Native American Science and Engineering Program

By: Jessie Wrona



Shawna Greyeyes

The University of Arizona's (UA) Native American Science & Engineering Program (NASEP) is a year-long program that provides Native American high school students with the resources to pursue a college degree in a Science, Technology, Engineering, and Mathematics (STEM) field. NASEP students complete a week of residential programming at the UA, develop a water quality research project, and commit to a full year of follow-up through online communication. One-on-one support from UA affiliates, interactive workshops, and family events provide students with opportunities to better prepare for the college application process or careers in STEM.

Shawna Greyeyes (Diné) grew up in Flagstaff, but would spend weekends in Shonto, Arizona on the Navajo Nation. Her favorite

part of NASEP was staying on the UA campus, where she made friends that she still keeps in touch with today. During the week of residential programming at the UA, Shawna enjoyed learning about illegal dumping, water quality and rights, and how these issues relate to Native communities. Based on what she learned at NASEP, Shawna was able to return to her community of Shonto and test the quality of water her family uses to water their crops. Shawna's research, "Testing Water Quality Parameters to Ensure Healthy Product on the Navajo Nation," won several awards at the 2018 Southern Arizona Science and Engineering Fair (SARSEF) in Tucson, AZ; the SARSEF Grand Award: 3rd Place, the Air Force Future Leaders of STEM, Community Service Award and Outstanding Project in Geosciences. Upon graduating from Coconino High School, Shawna was accepted into the Research Experiences for Undergraduates (REU) Summer Program at Biosphere 2 in Tucson and researched water isotopes in the Santa Rita Mountains with her mentor Dr. Jennifer Macintosh. REU program director, Dr. Katerina Dontsova, encouraged Shawna to apply to the program after hearing Shawna present at a conference.

Using the skills and experiences she learned through her time with NASEP, Shawna is currently attending Coconino Community College (CCC). She is in the CCC to NAU (Northern Arizona University) program, which consists of two years at CCC and two years at NAU, which will ultimately lead to graduating with a bachelor's degree from NAU. At NAU, she plans to study environmental science where she can work in a hands-on field. Shawna hopes to use her education to give back to the Navajo Nation by helping to improve the environment. Environmental science is important to the Navajo Nation because it affects all aspects of life. Growing up, Shawna enjoyed spending time outside. She was taught to respect Mother Earth and feels that she was put on this earth to give back to the environment. Her love for the environment and science have inspired her future aspirations.

One piece of advice that Shawna has for Native students is to take opportunities. She says not to doubt yourself, whether it be a scary thing to do or have a less than great GPA; take the chance. For her, one opportunity opened so many doors.



For more information visit: https://nasep.arizona.edu/

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> Right: Shawna presenting her research at Native American College Day at UA

