

ABT 395/399 Spring 2022 Presentations
Tuesday, April 19, 2022
Cameron Williams Lecture Hall, Plant Science Building

9:10am Aadra Kachroo Welcome & Introductions

9:15-9:30 AM Ryan Dodds Leghemoglobin: A visual marker

Mentor: David Hildebrand, Ph.D., Department of Plant and Soil Sciences, College of Agriculture, Food and Environment

9:30-9:45 AM Benjamin Clements Epigenetic and phenotypic variability in second generation soybean epimutants

Mentor: Carlos Rodriguez-López, Ph.D., Department of Horticulture, College of Agriculture, Food and Environment

9:45-10:00 AM Ava Vilardo Insulin signaling effects on ApoA1 retention

Mentor: Gregory Graf, Ph.D., Department of Physiology, College of Medicine

10:00-10:15 AM Dianna Burgess Characterization of antibiotic allergy labeling in pediatric patients and impact on antibiotic prescribing practices at a single institution

Mentor: Elizabeth Autry, PharmD, Kentucky Children's Hospital & the Department of Pharmacy Practice and Science, College of Pharmacy

10:15-10:30 AM Nick Krommer Measuring cyanide precursors in grains used for Bourbon production

Mentor: Jarrad Gollihue, Ph.D., James Beam Institute for Kentucky Spirits, College of Agriculture, Food and Environment

10:30-10:45 AM Abigail Vetter Relationship between environmental conditions and strongylid parasite diversity

Mentor: Martin Nielsen, Ph.D., Department of Veterinary Science, College of Agriculture, Food and Environment

10:45 AM-2:10 PM Break

2:10 PM Begin afternoon session

2:15-2:30 PM Kelly Whitmore Using serological testing to detect antibodies against *Neospora hughesi* in blood samples of Brazilian *Equus caballus* affected by Equine Protozoal Myeloencephalitis (EPM)

Mentor: Daniel Howe, Ph.D., Department of Veterinary Science, College of Agriculture, Food and Environment

2:30-2:45 PM Francisco Beltran Investigating Colletotrichum's antibacterial potential

Mentors: Steven Van Lanen, Ph.D., Department of Pharmaceutical Sciences, College of Pharmacy & Lisa Vaillancourt, Ph.D., Department of Plant Pathology, College of Agriculture, Food and Environment

2:45-3:00 PM Logan Bechanan Regional variation of metabolites and phenols in *Quercus alba*

Mentor: Seth DeBolt, Ph.D., Department of Horticulture, College of Agriculture, Food and Environment

3:00-3:15 PM Robert Screen Thermal tolerance of *Drosophila melanogaster* carrying conditionally lethal transgenes for pest control

Mentor: Nick Teets, Ph.D., Department of Entomology, College of Agriculture, Food and Environment

ABT 395/399 Spring Presentations
Thursday, April 21, 2022
Cameron Williams Lecture Hall, Plant Science Building

9:10am Aadra Kachroo Welcome & Introductions

9:15-9:30 AM Rielee Phelps Development of a high throughput assay for RNA dependent RNA polymerase
Mentor: Steven Van Lanen, Ph.D., Department of Pharmaceutical Sciences, College of Pharmacy

9:30-9:45 AM Amy Joubert Cannabidiol, inflammation, and blood brain barrier leakage in animal models of *Status epilepticus*
Mentor: Bjoern Bauer, Ph.D., Department of Pharmaceutical Sciences, College of Pharmacy

9:45-10:00 AM Rikke Sveigaard Nielsen Spatially resolved central carbon labelling in a mouse model of AD
Mentor: Ramon Sun, Ph.D., Department of Neuroscience, College of Medicine

10:00-10:15 AM Taylor Ann Lucas Alternate approaches to TRPM8 and TRPA1 activation of the cardiovascular system
Mentor: Thad Wilson, Ph.D., Department of Physiology, College of Medicine

10:15-10:30 AM Anna-Blake Langley Seasonal variation in disinfection byproducts in Kentucky's drinking water
Mentor: Jason Unrine, Ph.D., Department of Plant and Soil Sciences, College of Agriculture, Food and Environment

10:30-10:45 AM Joseph Ison Isolation and identification of auxin producing bacteria
Mentor: Luke Moe, Ph.D., Department of Plant and Soil Sciences, College of Agriculture, Food and Environment

10:45-11:00 AM Alex Stewart Hybrid assembly of cane toad gut microbiomes from invasive and non-invasive Australian populations
Mentor: Carlos Rodríguez López, Ph.D., Department of Horticulture, College of Agriculture, Food and Environment

11:00 AM-1:55 PM Break

1:55 PM Begin afternoon session

2:00-2:15 PM Tyra Gilbert Identifying metabolic processes of L-proline synthesized from D-ornithine
Mentor: Luke Moe, Ph.D., Department of Plant and Soil Sciences, College of Agriculture, Food and Environment

2:15-2:30 PM Emmie Sellers Evaluating MMP9 as a potential mechanism for hyperhomocysteinemia induced cerebrovascular pathology
Mentor: Donna Wilcock, Ph.D., Department of Physiology, College of Medicine

2:30-2:45 PM Zach Hyatt The effects of cholesterol loading on macrophage protease production
Mentor: Scott Gordon, Ph.D., The Saha Cardiovascular Research Center, College of Medicine