ABT395/399

Research and Internship Presentation Schedule Agricultural & Medical Biotechnology Program Spring 2021

Tuesday, April 27 & Thursday, April 29, 2021

Tuesday, April 27

9:25 AM Aardra Kachroo Introductions

9:30 AM Aaron Harris Effects of mycotoxins Fumonosin and Doxynivalenol

Mentor: Dr. Robert Hirsch, Department of Plant Pathology, College of Agriculture, Food, & Environment

9:45 AM Kaitlin Cox Salivary flow and intensity of pain in patients with burning mouth disorder

Mentor: Dr. Craig Miller, Division of Oral Diagnosis, Oral Medicine and Maxillofacial Radiology, College of Dentistry

10:00 AM Angelica Garza Genetic components of male-female interactions of transgenic insects carrying a conditional dominant lethal gene

Mentor: Dr. Nicholas Teets, Department of Entomology, College of Agriculture, Food & Environment

10:15 AM - 10:45 AM Break

10:45 AM Sydney Rogers Measuring the over-wintering success in both latent and virulent strains of HzNV-2

Mentor: Dr. Bruce Webb, Department of Entomology, College of Agriculture, Food & Environment

11:00 AM Cessna Langford Megasphaera elsdenii supplementation effects on performance measures of crossbred Holstein X Angus calves

Mentor: Dr. Joao Costa, Department of Animal & Food Sciences, College of Agriculture, Food & Environment

11:15 AM Allison Snyder Azithromycin's impact on the inflammatory properties of neutrophils

Mentor: Dr. David Feola, Pharmacy Practice & Science Department, College of Pharmacy

11:30AM - 1:55 PM LUNCH

2:30 PM **Henry Smith** Identification and characterization of *Fusarium* spp. affecting Kentucky hemp *Mentor: Dr. Nicole Gauthier, Department of Plant Pathology, College of Agriculture, Food & Environment* 2:45 PM **Rebecca Martinez** Mitochondrial OXPHOS signaling regulates Wnt pathway in colon cancer

Mentor: Dr. Tianyan Gao, Department of Molecular & Cellular Biochemistry, College of Medicine

3:00 PM Elizabeth Yates Comparing Physical and Chemical Methods to Enhance Hemp Seed Germination

Mentor: Dr. Luke Moe, Department of Plant and Soil Sciences, College of Agriculture, Food & Environment

Thursday, April 29

10:40 AM Aardra Kachroo Introductions

10:45 AM Tristan Donovan Physiological limits in the use of channel opsins with Drosophila melanogaster: Body wall muscle and motor neurons

Mentor: Dr. Robin Cooper, Department of Biology, College of Arts & Sciences

11:00 AM Jaxon Boley Survival of bluegrass hardwood tree seedlings under varying conditions

Mentor: Dr. John Cox, Department of Forestry and Natural Resources, College of Agriculture, Food & Environment

11:15 AM Alexi Linneman The mechanisms of the protective immunity against Toxoplasma gondii

Mentor: Dr. Yasuhiro Suzuki, Department of Microbiology, Immunology, & Molecular Genetics, College of Medicine

11:30 AM Hayden Bouren Characterization of the Australian cane toad blood microbiome

Mentor: Dr. Carlos Rodriguez-Lopez, Department of Horticulture, College of Agriculture, Food & Environment

11:45 AM Kylie Bickler Dose Response of RNAi in Multiple Insect Species

Mentor: Dr. Lynne Rieske-Kinney, Department of Entomology, College of Agriculture, Food & Environment

12:00—12:55 PM Lunch

1:00 PM Rebecca Caldbeck Feeding a growing population: Leghemoglobin as a visual marker for developing cisgenic plants

Mentor: Dr. Pradeep Kachroo, Department of Plant Pathology, College of Agriculture, Food & Environment

1:15 PM Hanna Fischer Characterizing SATB2 circular RNAs in arsenic-mediated carcinogenesis

Mentor: Dr. Yvonne Fondufe-Mittendorf, Department of Molecular & Cellular Biochemistry, College of Medicine

1:30 PM James Campbell The potential of CASC3 as a LEAP client protein

Mentor: Dr. Bruce Downie, Department of Horticulture, College of Agriculture, Food & Environment

1:45 PM Alexandria Pete Investigating the role of myosin XI-G in synergid cells for Arabidopsis thaliana

Mentor: Dr. Tomokazu Kawashima, Department of Plant and Soil Sciences, College of Agriculture, Food & Environment

2:00 PM Taylor La Mantia Virtual authentic learning experiences in molecular biology using data sonification

Mentor: Dr. Luke Bradley, Department of Neuroscience, College of Medicine

2:15 PM Rachael Klueppel Small molecule inhibitors of bacterial type IV secretion systems

Mentor: Dr. Carrie Shaffer, Department of Veterinary Science, College of Agriculture, Food & Environment

2:30 PM Morgan Erwin Transmission of the Helicoverpa zea nudivirus by sterile males

Mentor: Dr. Bruce Webb, Department of Entomology, College of Agriculture, Food & Environment