



# Research Day 2013

UNIVERSITY OF SOUTH CAROLINA AIKEN

*...a Forum  
of Discovery*

*April 12th, 2013*

*Student Activities Center, 12:00-5:00 pm*

Sponsored by USC Aiken Alumna, Ms. Celeste Suggs

**Friday, April 12, 2013  
12-5 pm**

**Oral Presentations – Humanities and Social Sciences**

SAC Mezzanine

1:00-3:10 pm

**Session 1**

**Prof. Jack Benjamin, Presiding**

**1:00 A Poet, a Potter, and a Slave: What David Drake Can Teach Us**

Brianna Arnone (English Major), Jennifer Gilmore (English Major)

Faculty Mentor: Dr. Tom Mack

**1:20 Hickman Hall: The Heart of Graniteville**

Jonathan Larry (Business Administration Major)

Faculty Mentor: Prof. Karen Edgington

**1:40 Plato's Receptacle Examined by Ancient, Modern, and Feminist Philosophers**

Michelle Pakla (Fine Arts Major)

Faculty Mentor: Dr. David Dillard-Wright

Break – 10 minutes

**Session 2**

**Prof. Jack Benjamin, Presiding**

**2:10 "Snow White" and "Beauty and the Beast" - A Feminist Look at the Evolution of Fairy Tales**

Kayla Pruitte (Communications Major)

Faculty Mentor: Dr. Jill Hampton

**2:30 James Matthews Legare: Poet and Inventor**

Taylor Rodgers (English Major)

Faculty Mentor: Dr. Tom Mack

**2:50 Creating Intertextuality with Visual Rhetoric: Adapting a Novel into a Graphic Novel**

Delicia Williams (English Major)

Faculty Mentor: Dr. Matthew Miller

## **Oral Presentations – Sciences**

SAC Mezzanine

12:00-3:30 pm

### **Session 1**

**Dr. Edward Callen, Presiding**

**12:00 Pacing Strategy: The Effect of Teleoanticipation on Performance**

Andrew Littlefield (Exercise Science Major)

Faculty Mentor: Prof. Patrick Gelinas

**12:20 *Ping* and *Pong* ORF 1 Domain Swapping to Determine the Role of DNA Binding and Nuclear Localization in *mPing* Transposition**

Giselle Outten (Biology Major)

Faculty Mentor: Dr. Nathan Hancock

**12:40 Design and Synthesis of a 1,4,7-Triazacyclononane Ligand for Use in Models of Type 2-Cu-Nitrite Reductase**

Sarah Weaver (Chemistry Major), Shelby Fuller

Faculty Mentor: Dr. Gerard T. Rowe

Break – 10 minutes

### **Session 2**

**Dr. Edward Callen, Presiding**

**1:10 Determining Transposition Promoting Regions Based on Recombinant *mPing* and *mPong* Constructs**

Kristian Pickrel (Biology Major)

Faculty Mentor: Dr. Nathan Hancock

**1:30 Sweet Tooth or Artificial Sweetener Craving: Replacing Sugar with Artificial Sweeteners**

Margaret McCoy (Nursing Major)

Faculty Mentor: Prof. Iris Walliser

**1:50 The Effects of Various Promoters on *mPing* Transposition in Arabidopsis**

Keifer Richardson (Biology Major)

Faculty Mentor: Dr. Nathan Hancock

Break – 10 minutes

### **Session 3**

**Dr. William H. Jackson, Presiding**

**2:20 The Presence of Glyphosate-Resistance Weed Seeds in Commercial Potting Soils**

Katherine I. Layne (Biology Major)

Faculty Mentor: Dr. Andrew Dyer

**2:40 How Well Do Science Freshmen Understand Source Citation?**

Brittany Cheeks (Biology Major)

Faculty Mentor: Dr. Michelle Vieyra

**3:00 Evidence of Genetic Variation and Adaptive Phenotypic Plasticity in Two California Annual Invasive Grasses**

Shana Woodward (Biology Major)

