Writing Assignment 4

2-25-21

 This study takes a more in depth look at niche breadth evolution in bacteriophages. This experiment observes molecular differentiations and changes in phenotypes of the T4 virus when exposed to *E.* *coli* C and *E.* *coli* K-12. The variety in hosts displayed changes in productivity by the phages and when looking at the genomes of infected hosts there was indication of selection. It was found that it takes multiple mutations to affect the structural genes of the phages.

Pham J., Ogbunugafor B., Nguyen A., Hartl D. Experimental evolution for niche breadth in bacteriophage T4 highlights the importance of structural genes. *Microbiologyopen* *Epub* DOI: 10.1002/mbo3.968. (2020)