



# SCHOLAR SHOWCASE

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## UNIVERSITY OF SOUTH CAROLINA AIKEN

**12 April 2024**

### **Schedule of Events**

#### **Poster Sessions – Student Activity Center Gym**

**Poster Hanging - 9:00 am - 10:00 am**

**Session 1 (odd numbers) - 10:00 am - 11:30 am**

**Poster Hanging - 1:00 pm - 2:00 pm**

**Session 2 (even numbers) – 2:00 pm – 3:30 pm**

#### **Humanities Oral Sessions – SAC Mezzanine**

**Session 1 – 10:00 am**

**Session 2 – 2:00 pm**

#### **Honors Symposium Session – SAC Mezzanine**

**Session 1 - 3:15 pm**

## **Humanities Oral Sessions – SAC Mezzanine**

### **Session 1 – 10:00 am – 11:15 am**

**10:00-10:15 Exploring Race and Gender Via Film: *Pushout* as an Example**  
Robert John Kamphaus, Jr. mentored by Dr. Melencia Johnson

**10:15-10:30 Girl Hood: The Tale of Two Girls' Delinquency**  
Jon'tasia Ford mentored by Dr. Melencia Johnson

**10:30-10:45 Exploring Positive and Negative Parental Attachment and Its Effect on Rehabilitation Through Girlhood**  
Ryan Goldman mentored by Dr. Melencia Johnson

**10:45-11:00 Exploring Acceptance/Belonging and Authority/Power: An Analysis of *Honeytrap* (2014)**  
Kirsten Davis mentored by Dr. Melencia Johnson

**11:00-11:15 Exploring Gang Affiliation and Peer Influence: An Analysis of *Honeytrap***  
Peyton Reece Theuerl mentored by Dr. Melencia Johnson

### **Session 2 – 2:00 pm – 3:00 pm**

**2:00-2:15 South Carolina Through the Revolutionary War: A Digital Humanities Project**  
Addisen Alvanos and Kaylie Lewis mentored by Dr. Todd Hagstette

**2:15-2:30 The Golem's Journey in Chabon's *The Amazing Adventures of Kavalier & Clay*: A Digital Humanities Project**  
Rachel Eubanks mentored by Dr. Matt Miller

**2:30-2:45 Trail of Bones: Hauntology and Determinism in Cormac McCarthy's *Blood Meridian***  
Hunter Martin mentored by Dr. Julie Wise

**2:45-3:00 Got Milk?: Tiller's Mommy Issues in Chang-Rae Lee's *My Year Abroad***  
Aybrianna Williams mentored by Dr. Matt Miller

## **Honors Symposium Session – SAC Mezzanine**

### **Session 1 – 3:15 pm – 4:15 pm**

**3:15-3:30    Fathers Early Caregiving Intentions and Later Child Reports on Their Involvement**

Katelyn Danner mentored by Bridget Cho

**3:30-3:45    An Assessment of Running Position Across Four Conditions**

Logan G Scruggs mentored by Andrew Hatchett

**3:45-4:00    Early Life Adversity, Parental Anger, and Child Psychopathology**

Hannah Olivia Waterman mentored by Brianne Coulombe

**4:00-4:15    Hyacinths and Liar's Sins - How the Immaterial and Material Haunt Each Other in T.S. Eliot's "The Waste Land"**

Nicholas Conan Riveglia mentored by Julie Wise

## **Poster Sessions – Student Activity Center Gym**

### **Poster 1 - Analyzing the effect of BimL overexpression on HeLa cell viability**

Holly A Taylor mentored by William Jackson

### **Poster 2 - Integrating observations of Alleghanian plutonism, thrust faulting, lithospheric delamination, and the final closure of the Rheic Ocean in the Carolinas and Georgia**