Faculty Mentor: Dr. Andrew Dyer

### **Poster Session**

SAC Lobby

12:00-3:30 pm

(All posters will be on display from 12:00-3:30 pm. Authors in Session 1 should be present from 12:30-2:00 pm. Authors in Session 2 should be present from 2:00-3:30 pm)

### **Session 1**

12:30-2:00 pm

**(RD-1) Visually Evoked Potential Test Parameters and Clinical Implications**

Austin Kaiser (Psychology Major), Alan Saul

Faculty Mentor: Dr. Dawn A. Morales

**(RD-2) *Phaseolus acutifolius* Transformation**

Courtney Burckhalter (Biology Major)

Faculty Mentor: Dr. Nathan Hancock

**(RD-3) Investigations into Analogs of EDAB as Raman Spectroscopic Probes of Solvent/Solute Interactions**

Shanna Henson (Chemistry Major)

Faculty Mentor: Dr. Monty Fetterolf

**(RD-4) Helping Recently Deployed Service Members with Symptoms of Traumatic Brain Injury and Post-Traumatic Stress Get Better with Writing.**

Angel Legare (Psychology Major), Maliah Smith, Joel Raintree, Scott Mooney

Faculty Mentor: Dr. Dawn A. Morales

- (RD-5) **Soda and Candy for Breakfast – A Nutritional Assessment of Popular Children’s Breakfast Foods**  
Brittney Austin (Exercise and Sports Science Major)  
Faculty Mentor: Dr. Brian Parr
- (RD-6) **Dose Dependent Effects of Caffeine on Cognitive Performance and Neuronal Activation**  
Stephan Albrecht (Biology and Psychology Major), Helen Morris  
Faculty Mentor: Dr. Michelle Vieyra
- (RD-7) **The Temperature Dependence of the Solvatochromism of Methylene Violet in Alcoholic Solvents**  
Ashleigh Kimberlin (Chemistry Major)  
Faculty Mentor: Dr. Monty Fetterolf and Dr. Gerard Rowe
- (RD-8) **An Examination of Gender and Dispositional Hurt Differences in Utilization of Coping Strategies**  
Sarah Norris (Psychology Major)  
Faculty Mentor: Dr. Laura N. May
- (RD-9) **The Relationship of Heart Rate and Blood Pressure Between Children and Adults**  
Craig D. Ross (Exercise and Sports Science Major)  
Faculty Mentor: Dr. Christopher M. DeWitt
- (RD-10) **The Relationship Between Child Sexual Abuse and Self-Esteem in College Students**  
Karlota Duffy (Nursing Major)  
Faculty Mentor: Dr. Linda Herald-Gacad
- (RD-11) **Targeted Insertion of the *mPing* Transposable Element**  
Ashley Strother (Biology Major), David Gilbert  
Faculty Mentor: Dr. Nathan Hancock
- (RD-12) **Does the Reality Television Show “16 and Pregnant” Portray the Reality of Being a Teen Mom?**  
Shelby N. Smith (Psychology Major)  
Faculty Mentor: Dr. Keri Weed
- (RD-13) **Synthesis of a Diels-Alder Cycloadduct; 9-aza-1,4-oxidobicyclo[4.4.0]dec-2-ene Using Trityl Chloride as a Steric Buttress.**  
Tripp Warrick (Chemistry Major), Michael Lancaster, Amir Abdulaziz, Stacey Kingsberry  
Faculty Mentor: Dr. Nandeo Choony

