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2023 SEA Symposium Abstract

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Annotation of the Cluster AZ temperate Arthobacter phages, JStan and Community: a truncated orpham, a possible secret TA system, and an analysis of predicted membrane proteins

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Jstan and Community are members of a rapidly enlarging Cluster AZ that infect the host *Arthrobacter*. Both were discovered in 2022 on the campus of Southern Connecticut State University. They have an interesting capsid maturation protease and VIP2-like ADP-ribosyltransferase toxin that may be part of a cryptic TA system. Jstan has an orpham with an interesting domain, which we will plan to investigate using comparative genomics. We will also present an analysis of the predicted membrane proteins of these phages.