Anthony Anderson mentored by Allen Dennis

### **Poster 3 - Cloning Pro-Apoptotic PUMA Into A HIV-Dependent Plasmid**

Vivica Tamia Birt mentored by William Jackson

### **Poster 4 - What's up with these eggs?: A closer examination of unhatched eggs in Eastern Bluebirds**

Mary Elizabeth Beard mentored by Michelle Vieyra

### **Poster 5 - Investigating the effect of NHP6A protein on *mPing* transposition in yeast**

Kaili Renken mentored by C. Nathan Hancock

### **Poster 6 - Exercise and ADHD**

Triniti Kelly mentored by Brian Parr

### **Poster 7 - Developing hyperactive cargos for targeted *mPing* insertion**

Madison Lynn Hamlin mentored by Nathan Hancock

### **Poster 8 - Exercise and Parkinson's Disease: A Review of the Literature**

William Cruz Kizer mentored by Brian Parr

### **Poster 9 - Analysis of Cas9 targeted *mPing* insertion in yeast**

Megan Collins mentored by C. Nathan Hancock

### **Poster 10 - Effects of Memes on Political Misinformation Believability**

Shawn Forth mentored by Amanda Waymer

### **Poster 11 - Investigating Transposition Activity: Functional Analysis of the *Zea mays Mariner 20* element**

Keith J Nelson mentored by Charles Hancock

### **Poster 12 - Adolescents' Perceptions of the Impacts of Venting in their Virtual Social Circle**

Sakura Suri mentored by Amanda Waymer

### **Poster 13 - Modular Blogging Platform**

Scott Rostron, Austin Walter, Onan Chew mentored by Amanda Warren

**Poster 14 - Drinking in Jim Crow Graniteville**

Carson Perry Umbarger mentored by Heather Peterson

**Poster 15 - Double Trouble: Age of Death in Aiken and Charleston in 1940**

Cindy Lin mentored by Andrew Dyer

**Poster 16 - Vietnam Veterans Oral History Project: From Aiken to the Library of Congress**

Luke Aldridge mentored by Sarah King

**Poster 17 - Cardiovascular Deaths Among Men and Women: Age at Death**

Emilee Sue Schiffhauer mentored by Andrew Dyer

**Poster 18 - Equine Assisted Psychotherapy: An Experimental Therapy**

Sam Keats mentored by Bridget Cho

**Poster 19 - Child mortality in pre-antibiotic vs antibiotic era**

Kya Dye mentored by Andy Dyer

**Poster 20 - Hearing Color: Usability in Sonification**

Madison Coffman mentored by William Johnson

**Poster 21 - Color Wars: Average life span of women of color in 1930's & 1970's**

Jasmine Kitchings mentored by Andrew Dyer

**Poster 22 - Diversity & Degree Status, Career Defining or Career Limiting:  
Studying the Impact of Racial Background & Education Level on Career Aptitude**

Myliyah Bogans, Nkosi Gaddy, Dalton Graves, Tyler Johnson, Rylee Knox, Reagan Leonard,  
Mika Mayo, Johneisha McWilliams, Gemma Osbon, Olivia Pall, Jayla Richardson, Abigail

Walton mentored by Carl Ciccarelli

**Poster 23 - Knocking Out Pneumonia: A Fight Against Flu and Pneumonia Related Deaths**

Melissa Cheadle mentored by Andrew Dyer

**Poster 24 - Buffalo Soldiers: Waging War on the Depiction of African Americans**

Christian Reagin mentored by Heather Peterson

**Poster 25 - Death is a Killer: The Average Age at Death of Adults in 1929 and 1955.**

Mallory Skinner mentored by Andrew Dyer

**Poster 26 - An Android App: Discrete Math in Your Hands**

Soumik Debjit Mitra mentored by Rao Li

**Poster 27 - Cardiovascular Disparities: Age of death of African Americans vs Whites in the 1920s and 1960s.**

Sheena JaMya Stanley mentored by Andy Dyer

**Poster 28 - Modular Blogging Platform**

Scott Rostron, Austin Walter, Onan Chew mentored by Amanda Warren

**Poster 29 - African American History, Culture, & Art: An Interdisciplinary Unit**

Isaiah R Gillian mentored by Deborah McMurtrie

**Poster 30 - CCIA AND GEN-CYBER**

Aditya Santosh Bhosle, Isaiah Ervin, Omkar Sameer Naik mentored by Hala Strohmer

**Poster 31 - Teaching Students about Bi-Polar Mania**

Afton Channell Smith mentored by Melissa Martin

**Poster 32 - Fly Myrtle**

David Gomez and Brandon Payero mentored by Hala Strohmer

**Poster 33 - Attention-Deficit/Hyperactivity Disorder in Students**

Kaylee Ann Little mentored by Melissa Martin

**Poster 34 - ISO Requirement Similarity Tool (IRST) Prototype**

Isaac Hutto, Winston Asher, Dalton Todd mentored by Hala Strohmer

**Poster 35 - Implementation of technological tools in special education classrooms**

McKenzie Lott mentored by Melissa Martin

**Poster 36 - Assessing the Accuracy of AI Detection Tools**

Tyler Green and Grant Calloway mentored by Hala Strohmer

**Poster 37 - The Effects Anxiety Can Have On Students: Under a Special Education Lense**

Skylar Nicole Shirey mentored by Melissa Martin

**Poster 38 - Effect of Surface Roughness and Oxidation on Contact Angle for Heat Transfer Applications**

Crystal I Garcia Quinones mentored by Titan Paul

**Poster 39 - Implementation of Technology in Special Education Classroom**

Skylar Faith Talton mentored by Melissa Martin

**Poster 40 - Effects of Mixing Time on Nanofluid Viscosity**

Anthony Longobardo mentored by Titan Paul

**Poster 41 - Exploring ICS/SCADA Network Vulnerabilities**

Aaryan R Londhe, Brian J Kram, Ronit A Pawar mentored by Hala Strohmer

**Poster 42 - Chip's Phone Safety Adventures**

Jonathan Edward Walker Jr. and Jeffrey Scott Hall Jr. mentored by Amber Dobbs

**Poster 43 - Assessing the Efficacy of Jailbreak Prompts: A Study on Content Restrictions in ChatGPT**

Dylan Murzello and Yash N Dasri mentored by Hala Strohmier

**Poster 44 - Comparative Study of Pressure Prop of Nanoparticle Enhanced Ionic Liquids (NEILs) with Traditional Heat Transfer Fluids (HTFs)**

