

Dr. Emily Nowicki

Associate Professor

PhD in Microbiology and Molecular Genetics



Courses Taught:

BIOL 1065: Introduction to Molecules and Cells

BIOL 1065L: Introduction to Molecules and Cells
Laboratory

BIOL 2040: Microbiology for Science Majors

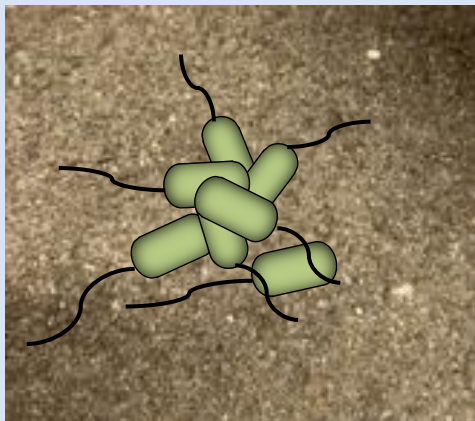
BIOL 2140: Microbiology for Science Majors Laboratory

BIOL 3050: Immunology

BIOL 4000: Research Communication (& Honors Thesis)

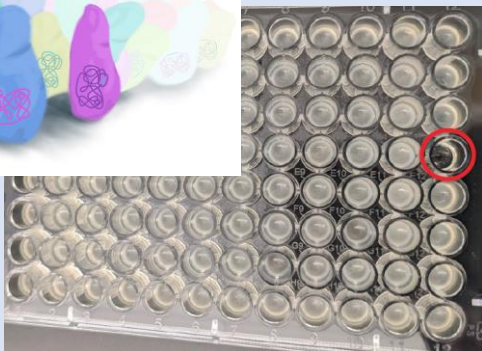
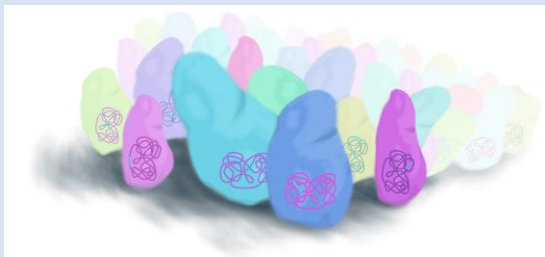
BIOL 4010: Independent Research (& Honors)

Dr. Nowicki's Research Program:



Question 1:

Which genes are required for *P. putida* fitness in soil?



Question 3:

Which genes are important for the environmental bacterium *P. putida*'s tolerance to antibiotics and antimicrobials?



Question 2:

How does the antibiotic susceptibility of *P. putida* in soil extract medium compare to its susceptibility when grown in standard laboratory medium?



Question 4:

How does the bacterial community composition change during mouse decomposition in soil? (with Dr. Sawyer)

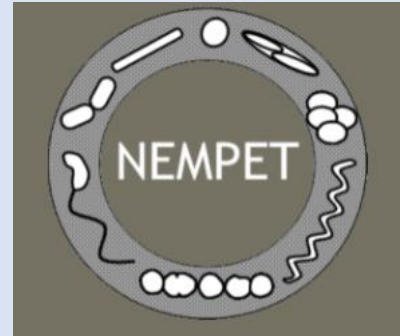
Our overarching research question:

Which genes and community members are important for bacterial survival in soil?

Research from Dr. Nowicki's lab has been presented at:



American Society for
Microbiology Conference for
Undergraduate Educators



Northeastern Microbiologists:
Physiology, Ecology & Taxonomy



New England Science Symposium, hosted by
Harvard Medical School's Office for DICP

Research from Dr. Nowicki's lab has been published in *Fine Focus*, 2022:



**Antibacterial Effects of Bitter Melon Extract in Combination With
Commonly Prescribed Antibiotics**

Olivia Mae Ambrose, Tiffany Thanh Mai Nguyen, and Emily M. Nowicki

Department of Natural Sciences and Mathematics, Curry College.

Milton, MA 02186