Ailani Bonilla, University of Utah, Salt Lake City, USA for their project: *Evaluating Ni and Co Mobility During Hydration and Carbonation of Ultramafic Rocks*

I am a second year PhD student at the University of Utah. Under the mentorship of Dr. Juan Carlos de Obeso, I am studying how and where Ni and Co are mobilized during hydration and carbonation reactions of peridotites. To answer these questions, this project will be broken down into three main objectives: (1) Map Ni and Co distributions and mineral associations, and describe textural relationships by characterizing thin sections of different lithologies using petrographic and scanning electron microscopy (SEM) analyses; (2) Assess Ni abundance at the mineral scale utilizing electron microprobe analysis (EMPA) to determine which minerals host Ni and Co in each lithology; and (3) Establish Ni isotope fractionation by measuring δ^{60}Ni in samples and using mass balance equations to establish Ni budgets.

I was born and raised in Los Angeles, California. I got my bachelor's degree in Geological Sciences, with a minor in Marin Biology from the University of Southern California. During my undergraduate education, I had the opportunity to work at the Natural History Museum of Los Angeles County, where I worked in two departments: The Marine Biodiversity Center and the Mineral Sciences Lab. Since I was three years old, I knew I wanted to become a scientist. I explored geobiology and evolutionary sciences, but it was my time at the Mineral Sciences Lab where I discovered my interest in geochemistry.

The Lipman Research Award will allow me to present my findings at a conference and support some of the analyses that will be done on my samples.