## **Session 2**

2:00-3:30 pm

- (RD-14)     **Response Effort and Prevention in Activity - Based Anorexia in Rats**  
Nicole Streeb (Psychology/Business Management Major)  
Faculty Mentor: Dr. Edward Callen
- (RD-15)     **Reinstated Fear Increases Over Time**  
Nicole Streeb (Psychology/Business Management Major)  
Faculty Mentor: Dr. Edward Callen
- (RD-16)     **The Effect of Selectively Expressed Pro-Apoptotic tBid on 293T cells Expressing HIV-1 Tat**  
Claudia Fulmer (Biology Major)  
Faculty Mentor: Dr. William H. Jackson
- (RD-17)     **Developing a DNA-Transposon Based Gene Delivery System**  
DeAnndra Pickens (Biology Major)  
Faculty Mentor: Dr. William H. Jackson
- (RD-18)     **Comparison of Nutritional Quality in Fast Food and Casual Dining Restaurants**  
Kyle Sprow (Exercise and Sports Science Major)  
Faculty Mentor: Dr. Brian Parr
- (RD-19)     **Exploring Properties of in vitro Point Mutations in the *Drosophila* Protease Gastrulation Defective**  
Rachel Roberts (Biology Major), Ellen LeMosy  
Faculty Mentor: Dr. William H. Jackson
- (RD-20)     **Analysis of the Ability of Tat-Dependent Bax to Induce Apoptosis**  
Priscilla Simon (Biology Major)  
Faculty Mentor: Dr. William H. Jackson
- (RD-21)     **A Colorful Story: Pigmented Sclerites from Gorgonians**  
Chris Perez (Chemistry Major)  
Faculty Mentor: Dr. Monty Fetterolf, Dr. Chad Leverette, Dr. Garriet Smith
- (RD-22)     **Quantitative Analysis of Expression from a Gene Cassette Controlled by the HIV-1 Promoter/Enhancer**  
Emily Bush (Biology Major)  
Faculty Mentor: Dr. William H. Jackson
- (RD-23)     **Bioaccumulation of Mercury in Crayfish (*Procambarus acutus*) Inhabiting a Site Polluted by a Coal-Burning Power Plant**  
Casey Garvin (Biology Major)  
Faculty Mentor: Prof. Brad Reinhart

- (RD-24) **Measuring the Comparative Effectiveness of Anti-HIV 1 Tat siRNAs**  
Alexander S. Jureka (Biology Major)  
Faculty Mentor: Dr. William H. Jackson
- (RD-25) **The Effect of Patient Education and Use of Therapeutic Support Services in Decreasing Incidence and Severity of Foot Complications Associated with Diabetes Mellitus**  
Olivia Moyer (Nursing Major), Tina Jordan  
Faculty Mentor: Dr. Linda Herald-Gacad
- (RD-26) **Anti-HIV Vif Activity Using Hammerhead Ribozymes Expressed from an RNA Polymerase III Promoter**  
Madison Sweet (Biology Major)  
Faculty Mentor: Dr. William H. Jackson
- (RD-27) **Developing a DNA Transposon-Based Gene Delivery System**  
Emily M. Webb (Biology Major)  
Faculty Mentor: Dr. William H. Jackson

**Awards Ceremony: SAC Mezzanine, 4pm**

## **With Gratitude**

We wish to thank USC Aiken alumna, Ms. Celeste Suggs, for her generous contribution and continuous support of Research Day.

We also wish to thank the following for their assistance.

Prof. Jack Benjamin  
Dr. Tara Beziat  
Dr. Edward Callen  
Dr. Rebecca Carr  
Dr. Nandeo Choony  
Dr. David Dillard-Wright  
Dr. Doug Higbee  
Dr. Bill Jackson  
Dr. Chad Leverette  
Dr. Tom Mack  
Dr. Philip Mason  
Ms. Carol McKay  
Ms. Dale McCarthy  
Dr. Brian Parr  
Dr. Blanche Premo-Hopkins  
Dr. Jeff Priest  
Dr. Jane Stafford  
Ms. Rachel Strickhouser  
Prof. Brad Reinhart  
Dr. Gerard Rowe



**“I do believe that exposure educates us --- exposure to information, to experiences, to different types of people or ways of living and to Research Day presentations – all these exposures give us different views. In sorting and comprehending these views, we are learning.”**

**- *USC Aiken alumna, Ms. Celeste Suggs***