Goal 1.2

For my first artifact I chose my current project with Dr.Beach in biology 326 which is editing the yeast genome in an attempt to influence flocculation by overexpressing the gene SFL1. I was fairly excited about this project mainly because we were working with beer. The next artifact is my project for biology 250 with Dr.Shanle where we tested the difference in microbes of buffalo creek between flowing and stagnant water. I was also a bit nervous for this project because it was a big step up from the previous course because we had to go out without the teacher and collect our samples. It was nice though that we could independently do work without the teacher. As for the third artifact I chose my project from biology 324 with Dr.Shanle where we used CRISPR Cas9 to edit the genome of *Drosophila melanogaster* to express the gene wds (will die slowly) in which all offspring from the edited fruit fly died slowly. I was actually really excited for this lab as I had already had Dr.Shanle so I knew what to expect and I found the concept and application of genome editing extremely interesting. How these experiments helped me gain a better understanding and learning process of the major principles of cell and molecular biology is because in order to conduct these experiments we have to do research into how we can affect the cell on that level and how the change will affect the overall organisms.