

I am Erin Cassin, a Ph.D. student at the University of Nevada, Las Vegas in the School of Life Sciences. My dissertation research is focused on biofilms, which are communities of bacterial cells encased in a protective, self-produced matrix. I am particularly interested in the proteins of this extracellular biofilm matrix because they are relatively understudied. I use the model biofilm organism *Pseudomonas aeruginosa* to study the effects of matrix proteins on biofilm formation. My Summer 2021 research is investigating the intracellular mechanisms behind established nutrient-dependent effects of one of the *P. aeruginosa* matrix proteins, OprF. This is a critical step toward obtaining my Ph.D. My career aspiration is to work as a principal investigator in academia, studying the physiological processes of pathogenic microbes.