

## TOPICAL SESSIONS SCAS

Saturday, March 25<sup>th</sup> 2017

### BIOLOGY: CELLULAR

8:30AM - 10:00AM

Science 2, Room 203

- 8:30 AM MARIJUANA  $\Delta^9$ -TETRAHYDROCANNABINOL INDUCES UNIQUE CHANGES IN THE MURINE GUT MICROBIOME THROUGH INDUCTION OF MYELOID-DERIVED SUPPRESSOR CELLS AND T HELPER 17 CELLS.  
William Becker and Mitzi Nagarkatti, University of South Carolina School of Medicine
- 8:45 AM DETERMINING THE SEQUENCES INVOLVED IN MPING TRANSPOSITION  
Jazmine I. Benjamin and C. Nathan Hancock, University of South Carolina Aiken
- 9:00 AM EXAMINING THE ENVIRONMENTAL IMPACT OF THE 1000-YEAR FLOOD ON THE ESTUARINE FISH FUNDULUS HETEROCLITUS  
Anna Outlaw, Peyton Lee, and Marlee Marsh, Columbia College
- 9:15 AM EXPRESSION OF VIF-RESISTANT APOBEC3G FROM A HIV-1-DEPENDENT LENTIVIRAL VECTOR  
Erin McLaughlin and William Jackson, University of South Carolina Aiken
- 9:30 AM AGING AND ROS-MEDIATED NEURODEGENERATION IN C. ELEGANS  
Chelsea Shoben and Daniel Williams, Coastal Carolina University
- 9:45 AM EXPRESSION OF HEART-SPECIFIC FLUORESCENT REPORTER PLASMIDS IN CIONA INTESTINALIS JUVENILES  
Brooke Davis and Heather Evans-Anderson, Winthrop University

### BIOLOGY: FIELD

8:30AM - 9:30AM

Science 2, Room 119

- 8:30 AM EFFECT OF BOT FLY (*CUTEREBRA FONTINELLA*) PARASITISM ON THE MOVEMENT AND MICROHABITAT SELECTION OF WHITE-FOOTED MICE (*PEROMYSCUS LEUCOPUS*)  
Allison Johnson and Jonathan Storm, University of South Carolina Upstate
- 8:45 AM CHANGES IN THE VASCULAR PLANT DIVERSITY OF CUTTYHUNK ISLAND, MASSACHUSETTS  
Richard Stalter, St. John's University
- 9:00 AM EVALUATION OF THE TOXIC EFFECTS OF GLYPHOSATE, 2,4-DICHLOROPHENOXYACETIC ACID, AND THEIR COMBINED FORMULAS ON EARTHWORMS (*EISENIA FETIDA*)  
Caitlin Lazurick, Nicole Lidzbarski, Rachel Owings, Jeff Brotherton, and Edna Steele, Converse College
- 9:15 AM ACCLIMATION TIME OF EASTERN PAINTED TURTLES (*CHRYSEMYS PICTA PICTA*) TO A NOVEL EXPERIMENTAL ENVIRONMENT  
Daijha Ashford, Kajol Bajaj, and David Ferris, University of South Carolina Upstate

**BIOLOGY: MOLECULAR**

**8:30AM - 11:45AM**

**Science 2, Room 204**

- 8:30 AM TESTING STRATEGIES TO PRODUCE TARGETED INSERTION OF MPING  
Mary Roby and C. Nathan Hancock, University of South Carolina Aiken
- 8:45 AM ROLE OF MIR-34A IN AMELIORATION OF SEB-INDUCED LUNG INJURY  
TREATED WITH TETRAHYDROCANNABINOL (THC)  
Amira Mohammed and Mitzi Nagarkatti, University of South Carolina School of  
Medicine
- 9:00 AM FUNCTIONAL CHARACTERIZATION OF AN ESSENTIAL CHLOROPLAST PROTEIN  
Christopher Pierpont and Michelle Barthelet, Coastal Carolina University
- 9:15 AM UNDERSTANDING THE FUNCTION OF KDM1A USING CRISPR/CAS-9 IN  
ZEBRAFISH  
Franses Loyola-Rosado and April Delaurier, University of South Carolina Aiken
- 9:30 AM GENERATING MEF2CA AND MEF2CB TRANSGENIC ZEBRAFISH LINES USING  
BAC-MEDIATED RECOMBINATION  
Kenneth Glenn and April Delaurier, University of South Carolina Aiken
- 9:45 AM CTSK:MCHERRY-ITOL2 - A TRANSGENIC CONSTRUCT TO STUDY THE ROLE OF  
OSTEOCLASTS DURING ZEBRAFISH DEVELOPMENT  
Brianna Snelling and April Delaurier, University of South Carolina Aiken
- 10:00 AM *BREAK*
- 10:15 AM TESTING A SIRNA TARGETING HIV-1 VIF  
Alyssa Smith and William Jackson, University of South Carolina
- 10:30 AM GENERATING A HIV-1-DEPENDENT CHIMERIC VECTOR TO DELIVER A PRO-  
APOPTOTIC GENE  
Natalie Arthur and William Jackson, University of South Carolina Aiken
- 10:45 AM DEVELOPMENT OF AN MPING-BASED ACTIVATION TAG FOR ZEBRAFISH  
MUTAGENESIS  
Tiana Chandler and Nathan Hancock, University of South Carolina Aiken
- 11:00 AM PROTEIN-PROTEIN INTERACTIONS ASSOCIATED WITH A PUTATIVE  
CHLOROPLAST SPLICEOSOME  
Alexandra Margets and Michelle M. Barthelet, Coastal Carolina University
- 11:15 AM ROLE OF AHR LIGANDS IN MICRORNA-MEDIATED TH17/T REGULATORY CELL  
DIFFERENTIATION IN DELAYED TYPE HYPERSENSITIVITY  
Osama Abdulla, Mitzi Nagarkatti, and Prakash Nagarkatti, University of South Carolina  
School of Medicine
- 11:30 AM SIRNA MEDIATED DOWNREGULATION OF HIV-TAT IN ANTI-TAT SIRNA  
PROTECTED LYMPHOCYTE POPULATIONS  
Christian Fay and William Jackson., University of South Carolina Aiken

