2026 PhageHunters at Allegany College of Maryland

CUMBERLAND, Md. — Students at Allegany College of Maryland are making contributions to scientific research through the college's PhageHunters program, where undergraduate students recently identified and analyzed previously unknown bacteriophages, or viruses that infect bacteria.

The student researchers were enrolled in the Spring semester of Biology 102, where they used specialized computer software to identify genes within the DNA of newly discovered bacteriophages, commonly referred to as "phages." The phages themselves were originally isolated by students in the PhageHunters laboratory section of Biology 101 during the Fall semester.

The following students are now official authors of a peer-reviewed, published, and annotated genome:

Bridget N	Brown
Levi E	Carrington
Kayijah T	George
Camden A	Mallory
Miriam A	McConnell
Patrick	McCoy
Hailey R	Stair
Delilah M	Stottlemyer
Ariaya N	Walker

The discovery is significant because each bacteriophage identified by ACM students is a completely unique organism that has never before been seen or genetically sequenced. Scientists estimate there are more than 10^{31} bacteriophages on Earth — making them the most abundant biological entities on the planet and more numerous than all other organisms combined.

Madebyisha was isolated and DNA extracted from soil collected from ACM's own wetlands in the Fall 2024 semester by two students, Isha Drammeh and Curtis Wells.

ACM students are helping researchers worldwide study viral evolution and explore new medical applications for phages. In recent years, bacteriophage research has contributed to emergency "compassionate use" treatments for patients suffering from antibiotic-resistant bacterial infections.

The PhageHunters program gives students the opportunity to earn professional scientific credentials early in their academic careers. Research findings generated by students can ultimately be included in peer-reviewed scientific publications.

The program is also designed to be highly accessible to students with no prior research experience.

“It's Easy!” says ACM Biology Professor Michele Barmoy, “No experience or prior knowledge is required. Step one is digging up some dirt. Students learn one small, manageable skill at a time alongside classmates where everyone is troubleshooting together and is part of a global network of thousands of other students.”

The PhageHunters program continues to provide ACM students with hands-on research opportunities while advancing scientific understanding of bacteriophages and their potential role in future medical treatments.