

Keep Engaging Youth in Science

By: Jessie Wrona



Tia Folgheraiter

The University of Arizona's (UA) Keep Engaging Youth in Science (KEYS) Research Internship Program is a seven-week summer program that allows Arizona high school students to explore the fields of bioscience, engineering, environmental health, and biostatistics. During the program, students work alongside UA faculty members in research laboratories. The KEYS Internship Program has helped 428 students develop their interests and skills, including KEYS 2016 alumni Tia Folgheraiter (Diné).

Tia grew up in Tuba City, Arizona which is located on the Navajo Nation. Tia participated in KEYS as a junior in high school during the summer of 2016. The KEYS program exposed Tia to many new experiences which had an influential impact on her life.

While in the KEYS program, Tia researched Amyotrophic Lateral Sclerosis using a *Drosophila* model in Dr. Zarnescu's laboratory. Amyotrophic Lateral Sclerosis (ALS) is neurodegenerative disease that affects the brain and spinal cord, causing loss of local motor function, paralysis, and death within 3-5 years of diagnosis. During her research, Tia tested new molecules on *Drosophila*, a type of fly, to see if this drug could potentially help ALS patients. Tia stated that this research assignment was meaningful to her as her late aunt was diagnosed with ALS.

Participating in the KEYS Program and living in the dorms at the UA campus helped Tia become independent. Additionally, she gained research experience and confidence. At the end of the program, students were encouraged to step outside of their comfort zone and present a final poster about their projects. The final research showcase was Tia's favorite part of the program; she enjoyed demonstrating her work to her peers, family, and other professionals. The showcase was especially powerful for Tia because her aunt was able to attend and see the research she had conducted in honor of her.

Now, Tia is a sophomore at Dartmouth College in New Hampshire, where she is majoring in Native American Studies. She enjoys learning about contemporary Native American art and is interested in how Native Americans are represented in the media. Tia feels that learning about Native American history is important because it demonstrates the culture, traditions, and resiliency of Native American people. She believes that there is power in knowing history, as it is the best way to make a difference. While she is not in a lab environment anymore, Tia believes that the research skills and confidence she gained from the KEYS program still help her to this day. Tia also has an interest in environmental studies, where she hopes to explore Federal Indian Law and correct environmental issues that affect community members on her reservation. Today, she currently works as the Special Events Intern at the National Museum of the American Indian in Washington, D.C.

When asked what advice she would give Native students she states, "stepping outside of your comfort zone is scary at first but has good outcomes and benefits at the end." Tia also encourages students to find something they are passionate about because it leads to exciting and enjoyable opportunities.



For more information visit:
<https://keys.arizona.edu/>



Tia working in the lab during her KEYS experience