2023 Summer Undergraduate Research Program Scholars’ Final Presentations  
Friday, July 28, 9:00 a.m., Microbial Sciences Room 6201  
Free Zoom webinar: Register on-line:  
https://uwmadison.zoom.us/meeting/register/tJ0lceioqj4qGNQ0I0N78NgHnLZRN4w8zvjJ

9:00 – 9:15: Transformation of *Bacillus subtilis* with DNA obtained from natural donor cell lysis to understand inherent mechanisms of beta-lactam resistance in *Listeria*.  
Pablo De Avila. Faculty mentors: Tu Anh Huynh and Briana Burton.

9:15 – 9:30: Investigating whether *Entamoeba muris* antigenic variation offers better survival within the host gut microbiome.  
Jasmine Hughes. Faculty mentor: Laura Knoll.

9:30 – 9:45: Investigating Mechanisms of DMSO Reductase Regulation in *Salmonella enterica*.  
Analea Scott. Faculty mentor: Johanna Elfenbein.

9:45 – 10:00: Thermal Inactivation of Salmonella in Plant-Based Cheese.  
Calvin Slaughter. Faculty mentor: Kristin Schill.

10:00 – 10:15: Investigating current sanitation practices in multi-species processing facilities and their ability to prevent the spread of microorganisms.  
Lauren Sroda. Faculty mentor: Vanessa Leone.  
*Student stipend sponsored by Johnsonville.*

10:15 – 10:30: Break

10:30 – 10:45: Application of an antimicrobial from *Aspergillus oryzae* to inhibit foodborne pathogens and spoilage fungi in select dairy products.  
Erika Nielson. Faculty mentor: Jae-Hyuk Yu.

10:45 – 11:00: Investigating whether coffee extracts inhibit *Clostridium botulinum* growth in coffee.  
Jakob Gryniewski. Faculty mentor: Kristin Schill.

11:00 – 11:15: Evaluation of the antimicrobial activity of *C. Arabica* at different coffee bean roast levels and identification of inhibitory compounds against *Clostridium botulinum* in hot brew coffee extracts.  
Juliana Obayashi. Faculty mentor: Brad Bolling.

11:15 – 11:30: Investigating the potential of *Hanseniaspora* as a biocontrol for the apple pathogen *Penicillium expansum*.  
Martijn den Boone. Faculty mentor: Nancy Keller.

11:30 - 11:45: Investigating the behavior of *Staphylococcus aureus* and *Bacillus cereus* in manufactured dough products prior to baking.  
Daniluz Schueller. Faculty mentor: Charles Kaspar.