

Mikkel Louis, Oregon State University, Corvallis, Oregon, USA for their project:
Last Crystallization Ages and Magmatic Evolution of Zircons from the Two Largest Cayma Stage Units of Misti Volcano, Arequipa, Peru

As of Fall 2026, Mikkel is a fifth-year Ph.D. student at Oregon State University where she works with Dr. Frank Tepley III. Her primary research goal is to try and determine what processes were required to produce the late Pleistocene felsic eruptions of the Cayma stage at Misti volcano, Peru. The Cayma stage is a set of four rhyolitic to dacitic tephra-fall deposits sandwiched between the dominate andesite producing eruptions. Mikkel wants to elucidate on the evolution of Misti's transcrustal magmatic system and the associated processes occurring within the different storage zones. Development of a more robust eruptive history for Misti is needed to aid in improved hazard mitigation plans as Misti is still an active volcano.



Prior to being at OSU, Mikkel completed her MS in Geology (2022) at Western Washington University with Dr. Jackie Caplan-Auerbach. Her thesis detailed the progression of submarine eruptive sounds from West Mata volcano, NE Lau Basin using a moored hydrophone array. She received her BS in Geology (2018) with a minor in Mathematics from Central Washington University where she did undergraduate research with Dr. Wendy Bohrsen using the Magma Chamber Simulator to complete computational models of the Steens Basalt (SE Oregon).

Outside of research, Mikkel enjoys practicing taekwondo, where she has earned a blue belt. She also loves spending time with her partner and son, exploring new places, experiencing different cultures, and enjoying family adventures together.