

J. Marshall Shepard (1969-Present)



**Georgia Athletic Association
Professor, Department of Geography**

**2013 Past President
American Meteorological Society,
University of Georgia**

"If you do your job and excel and are competent, there will be a great number of opportunities for you. There are lots of opportunities out there, and few people to fill them." J. Marshall Shepard, 2006.

Early Life and Education

J. Marshall Shepard owes his career as a respected meteorologist at least in part to a bee sting. As a sixth-grader in Canton, Georgia, he wanted to do his science project on bugs; but when he discovered that he was allergic to bees, he changed his mind. Instead he did his project on the weather, and he has been studying the science of weather ever since.

Shepherd's academic and career path since that point reflect that interest. He attended Florida State University as an undergraduate, receiving his degree in meteorology in 1991. He continued at Florida State for his graduate education, receiving his Master of Science in physical meteorology in 1993, and his doctorate in physical meteorology in 1999. He got his first weather-related job in the Earth-Sun Division of the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center after earning his master's degree, where he worked as a junior research scientist. In that capacity, he supported the work of senior researchers, helping analyze satellite air crafts and computer model data to better understand several weather patterns. He was eventually promoted to a senior civil service position as a research meteorologist at NASA, and later to Deputy Mission Scientist for the Global Precipitation Measurement (GPM) mission, all while working on his doctorate. Shepherd was the first African American to receive his doctorate in meteorology from Florida State, one of the nation's oldest and most respected meteorology programs.

Shepherd's career at NASA was enormously successful, and he earned widespread acclaim as a young researcher there. His research using space-based instruments and models to investigate how cities impact climate and rainfall patterns earned him the Presidential Early Career Award in 2004. Shepherd notes receiving that honor, which recognizes the top young scientists and

engineers in the country, as the highlight of his career thus far. He was also honored by Black Enterprise magazine as one of its 2005 Hot List members, recognized by The Network Journal as one of its “40 Under Forty”, and published in numerous scientific journals. He has given presentations to audiences ranging from the Department of Defense to groups of schoolchildren, and has appeared on numerous television news programs, especially during hurricane season. Shepherd notes this last opportunity as being particularly rewarding, as it gives him a chance to communicate the importance of his work and his field to a broad audience.

Shepherd worked at NASA for over twelve years, and despite his success there, decided he needed to move on to a different position. “I wasn’t unhappy at NASA—I was doing quite well there. I just wanted to change environments,” he explains. He discovered that a faculty position was available at the University of Georgia; he applied for it, and in January 2006 joined the university. He is now the Georgia Athletic Association Full Professor of Geography and Director of the University’s Atmospheric Sciences Program. Shepherd was also the 2013 President of the American Meteorological Society and is hosts WxGeeks on The Weather Channel. He was honored in 2014 with the Captain Planet Foundation’s Protector of the Earth Award, and he routinely appears before Congress, White House Officials, and the media as an expert on weather and climate.

Shepherd himself had a number of mentors who inspired and shaped his career as a scientist and researcher. He names his earliest and most important mentor as his mother, an educator who raised him on her own. “She instilled in me the importance of education and hard work,” Shepherd says. In a more professional capacity, Dr. Warren Washington at the National Center for Atmospheric Research served as “a model for how I wanted to pattern my career,” Shepherd says. Washington, another African American scientist, has earned worldwide acclaim for his work in meteorology and climatology and now heads the National Science Board. Historical figures also served as mentors to Shepherd—growing up, he greatly admired Dr. George Washington Carver for “the work he did in agricultural sciences with very limited resources at that time.”

Shepherd has been involved with number of minority-mentoring and diversity-related activities throughout his career. During his years at NASA, the organization often brought young, largely minority students into its facilities, where Shepherd modeled how to work with computers and use scientific data. He feels that such mentoring programs targeting younger students are especially critical. “I found most people in our field get exposed in middle school,” he explains. “It’s important to expose them to this field as young as possible.” He is also active in attending “career days” at local schools to speak with students about the field.

Shepherd laments what he calls a “severe pipeline issue of minorities going into this field.” In addition to his mentoring activities, Shepherd is also involved in a number of diversity-related initiatives. He is a former member and chairman of the American Meteorological Society’s Board on Women and Minorities, which sought to understand why women and minorities are so underrepresented in the field. He also served on several NASA committees focusing on similar diversity issues. Shepherd also worked with the advisory committee for Howard University’s graduate program in atmospheric and earth science, the first of its kind at a historically black university. Such programs are “a key way to fulfill that pipeline issues,” Shepherd notes. At UGA, Shepherd was the co-investigator on a National Science Foundation-funded effort, Diversity Climate Network, effort to increase minority participation in climate science. He has also written two articles in Ebony.com addressing issues of STEM and climate within the black community.

Shepherd advises minorities interested in pursuing environmental careers, and especially careers in the atmospheric or earth sciences, to have confidence in themselves and their abilities. “You have to come into this field with confidence, and don’t be uncomfortable with the fact that many of your colleagues might not look like you,” he says. “If you do your job and are competent and excel, there will be a great number of opportunities for you. There are lots of opportunities, and few people to fill them.”

For More Information

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This interview was conducted in 2015.