Advice
Keep your options open when looking at all the research opportunities Chapman has to offer. Find the topic that you find most interesting and engaging because loving the research you do makes all the difference. Conducting research on something you are truly passionate about makes the results and findings more exciting. Getting involved in research has opened up more learning opportunities and experiences that I have been able to take advantage of. I was able to further our research project at the Stanford Synchrotron Radiation Lightsource, which opened my mind to something new that I am passionate about.

Current Research
Impacts of Weathering of Bioaccessibility on Arsenic Bearing Mine Wastes. Uses an X-ray fluorescence (XRF) spectrometer to measure arsenic concentrations directly and measure dissolved arsenic concentrations in mines. Performs quantitative analysis to find the raw photon counts of each element in the soil. Primarily focuses on the arsenic raw photon counts and compares the data to standardized values to create calibration curves for the different mine sites. Uses simulated gastric fluid (SGF) to extract gas fluids and assess arsenic bioaccessibility as a function of size and grinding/weathering. Compares the arsenic concentrations to the standardized values to help ensure the safety of the residents and inform residents of the health hazards surrounding high concentrations of arsenic.