

Biopharmaceutical Discovery Faculty Search Candidate Seminar

219 Brown Laboratory

January 29, 10AM

Combatting Diseases Using Synthetic and Biological Machines



Kevin Yehl, Ph.D.
Massachusetts Institute of
Technology

Biological systems perform extraordinary tasks and serve as inspiration for building next generation therapies, biosensors, and materials. However, integrating biological function into synthetic materials is challenging. In this presentation, I will talk about my efforts at recapitulating functions of biological machines with the goal of treating diseases. In addition, I will discuss an alternative approach, which is a top-down strategy using synthetic biology to engineer biological systems directly. Specifically, I will talk about engineering therapeutic phage scaffolds to combat antibiotic resistance using protein engineering. Together, these examples illustrate the incredible potential and profound impact on society that bio-based systems can have.



UNIVERSITY OF DELAWARE
ARTS & SCIENCES

Department of Chemistry & Biochemistry