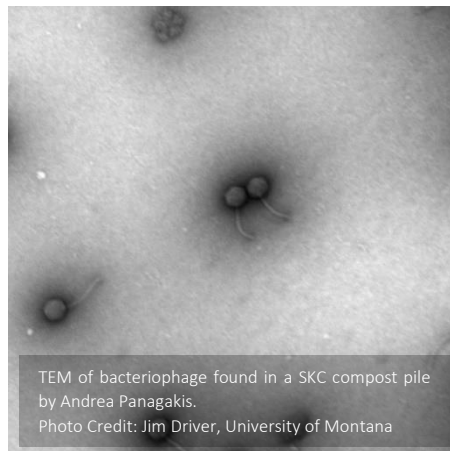


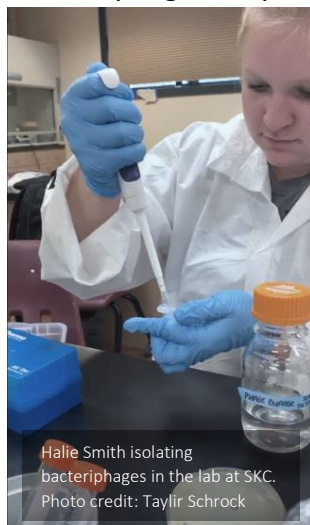
SKC STEM Academy Students Discover New Bacteria-Killing Viruses in their Backyards

By Taylir Schrock, SKC STEM Academy Research Coordinator

There are so many things in our environment that we cannot see- as Salish Kootenai College STEM Academy students are discovering. While in STEM Academy, high school students from around the valley conduct authentic, college-level science research in collaboration with the Howard Hughes Medical Institute's SEA-PHAGES program. Thanks to the National Institutes of Health SEPA program, this research has been made accessible for junior and senior high school students on the Flathead Indian Reservation.



What was thought to be “just a soil sample” turned out to be an oasis for a variety of bacteriophages- tiny viruses that prey on bacteria. “It’s incredible,” stated Halie Smith, a student at the SKC STEM Academy, “people think that bacteria are the most abundant organism on the planet. But what they don’t know is that for every single bacterium, there are at least ten bacteriophages.”



This year the students have discovered four new species of bacteriophages from a variety of locations including backyards, the SKC campus, and field sites. These bacteriophages- named Tonto, JimmyJ, Rocky and AbsoluteMadLad- were submitted to a national database, along with hundreds of other newly discovered bacteriophages around the world where they will contribute to biomedical research as well as further understanding of viruses and their evolution. The implications of these little viruses are limitless- in a world filled with antibiotic-resistant bacteria, bacteriophages may hold the key to future treatments of bacterial-caused illnesses and disease.

The world has more to offer than what is visible to the naked eye. Careers in STEM explore these unknown realms and increase knowledge in science, technology, engineering, math, and so much more. To learn more about the research performed by students at SKC STEM Academy, or to get involved, check out our website and follow us on Instagram to stay in the loop.



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