

AISES PEOPLE

LEADERSHIP IN THE WORLD OF SCIENCE AND BEYOND

Ryan Emanuel describes his life as “joyously hectic.” He has leading roles as a husband and father, faculty member at North Carolina State University (NCSU), hydrology field researcher, and AISES member and volunteer.

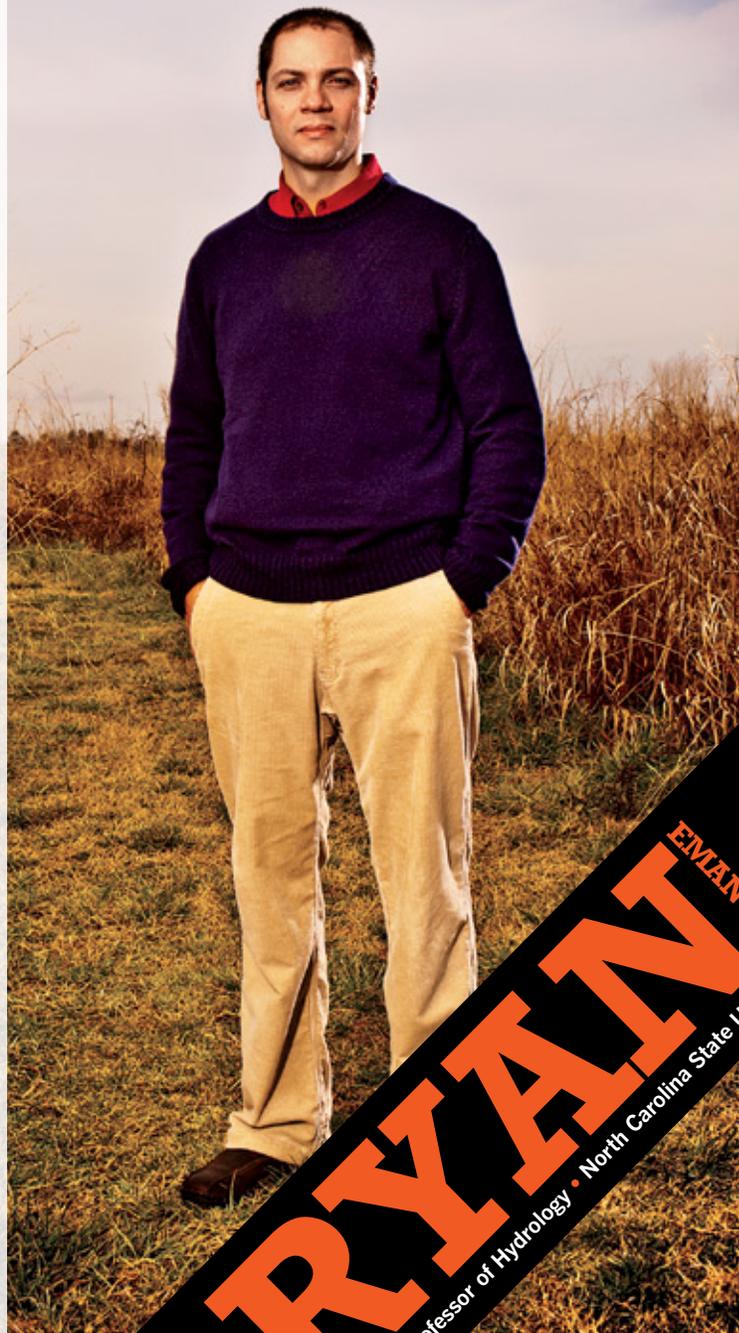
Long before NCSU became his base, Emanuel was anchored in North Carolina. He has vivid recollections of the forests and swamps near the Lumbee River* in Robeson County, where Emanuel, his brother, and cousins would go hiking and exploring — admiring the waterfalls along the way. “There were these sinuous blackwater swamps and cypress trees everywhere, and we would spend hours playing,” he remembers. “I felt right at home, and grew up feeling very much a part of my Lumbee tribe and heritage.”

Born and raised in Charlotte, Emanuel spent at least two weekends a month and stretches of many summers with his relatives and the wider Lumbee community. “In a way, I grew up with a foot in two worlds,” he observes: one in Robeson County and one in Charlotte, where sometimes he was the only American Indian in his classes. “My parents made sure I always had my tribe ‘down home’ and a network of support in the city too,” he says. “We had a strong Title VII education program in my school system, and all this helped me maintain my identity as both an individual American Indian and as part of a tribe.”

It turned out his parents’ plan was a good one, and by the spring of 1995, Emanuel was profiled in the local newspaper as an outstanding high school senior. Soon after the story came out, a recruiter from the regional water research office of the U.S. Geological Survey (USGS), offered Emanuel a summer internship. “I guess you could say that’s how I was proselytized into hydrology,” he recalls.

Emanuel’s perspective evolved as he learned to use equipment for measuring all things water, from rainfall to stream discharge. His work at the USGS, over three summers, taught him to see every part of a landscape as a component in a network connected by water.

Then in his first year as an undergraduate at Duke University, Emanuel attended the AISES National Conference. “It was a milestone for me,” he explains. “As a



RYAN EMANUEL
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 child, I was encouraged to get the best possible education, and for me, part of that included pursuing degrees at schools away from Native communities. AISES exposed me to people who had successfully traveled the same path while maintaining strong ties to their own Native communities and traditional values and perspective.” His feet were no longer in two worlds, but one great big world.

During his first two years at Duke, Emanuel majored in biology. Then after his sophomore year, Emanuel wandered into the Earth and Ocean Sciences Department building. He was captivated by huge relief maps. “My mind ran wild thinking about what those places look like in real life,” he says.

Inspired, Emanuel changed his major to geology — and there he was with water again, studying hydrology. After earning his BS, Emanuel married and moved to Virginia, where his wife, Cayce, was in graduate school. Two years later it was his turn, and he enrolled

at the University of Virginia in environmental sciences, finishing his PhD in 2007. Then Emanuel and his young family began their journey back to North Carolina. After teaching hydrology and environmental geology at Appalachian State University in Boone, N.C., Emanuel was appointed to his current role: assistant professor of hydrology at NCSU.

Emanuel is now focused on the future. “What I’ve learned, and what I tell people, is that if you are well read and well studied, pay attention and apply yourself, you can make the world a better place. In my mind, having that opportunity is one of the best things about being a scientist.”

These days, you will find the Emanuel family, including 8-year-old Laurel and 4-year-old Reed, paying regular visits to Robeson County. He wants his children to hear the stories of their heritage in “the rich and warm Lumbee English dialect.” They attend the annual Lumbee Homecoming as well as powwows near their home, and Laurel

takes cultural dance workshops led by members of AISES and NCSU’s Native American Student Program.

Emanuel also finds time to periodically help out with AISES at NCSU. One of his efforts was leading a day-long water science activity for a high school AISES chapter in Robeson County. “AISES can make a big difference for Native youth who puzzle over what they want to do with their lives, and how to bring their talents to bear on problems facing Native communities as well as society in general,” he says. “AISES members give faces and personalities to college majors and career titles that may otherwise sound abstract or unreachable.”

— S.C. Biemesderfer

**Most maps of North Carolina call it the “Lumber” River, but it is known as the Lumbee River by many who live in Robeson County. Lumbee tribal leaders are in the process of petitioning the government to change the name to reflect their population in the region.*



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