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2022 SEA Symposium Abstract

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Ames IA

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Challenges and Successes Annotating StevieWelch

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StevieWelch is a phage that infects *Microbacterium foliorum*. It was isolated and purified in the fall of 2021 near Iowa State University. The goals of our bioinformatics project this spring were to successfully annotate StevieWelch and make an “Annotation Quick-Start Guide” written by students in the class. We decided to work in three groups of four people per group and divide the genome into three sections of approximately 40 genes per section. Each group then used a combination of DNA master and PECAAN to help guide the annotation process. We employed a shared excel file to do our preliminary annotations and make notes about each gene. Our next step was to trade our annotations with the other groups. We will ultimately have one full annotation per group and two audits per group to crosscheck our work. Then we will finalize our annotation of StevieWelch in PECAAN and build our “Annotation Quick-Start Guide.” The guide will serve as a resource to help other students get acclimated to the bioinformatics process and highlight where we had struggles and explain how to overcome them.