



2019 Summer Undergraduate Research Program Scholars' Final Presentations
Friday, July 26, 8:30 a.m., Microbial Sciences Room 6201

- 8:30 – 8:45:** Exploring the role of Sphingosine-1-phosphate (S1P) in *Mus musculus* host response to *Toxoplasma gondii* infection.
Agastya Sharma. Faculty mentor: Laura Knoll.
- 8:45 – 9:00:** Relating Chemotype and Phenotype to differences in Aflatoxin Production within Populations of *Aspergillus flavus*.
Tatum Satterlee. Faculty mentor: Nancy Keller.
- 9:00 – 9:15:** Cyclic-di-AMP binding proteins employed as a detection method for mutants of gram-positive pathogens.
Alexander Johnson. Faculty mentor: Tu Anh Huynh.
- 9:15 – 9:30:** Computationally-derived compounds as potential candidates for therapeutic treatment of *Listeria monocytogenes* infection.
Hunter Ries. Faculty mentor: Rob Striker.
- 9:30 – 9:45:** Accumulation of the toxic intermediate UDP-Gal during galactose metabolism activates the SOS-response that leads to production of bacteriophages.
Xinyi Kong. Faculty mentor: J.P. van Pijkeren.
- 9:45 – 10:00** Analysis and characterization of *Lactobacillus reuteri*-mediated killing of coliforms in spoiled orange juice.
Jacob Zabel. Faculty mentor: J.P. van Pijkeren.
- 10:00 – 10:15:** Break
- 10:15 – 10:30:** Non-filamentous cells of enteric pathogens will better survive conditions of osmotic stress and will display higher levels of RpoS in all phases of growth.
Brigitte Flannery. Faculty mentor: Chuck Kaspar.
- 10:30 – 10:45:** Impact of compatible solutes by *Salmonella* in food and subsequent persistence and thermal tolerance of the cells.
Tanner Bilstad. Faculty mentor: Chuck Kaspar.
- 10:45 – 11:00:** Inhibition of *Clostridium perfringens* growth in uncured turkey product with and without clean-label antimicrobials and extended Phase 1 cooling.
McKenna Mahnke. Faculty mentor: Andy Milkowski, Kathy Glass and Jeff Sindelar.
- 11:00 – 11:15:** Determination of D- and Z- values for *Listeria monocytogenes* in cream cheese products at different temperatures.
Yinuo Jin. Faculty mentor: Kathy Glass.
- 11:15 – 11:30:** Analysis of *Aspergillus nidulans* CHIP-seq Data for the Regulation of Mycotoxin (aflatoxin) Production.
Ilhan Bok. Faculty mentor: Jae-Hyuk Yu