**MEDICINE / PHARMACOLOGY / PUBLIC HEALTH**

**8:30AM - 11:45AM**

**Science 2, Room 206**

- 8:30 AM COMBINATION OF CANNABINOIDS,  $\Delta^9$ -TETRAHYDROCANNABINOL (THC) AND CANNABIDIOL (CBD), AMELIORATE EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY PROMOTING CELL CYCLE ARREST AND APOPTOSIS IN ACTIVATED T CELLS THROUGH MIRNA SIGNALING PATHWAYS  
Zinah Al-Ghezi, Mitzi Nagarkatti, and Prakash Nagarkatti, University of South Carolina School of Medicine
- 8:45 AM 2,3,7,8-TETRACHLORIDBENZO-P-DIOXIN (TCDD)-INDUCED MDSCS MEDIATE IMMUNOSUPPRESSIVE ACTIVITY THROUGH MICRORNA DYSREGULATION  
Wurood Neamah, Prakash Nagarkatti, and Mitzi Nagarkatti, University of South Carolina School of Medicine
- 9:00 AM MICRORNA-30 MODULATES METABOLIC INFLAMMATION BY REGULATING NOTCH SIGNALING IN ADIPOSE TISSUE MACROPHAGES  
Kathryn Miranda, Prakash Nagarkatti, and Mitzi Nagarkatti, University of South Carolina School of Medicine
- 9:15 AM ENDOCANNABINOID AMELIORATES ACUTE LUNG INJURY INDUCED BY STAPHYLOCOCCUS AUREUS ENTEROTOXIN B (SEB) THROUGH REGULATION OF MICRO-RNA  
Muthanna Sultan, Hasan Alghetaa, Mitzi Nagarkatti, and Prakash Nagarkatti, University of South Carolina School of Medicine
- 9:30 AM THE EFFECTS OF CAFFEINE AND A HIGH SUCROSE DIET ON ADIPOSE TISSUE ACCUMULATION, MEMORY, AND ANXIETY IN RATS  
London Vickers and Michelle Vieyra, University of South Carolina-Aiken
- 9:45 AM EFFECTS OF HEAD IMPACT ON NEUROCOGNITIVE FUNCTIONS AND BALANCE  
Shaquanda Ross-Simmons and Michelle Vieyra, University of South Carolina Aiken
- 10:00 AM *BREAK*
- 10:15 AM INVESTIGATION OF MORINGA OLEIFERA LEAF EXTRACT AND ITS CANCER SELECTIVE ANTIPROLIFERATIVE PROPERTIES  
Reagen Welch and Ashlee Tietje, Southern Wesleyan University
- 10:30 AM PROGESTERONE LEVELS IN BLOOD VERSUS SALIVA OF BEEF CATTLE  
Leah Moorefield and Staci Johnson, Southern Wesleyan University

**CHEMISTRY / BIOCHEMISTRY**

**8:30AM - 9:15AM**

**Science 2, Room 120**

- 8:30 AM A 1ST GENERATION AMPEROMETRIC GALACTOSE BIOSENSOR  
Amanda Burton and Gillian Horn and Will Case, Converse College
- 8:45 AM COMPARISON OF BACTERIOPHAGE FOUND AT RESIDENTIAL AND COMMERCIAL ENVIRONMENTS  
Alexis Setta and Elizabeth Christmas and Dr. Paul Richardson, Coastal Carolina

9:00 AM INVESTIGATING THE ACTION OF DIMETHYLFUMARATE IN NEURONS  
Tulsi Patel and Norma Frizzell, University of South Carolina School of Medicine

**MATH / COMPUTER SCIENCE / PHYSICS / ASTRONOMY**

**8:30AM - 9:45AM**

**Science 2, Room 122**

8:30 AM "INVESTIGATING NON-EQUILIBRIUM FLUCTUATIONS OF NANOCOLLOIDS  
UNDER THE INFLUENCE OF A MAGNETIC FIELD USING DIRECT IMAGING AND  
SHADOWGRAPHY METHODS."

Ashley Rice and Ana Oprisan and Sorinel Oprisan, College of Charleston

8:45 AM IMPROVED ALGORITHMS FOR THE THERMAL IMAGING OF EXTRASOLAR  
PLANETS WITH SPITZER/IRAC AND HUBBLE/NICMOS

David Melnick and Joseph Carson, College of Charleston

9:00 AM RECURSIVE RESETTING IN NEURAL NETWORKS

Dave Austin and Sorinel Oprisan, College of Charleston

9:15 AM LOW- DIMENSIONAL CHAOS IN ONTOGENETIC MICE INJECTED WITH  
COCAINE

Julia Imperatore and Sorinel Oprisan, College of Charleston