

Title: The effects of the estrus stages on voluntary wheel running and anxiety in female CD-1 mice

Students: Abigail Algeiers and Emily Landry

Mentor: Parrish Waters, University of Mary Washington

Title: Fighting antibiotic resistance with phage therapy.

Student: Jay Boudreau

Mentor: Sawati Agrawal, University of Mary Washington

Title: Investigating the changes in morphology and composition of the duodenum in response to sodium

Student: Lydia Carl

Mentor: Bisi Velayudhan, James Madison University

Title: Effects of exercise on brain-derived neurotrophic factor and cortisol on cognitive function.

Student: Cidney Collins

Mentor: Parrish Waters, University of Mary Washington

Title: The effect of social isolation on depression-like behavior in mice.

Student: Dylan Crann

Mentor: Parrish Waters, University of Mary Washington

Title: The characterization of two novel calcium signaling proteins in *Toxoplasma gondii*.

Students: Abigail Delapenha and Emily Sizemore

Mentor: Swati Agrawal, University of Mary Washington

Title: Characterizing the cutaneous microbiome of *Euycea lucifuga* as a potential defense against infection

Student: Madeline Key

Mentor: Matthew Becker, Liberty University

Title: Apoptosis induction in Jurkat T-lymphocytes by proton pump inhibitors (PPIs).

Student: Shreya Murali

Mentor: Randall Reif, University of Mary Washington

Title: Band-aids on broken hearts: preventing protease-mediated degradation of desmoplakin with small molecules

Student: Roujon Nowzari

Mentor: Nathan Wright, James Madison University

Title: An inquiry into the tube-test as a measure of dominance in mice.

Student: Timothy Philbeck

Mentor: Parrish Waters, University of Mary Washington

Title: Investigating antimicrobial properties of Atlantic white cedar.

Student: Alyssa Wilkinson

Mentor: Janet Steven, Christopher Newport University