CONSIDER FOR TALK

2022 SEA Symposium Abstract

Harford Community College

Bel Air MD

Corresponding Faculty Member: Breonna Martin (brmartin@harford.edu)

Characterization of the Cluster EM Phage Hannabella

Jay Davis, Hanna Habiba, Christian Jednorski, Jessica LeBrasseur, Isabella Scopelliti, Ethan Walters, Jaclyn A Madden, Breonna J Martin

Working with the SEA-PHAGES program Hannah Habiba and Isabella Scopelliti discovered the bacteriophage, Hannabella. The novel phage was extracted from soil collected from Harford Community College in Bel Air, MD. Our research aimed to characterize the bacteriophage and then annotate its genome. We determined that Hannabella is a lytic phage identified as a *Podoviridae* with 53,643 bp and a GC content of 64.8%. It infects *Microbacterium foliorum* NRRL B-24224 and belongs to the EM cluster. Arete, one of only three published annotations in this cluster, is similar to Hannabella sharing 98% identity. As phages in the EM cluster are still uncommon, further exploration will contribute to the growing knowledge of their structure and gene function.