Ackert Hall, Room 120
Wednesday, September 3, 2025
4:00 P.M.

Coffee and Cookies
Chalmers Hall, Room 168
3:45 P.M.

Biochemistry & Molecular Biophysics Seminar

High-throughput approaches for antimicrobial peptide discovery and optimization

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The continued development and spread of antibiotic resistance combined with a decade's long stagnation in new antibiotic discovery has left doctors with few options to treat multidrug resistant bacterial infections. This necessitates the development and application of new strategies of antibiotic discovery. Our lab leverages a high throughput antimicrobial peptide functional screen called surface localized antimicrobial display (SLAY) to identify novel peptide sequences with antibiotic potential. By combining this strategy with biochemical assays and machine learning, we have also helped better understand how to efficiently optimize known sequences to reduce their toxicity while maintaining potent bacterial killing.