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2023 SEA Symposium Abstract

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The Process of Discovering Mabel Gene Functions​

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Bacteriophages, viruses that infect bacteria, are currently being studied as a solution for antibiotic resistance. One route of studying bacteriophages is through genetics. In bacteriophages there are genes that code for super immunity (protection against different bacteriophage’s infections) and cytotoxicity (ability to kill bacteria). Those are the genes that we were looking for in our phage Mabel. We used PCR, transformations, and a series of assays to determine if our genes coded for either type of function. Genes 16, 58, and 85 did not code for superimmunity or cytotoxicity. As of now we do not currently know gene 16, 58, or 85’s functions and further experimentation is needed. In the future we are considering trying interaction assays to elucidate function.