

Agriculture Biotechnology Student Research Presentations

Thursday, April 29

Cameron Williams Lecture Hall - Plant Science Building

- 1:00pm** The Screening and Cloning of a P450 Tobacco Demethylase cDNA for its Insertion into *Nicotiana tabacum*
Ms. Madeline Bush
Research Mentors - Dr. Balazs Siminszky and Lily Gavilano, UK Department of Agronomy, in affiliation with NCSU
- 1:15** Effect of Microinjection of a cAMP Analog into the Dorsal Raphe Nucleus (DRN) of the Hamster Brain on Circadian Rhythms
Mr. Jordan Welte
Research Mentor – Dr. Marilyn Duncan, UK Department of Anatomy and Neurobiology
- 1:30** Functional Analysis of Deletion Mutants of Herpes Simplex Virus Type 1 Glycoprotein L
Ms. Krista Stoops
Research Mentor – Dr. Robert Geraghty, UK Department of Microbiology, Immunology, and Molecular Genetics
- 1:45** Role of Soluble Proteins in the Immunogenicity of *Sarcocystis neurona* in Horses
Ms. Molly Mesko
Research Mentor - Dr. Daniel Howe, UK Department of Veterinary Sciences
- 2:00** Localization of Receptors and Proteins in Cardiac Myocytes
Mr. Jeremy Luckett
Research Mentor - Dr. Robert Lasley, UK Department of Surgery
- 2:15** Casein Zymogram Use as an Indicator of Calpain Activity *In Vivo*
Mr. Matthew Bacon
Research Mentor – Dr. Rodney Guttman, UK Department of Physiology
- 2:30** Functional Characterization of SET domain protein ^εN –methyltransferases
Ms. Elizabeth Megan Flynn
Research Mentors - Dr. Robert L. Houtz and Dr. Lynnette Dirk, UK Department of Horticulture
- 2:45** Genetic Studies in Yeast Splicing
Ms. Colleen Stoeppel
Research Mentor - Dr. Brian C. Rymond, UK Department of Biology
- 3:00** Investigation of the Effects of Steroid Hormones on Axon Branching Frequencies
Mr. Nicholas Godby
Research Mentor – Dr. Philip Bonner, UK Department of Biology
- 3:15** Sphingolipid Metabolism in Yeast
Mr. Tommy McKechnie
Research Mentor - Dr. David Watt, UK College of Medicine

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- 1:00pm** Pre-Treatment of Intestinal Epithelial Cells with TNF Enhances LPS-Induced Up-Regulation of the Polymeric Immunoglobulin Receptor
Mr. Matthew Eaton
Research Mentor – Dr. Charlotte S. Kaetzel, UK Department of Microbiology, Immunology, and Molecular Genetics
- 1:15** Transient Expression Studies on the Functioning of Internal Ribosome Entry Site (IRES) in Plant Protoplasts
Ms. Jessica Menk-Pennington
Research mentor – Dr. Venkata S. Tavva, UK Department of Agronomy
- 1:30** Indirect ELISA Detection and Quantification of *Arabidopsis thaliana* DEF1 and DEF2 in Transgenic Tobacco
Ms. Rachael Brightwell
Research Mentors – Dr. Robert L. Houtz & Ms. Heather Conn, UK Department of Horticulture
- 1:45** Kinetic Characterization of a Human SET 7/9 Histone Mono-methyltransferase Mutant that Catalyzes Dimethyllysine Formation
Ms. Beth Milliner
Research Mentors – Dr. Robert L. Houtz and Dr. Lynnette Dirk, UK Department of Horticulture
- 2:00** Identification of Gene Expression in the Apex of Rat Ovarian Follicles
Mr. Johnny Morehouse
Research Mentor - Dr. T. E. Curry, UK College of Medicine, OB-GYN
- 2:15** Uptake of Aluminum Citrate and Aluminum Maltolate into Cells Modeling the Human Intestine
Mr. Charles Frederick Closson
Research Mentor – Dr. Robert Yokel, UK College of Pharmacy
- 2:30** Genetic Polymorphisms in GSTT1 and GSTM1 and Possible Links to Late-onset Alzheimer's Disease (LOAD)
Mr. Casey Brantley
Research Mentor – Dr. Steve Estus, UK Sanders-Brown Center on Aging
- 2:45** The Identification of Common and Unique Protein Binding Partners of Talin-1 and Talin-2
Mr. Joshua Johnson
Research Mentor - Dr. Richard McCann, UK College of Medicine, Department of Biochemistry
- 3:00** Isolation of Cold Temperature Germinating Mutants of *Arabidopsis thaliana*
Mr. Louai Salaita
Research Mentor - Dr. Bruce Downie, UK Department of Horticulture