

RESEARCH OPPORTUNITY FOR FRESHMEN AND SOPHOMORES



Howard Hughes
Medical Institute

Katie Crump, Ph.D.
Julia Torruellas-Garcia, Ph.D.
Emily Schmitt-Lavin, Ph.D.

Department of Biological Sciences

COURSE-BASED UNDERGRADUATE RESEARCH EXPERIENCE (CURE)

- **Timeline:** One year long
- **Audience:** Students with little or no background in college-level biology (**freshmen & sophomores**)
- **Goal:** Students will participate in engaging, real-world research to discover viruses that infect bacteria, in hopes of identifying new therapies for diseases.
- **Specific Project:** Students in these courses will be part of the National Research group called SEA-PHAGES funded by the Howard Hughes Medical Institute (HHMI) – Read more about the program here <https://seaphages.org/>





The background of the slide is a microscopic view of various biological structures. It features several bacteriophages (viruses that infect bacteria) with their characteristic head-tail structure. There are also larger, more complex structures that appear to be bacterial cells or spores, some with a fuzzy, textured surface. The colors are muted, with shades of grey, blue, and pinkish-red.

BIOL 1000: Intro to Biology Research I

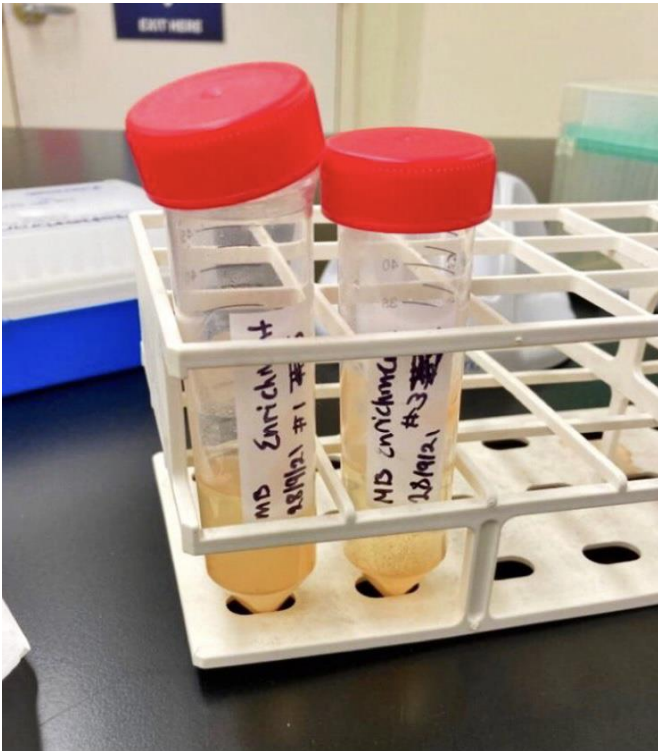
Participate in engaging, real-world research to discover viruses that infect bacteria, in hopes of identifying new therapies for diseases. NSU's BIOL 1000 and BIOL 1001: Introduction to Biology Research I/II, offer a unique two-semester laboratory course designed for freshman and sophomore students in any major.

(Pre-requisites include • MATH 1040 (or higher), COMP 1000)

Benefits

Academic

- 3 credit class (takes place exclusively in lab)
- Satisfies 2 ExEL credits



Research Experience

- Early exposure to innovative, scientific research
 - Tools and techniques for microbiology, molecular biology, genomics and bioinformatics
 - Opportunities to present research at local and national symposiums
 - Potential to be a co-author on publications
- Find and name their own bacteriophages

Our Experiences

- This semester we are looking for phage that infects the bacteria, *Gordonia Rubripertincta*.
 - Our goal was to find at least 2 phages that infect *G. Rubripertincta* (the odds were around 1/5). Four people on our team found phage!
- There was contamination!



Our contact info

Ashley Guillen-Tapia

- ag3092@mynsu.nova.edu

Sarah Ballarin

- sb3290@mynsu.nova.edu

Paula Farez

- mf1921@mynsu.nova.edu

Nashrah Pierre Louis

- np1112@mynsu.nova.edu

