

I am currently a master's student working in Dr. Brian Hedlund's lab at UNLV. I began work in his lab in the summer of 2018 as an undergraduate researcher, and have continued my work since then, recently picking up my master's project in the Fall 2021 semester. Upon completion of my master's degree, I intend to pursue a PhD in ecology and evolution. With that degree, I hope to lead research projects related to microbial ecology and become a mentor to graduate and undergraduate students.

My research project focuses on the sole isolate of a bacterial phylum, *Fervidibacter sacchari*. *F. sacchari* is a thermophilic microbe that is notable for possessing over one-hundred genes to produce glycoside hydrolases (GHs), which are enzymes capable of degrading polysaccharides like starch and cellulose. None of the GHs that *F. sacchari* possesses have been characterized to date. My project is to determine the function of these enzymes and make sense of their role in the broader ecological niche of *F. sacchari*.