

My name is Savannah. I am currently an undergraduate at the University of Nevada, Las Vegas and I am pursuing my bachelor's degree in biology and anthropology. After undergrad, I hope to continue my education in biology by pursuing a master's and a PhD. While I am open to whatever opportunities come my way, my current career goals involve staying in academia and continuing to do research.

My current project involves me characterizing an enzyme from a hyperthermophilic bacterium, *Fervidibacter sacchari* under the supervision of Dr. Brian Hedlund. This organism specializes in degrading sugars – the enzyme I am studying is one of over 100 sugar-degrading enzymes, called glycoside hydrolases, this organism encodes for in its genome. The overall goal of this project is to understand how the enzyme works and when it could be used by *F. sacchari* in its environment. My previous work with this enzyme involved characterizing its optimum temperature and pH. Now, I hope to gain a greater understanding of the mechanism by which it degrades sugars by testing its kinetic parameters, which bonds in its optimal substrate it cleaves, and testing where its active site is located.