig right into what you do at NOAA, is that a big part of the grant is officially preparing all of our supporting students, and being ready for the known workforce, but also making sure you're ready for work in any federal government agency or even the private sector. And you are a wonderful example of coming through our center, learning, graduating and putting that to good use in other federal government agencies. But let's go ahead and start talking about what you do now at NOAA, and how it attaches back to perhaps what you did as a doctoral student at Howard University.

**Segayle:** [00:08:36] Yeah, wonderful question. So I came into NOAA as a contractor initially, and during that time, I was working to help coordinate some of the research that was funded, congressionally funded research as a result of hurricanes in 2017, and 2018. So my role during that time was to make sure that we were coordinating well within NOAA across the various line offices to contribute to research to improve hurricane forecasting, floods and wildfire. So that was my initial role at NOAA. Right now what I'm doing, since being at NOAA, I have had the opportunity to try various roles, to learn learn additional skills and try various roles. Right now what I'm doing is a project management with the phased array radar acquisition program. And really, this program is helping to acquire a phased array radar test article to ensure that NOAA has all of what it needs to do adequate research and development for the next phase of National Weather Service's radar observations.

**Dr. Tyree:** [00:09:53] So most of us, and I'll put myself at the front of the line, do not know what that radar system is. Will you tell us what it is? And why is it so important that they have someone like you dedicated to making sure it's acquired?

**Segayle:** [00:10:12] Well, the national radar network is what is used to help forecast for severe weather including tornadoes or hurricanes. So you may note, you may hear on the news, that they look at radar, if you're looking at the forecast, they may say, Oh, we see a tornado signature in the radar. And so what that means is that, because of one of the national radars, they're able to detect signatures of tornado or thunderstorm, they can pull information from those observations and really help to forecast to help protect lives and property.

**Dr. Tyree:** [00:10:53] So extremely, extremely important. Is there anything else that you're working on, you know, that's exciting to you at work? Or you thought like maybe, you know, a year ago or 10 years ago that you'd never be able to do had you not been NOAA right now?

**Segayle:** [00:11:11] Yeah, I think this actually this program that I'm working on right now, the acquisition program for the phased array radar is something very new for me. My, during my studies, I looked at LIDAR observations, and improving forecasts using LIDAR observations. This, looking at radar observations or trying to acquire a whole radar system for the government is something very new to me. And so it's really interesting, because I get to learn another set of skills in terms of acquisition within the government, all of the rules and regulations associated with it, the challenges associated with that. And it also stretches me because it allows me the opportunity to learn a little bit more about radar systems, although they're very similar to LIDAR there are some key differences and so this is something that's really fascinating and interesting to me.

**Dr. Tyree:** [00:12:06] Yes, so we're not just grabbing a government credit card and going to Walmart and smacking it down and getting a radar system. We know that that's going to be months, if not years worth of work, I'm sure.

**Segayle:** [00:12:17] Absolutely.

**Dr. Tyree:** [00:12:18] Yeah, absolutely. So let's talk again about your Howard University experience. Because something drew you back to the classroom, something drew you back to your alma mater, and students, can you tell me just a little bit about, you know, why you went back as an adjunct professor? And what if anything, you're able to, to impart on students not only as an NCAS alum, but you know, someone who's worked in the federal government doing exactly what they want to graduate into?

**Segayle:** [00:12:52] Yeah, so I really am passionate about helping students through their process in graduate school, undergraduate and graduate school. That is really what drew me back to Howard. As an adjunct professor, I really enjoy being with students and helping them work through whether it’s, it is physics problems, or atmospheric science problems, or helping them really gauge what it is that they want to do. That, for me is something that's really exciting. It's something that keeps me motivated, especially seeing young people that may or may not look like me go into atmospheric science or meteorology. That's really what drew me back to Howard as an adjunct professor, I really enjoy working with students.

**Dr. Tyree:** [00:13:40] So we're ending this series by asking all of our guests, what advice would you give to a student who might be looking for funding, who might be looking into a career in meteorology or atmospheric sciences, what would you say to them about your experience in the NCAS-M grant and maybe even applying to be a part of it?

**Segayle:** [00:14:01] What I will say is definitely apply to be a part of the grant, the grant has been wonderful in terms of giving me field experience and being able to go out and do actual field study. That's something that I didn't touch on earlier. But that's something that was really instrumental in my career. It helped me understand how to do particular field campaigns, and helped me to understand instrumentation and how it works and how to set it up and collect observations, collect data, and then be able to take the raw data, filter it and pull useful information from that data. So it's kind of the end to end process, that program really helped and fostered that for me. Additionally, I think I would give the advice to students to really try to continue to network. Networking is very, very important. It helped me get my foot in the door in NOAA, and it also helped me to move around to different offices and different positions within NOAA. Networking is extremely important as you build out your career.

**Dr. Tyree:** [00:15:11] And what I will say to you is that there are so many people, including me, who find it a little uncomfortable to send that cold email to someone you may not know or, quote unquote, work a room of people that you're unfamiliar with. And so with that, I would say, you are not the first in this series to talk about the importance of networking, and I'm sure you won't be the last but for those listening, I would say make sure you just google how you know how to network, look for tips and tricks. You know, watch a YouTube video, read a book, because networking at the end of the day is about meeting people, making sure that you're tapping into opportunities, and sometimes you can't do that all by yourself, you really need to, you know work your mentorship relationships, work your you know, faculty relationships, and just work your overall group of supportive people who can help you get there. So thank you so much for that wonderful advice Segayle. It was wonderful for you to take a moment to speak with us today. It was truly a pleasure.

**Segayle:** [00:16:13] Thank you for having me. I would echo what you said about networking. It is vital and very important. And I really appreciate the opportunity to share my story. So thank you.

**Dr. Tyree:** [00:16:25] Yeah, absolutely. So for everyone listening. Thank you for joining us on another episode of students, scientists and stakeholders. To learn more about NCAS-M and the NCAS-M grant opportunities, visit our website at [www.ncas-m.org](http://www.ncas-m.org). Also, if you're a student and you want to be a part of the grant, be sure to check out the Apply page. You can also stay connected and keep up with all of our latest updates by following us on our socials – on Twitter and Instagram @NCASnews. Until next time, thank you for joining us.