DO NOT CONSIDER FOR TALK

10th Annual SEA Symposium Abstract

Howard Hughes Medical Institute

Chevy Chase MD

Corresponding Faculty Member: Viknesh Sivanathan (sivanathanv@hhmi.org)

New Actinobacterial Hosts & A New DNA Isolation Protocol

Emily Davis\*, Priscilla Kobi, Aleem Mohamed\*, Viknesh Sivanathan

\* University of Maryland, Baltimore County, Baltimore MD

New Actinobacterial Hosts: The scientific goal of SEA-PHAGES is to explore the biodiversity of actinobacteriophages. As we expand from isolating and studying mycobacteriophages to actinobacteriophages, the careful “piloting” of new actinobacterial hosts can facilitate this process. Here, we present data from piloting several actinobacterial hosts, the most recent being *Gordonia rubripertincta* and *Microbacterium testaceum*. This data is presented in contrast to working with *Mycobacterium smegmatis*. Come see why making the switch to working with Actinobacteria other than *M. smegmatis* is easy, cheap, and scientifically rewarding.   
  
New DNA Isolation Protocol: When a titer greater than 109 pfu/ml cannot be obtained for a phage lysate, the lysate can be concentrated by precipitating phage. This is typically done using PEG. Here, we compare and contrast an adapted protocol for precipitating phage using zinc chloride to that using PEG. Phage precipitation with zinc chloride is faster and less cumbersome than when using PEG, but requires some tricks. Come to our poster to learn more.