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2022 SEA Symposium Abstract

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Isolation and characterization of the B1 bacteriophages Etaye and LostandPhound

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The University of Detroit Mercy SEA PHAGES cohort isolated two lytic B1 bacteriophages from Mycobaterium smegmatis, Etaye and Lostandphound. Both Phages were isolated from soil samples in Michigan in the fall of 2021. Characterization of the Phages identified both as Siphoviridae phage with a lytic lifecycle. DNA was isolated from both phage and they were sequenced in preparation for genomic annotation. Etaye has a genome size of 68,950 bp and is most closely related to the annotated B1 Phage Weher20. LostandPhound has a genome size of 68,865 bp and is most closely related to the annotated B1 Phage Chorkpop. Currently, we are annotated both genomes in teams utilizing DNA Master, Phamerator, BLAST, Starterator, and Hhpred. During this semester we will finalize the annotation of these phage genomes for submission to Genbank and Phagesdb.