

Chloe FitzGerald Taylor, New Mexico State University, Las Cruces, New Mexico, USA, for her project: *Geochemically Correlating Ignimbrite Flare-Up Rhyolites in the Organ Mountains of New Mexico*

I am a second-year master's candidate in geology at New Mexico State University, advised by Dr. Jennifer Thines. I am originally from Hurricane, Utah, just outside Zion National Park, where I developed an early curiosity about rocks and Earth's natural landscapes. As a first-generation college student, I earned my B.S. in Geology from Southern Utah University in 2025. As an undergraduate, I worked with Dr. Jason Kaiser to investigate magma storage and staging by analyzing aluminum concentrations in amphibole from the Henry Mountains and Pine Valley Mountains of Utah.



My master's research focuses on understanding the origin and relationships between three Eocene tuff units in south-central New Mexico associated with the Ignimbrite Flare-Up. One of these units has distinct physical characteristics that suggest it may have originated from a separate caldera system. My research combines detailed stratigraphic observations with mineral and pumice chemistry, including major and trace element and radiogenic isotope analyses, to investigate the compositions and genetic relationships of these volcanic units and reconstruct their eruption history.

The Lipman Research Award from the Howard and Jean Lipman Foundation will provide critical support for my thesis research. Award funds will be used for electron microprobe analyses of feldspar and biotite at New Mexico Tech, as well as X-ray diffraction and inductively coupled plasma mass spectrometry analyses of pumices at Washington State University. These analyses will provide essential data for completing my research and improving our understanding of the volcanic history of southern New Mexico.