



Introducing David Davis, an Inaugural Scholar of the John Schade Memorial Fund

Science was always David Davis' thing. He attributes a lot of that to growing up on a cattle farm in Merced, CA—an environment he says fostered observation and reflection. He remembers space being his first passion, but when he got to college, it took a while to find the right fit. He started on a pre-med track at Merced Junior College, but didn't enjoy anatomy and physiology. He transferred to Georgia State University in Atlanta, GA, where he briefly majored in physics before finally hitting on geology.

Davis' Polaris Project experience was a long time in the making. As an undergraduate, he spent two summers conducting research in Woods Hole, MA—first with the Partnership Education Project, then as a summer student fellow at Woods Hole

Oceanographic Institution. Both times, he was introduced to work going on at Woodwell Climate Research Center, and found it interesting. When he learned about the Polaris Project, Davis was already committed to geology field work required for his undergraduate degree. He applied the next year, but then the pandemic hit. His opportunity to travel to Alaska with Polaris was delayed two years, by which time he was well into graduate school. And that made for a different kind of Polaris experience.

"I really wanted to make sure I asked the right question and designed a good project so I could use the data for a chapter of my thesis," Davis said. "But in the end, the social experience is what was most transformative."

Davis is pursuing a Ph.D. at Rutgers University. He is studying the influence of salt-tolerant microbes on rock formation, in hopes of finding new ways to search for evidence of life on Mars. Davis credits his experience with the Polaris Project for broadening his perspective on the role of climate science, and scientists, in society.

In addition to conducting field research on permafrost and Arctic lakes, Davis and his fellow Polaris students spent time with Alaska Native community members. Davis began to recognize parallels between the experiences of Native Americans and Black Americans. It brought home to him what it truly means for marginalized communities to be disproportionately impacted by climate change, and got him thinking about how to connect with his own family and community about the need for climate action.

Davis hopes to carve out the time to return to Alaska with the Polaris Project next summer.



Woodwell Climate Research Center



Introducing Alma Hernandez, an Inaugural Scholar of the John Schade Memorial Fund

Alma Hernandez was accepted into the Polaris Project just before the world closed down due to COVID-19. In the uncertainty following lockdowns and rising cases, it became clear that the 2020 cohort wouldn't be able to travel to the Arctic. Polaris, like everything that year, went virtual.

Though the field components of Polaris were postponed, Hernandez was still able to join Zoom meetings with other students and project mentors. She found the meetings just as meaningful, talking with others whose passions and backgrounds differed from her own, but converged around climate and the environment. Her interests lay in the unique Arctic soil that holds a wealth of information about our Earth's changing climate.

"The composition of Arctic soils is really unique. They are extremely affected by global warming and have long-term implications as they release more greenhouse gasses that contribute to climate change," says Hernandez.

Since the completion of the program, Hernandez graduated from University of Texas, El Paso, and has been accepted to a Master's program at the University of New Hampshire. She was also the recipient of the NSF's Graduate Research Fellowship award and Woodwell's own inaugural John Schade Memorial Fund award. Hernandez says she feels indebted to the mentorship she has received from Polaris.

"There were many instances when I felt overwhelmed by the thought of not having the qualifications to apply for graduate school or fellowships. I almost gave up, but Sue [Natali] and the Polaris Alumni were all so encouraging. My success in these applications wouldn't have been possible without their support," says Hernandez.

Members of the 2020 cohort completed their field experience during the summer of 2022. Hernandez was excited to finally see the Arctic soils she has been studying so diligently, having looked forward to her trip to Alaska for two years. She now plans to complete her master's degree and, perhaps after a well-earned break from school, earn a Ph.D.

"I want to be able to contribute at least a little portion of knowledge to serve people in the future. My dream was always to be a researcher, and I plan to keep pursuing this goal."