

I am Molly Devlin, a Ph.D. student studying subsurface microbiology at UNLV School of Life Sciences and the Desert Research Institute. My interest in life in the deep began the semester I took an environmental microbiology course and started caving. After learning about cave and subsurface microbiology– I was hooked! During my degree, I have had the opportunity to study how life survives in lava caves and deep boreholes, and the diversity of the microbes that reside there. My research for this fellowship will focus on detecting and identifying microbial endospores in the deep subsurface with a targeted DNA extraction technique. This will answer longstanding questions about the abundance and identity of endospores in the subsurface. My career goal is to be a PI of a lab, with research focused on life in extreme environments, such as the subsurface, to inform life detection on other planets. Beyond contributing to the search for life elsewhere I would like to do research that applies similar tools and approaches to improve life on Earth with projects such as groundwater remediation or environmental monitoring.