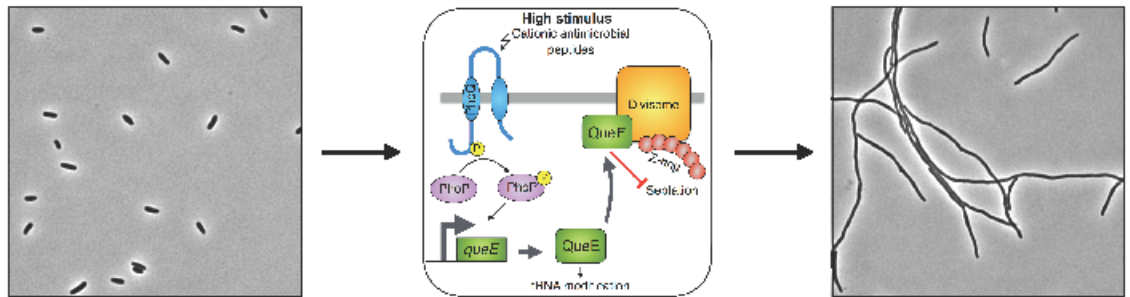




Antimicrobial Stress Response in Bacteria



One of the major public health concerns today is the dramatic rise of antimicrobial resistance. To counter this challenge, we must first understand the biochemical and regulatory pathways that underlie the resistance. My research is focused on signaling systems involved in antimicrobial peptide response. I discovered that treating *E. coli* with sublethal concentrations of antimicrobial peptides causes cells to filament, driven by a two-component system - PhoQ/PhoP. This block in cell division is the result of high stimulus through this two-component system and is mediated by a tRNA modification enzyme (QueE). The control of septation by PhoQ/PhoP may protect cells from antimicrobial peptide-induced stress.

Dr. Srujana Samhita Yadavalli

University of Pennsylvania, Philadelphia
(Candidate for Faculty Appointment)

Host: Dr. William Navarre

Date: Monday February 13, 2017

Time: 11:00 a.m.

Place: Red Seminar Room
Donnelly CCBR