

SEA-PHAGES Scavenger Hunt

Use the video which you watched and the www.phagesdb.org website to find answers to the following:

1. Find the name of a phage that begins with the same letter as your First Name.
 - A) What is the name of the phage? Abscesses
 - B) Where was it found? Abscesses may occur in any kind of tissue. It can be found in the lungs, brain, teeth, kidneys, and tonsils.
 - C) By whom? Cosso and his colleagues made the report.
2. What is the name of the lead scientist of the SEA-PHAGES program? Where does he work? Graham Hatfull is the lead scientist for the SEA-Phages program. London, England
3. Name two of the hosts used for bacteriophage isolation. Isabella was suffering from Mycobacterium abscessus
4. How many total phages were found in 2020? Bacteriophages, or phages, are ubiquitous bacterial and archaeal viruses with an estimated total global population of 10³¹.
5. How many phages were isolated by Nyack College? 18 sub clusters
6. What is name of a phage found at Nyack? Found by? Year? Is it sequenced? Shuman is a bacteriophage isolated in Nyack, New York, using Rhodococcus erythropolis NRRL B-1574 as a host. 3,000 completely sequenced actinobacteriophage genomes, almost 1,800 were isolated on a single host strain
7. What is the name of the young lady saved by phage therapy? Isabella
8. Find a phage that begins with the same letter as your Last Name that has been sequenced (different from the Q1).
 - A) What is the name of the phage? Betaflexiviridae
 - B) What is the genome size? 6.5-9kb in length
 - C) How many genes are in the phage? 108 species
 - D) What cluster does it belong to? Tymovirales
 - E) How many phages belong to that cluster? 13 genera
9. How many genes are in the virus that causes COVID-19? (Google search) Five key genes
10. What topics were the two most recent journal papers from the SEA-PHAGES program about? Complete Genome Sequences of Two Mycobacterium smegmatis Bacteriophages and Complete Genome Sequence of the Cluster F1 Mycobacteriophage KingMidas
11. Name another school in the SEA-PHAGES program that is geographically close to Nyack College. New York Institute of technology