Truman Brabham mentored by Titan Paul

**Poster 45 - Dish Antenna Positioning System**

Anthony Monaco and Caleb Waldrop mentored by Neil Miller

**Poster 46 - Identifying the causative mutations underlying a dwarf soybean phenotype**

Sam Burns mentored by Nathan Hancock

**Poster 47 - Malware Analysis**

Abdur Rahman Khan mentored by Chris Clark and Hala Strohmier

**Poster 48 - siRNA-mediated inhibition of HIV-1 regulatory functions**

Christine Sanderson mentored by William Jackson

**Poster 49 - Bold, Feminine Minds: The Fearless Women Who Shaped Mathematical History**

Sam Burns mentored by Mohammed Hailat

**Poster 50 - Analyzing the effect of tBid overexpression on cell death**

Jadynn McMahon mentored by William Jackson

**Poster 51 - SRNL Remote Manipulator in High Rad Environment**

Katelyn Alexandria Wilhite, Damian Whitt, Anouch Thomas James Wherle, Crystal Ivette Garcia Quinones mentored by Bethany Fralick

**Poster 52 - Testing if overexpression of pro-apoptotic Bax induces cell death**

Martina Louise Bryant mentored by William Jackson

**Poster 53 - Improved Removal System for Strip Effluent Coalescer Media**

Anthony Longobardo, Marvin Valentine, Zachery Wilson mentored by Bethany Fralick

**Poster 54 - Determining the role of phf21aa and phf21ab in model for Potocki-Shaffer Syndrome in Zebrafish**

Day'Lyn McKinnis mentored by April DeLaurier

**Poster 55 - Submersible Transfer Pump Selection for SRMC Radioactive Waste Tanks**

Michelle Corral, Zachary Woody, Cameron Huston mentored by Bethany Fralick

**Poster 56 - Determining the role of tbx5a and tbx5b in development of zebrafish**

James Harry Saxon IV mentored by April DeLaurier

**Poster 57 - DWPF Off-Gas Flammability Study**

Travis Farrell, Clay Beam, Isaiah Carbajal, Adam Krissinger mentored by Bethany Fralick

**Poster 58 - Determining the role of Hdac1, Kdm1a, and Zmym2 in development of zebrafish**

Sophia Danielle Ready mentored by April DeLaurier

**Poster 59 - Security Awareness in Higher Education**

Dakota Jones, Maggie C Heinbaugh, Caroline N Peace mentored by Chris Clark

**Poster 60 - Influenza Deaths Among Men and Women: Age at Death in Greenville and Hampton Counties**

Allison Green mentored by Andrew Dyer

**Poster 61 - Exercise and Parkinson's Disease**

Anna Grace Addy mentored by Brian Parr

**Poster 62 - Sex, Race, and Infant Death**

Alec J Lee mentored by Andrew Dyer

**Poster 63 - Resistance Training and Cognitive Function**

Kapono Lafayette mentored by Brian Parr

**Poster 64 - Why do African-Americans Die Younger than Caucasians?**

Caitlin Shirey mentored by Andrew Dyer

**Poster 65 - The Effect of Exercise on Depressive Symptoms in Patients with Chronic Illness**

Joseph E Riveglia mentored by Brian Parr

**Poster 66 - Bye-Bye Bacteria: Did the introduction of antibiotics benefit everyone equally?**

Me'Doña Summers mentored by Andrew Dyer

**Poster 67 - The Effect of Exercise on Anxiety**

Savannah Goff mentored by Brian Parr

**Poster 68 - The Progress of the USC Aiken Bluebird Nestbox Trail**

Quinn Schreiber, Emory Owen, Alyssa Godfrey mentored by Michelle Vieyra

**Poster 69 - ST-Segment Depression in 3 lead vs. 12 lead EKG on Males and Females**

Dillon Slater Wolford mentored by Chris DeWitt

**Poster 70 - Exploring Issues of Privilege in Family History**

Jessica Pierce Lawson mentored by Deborah McMurtrie

**Poster 71 - Heading Towards Home: The Importance of the NLB and Baseball to the African American Community of Graniteville**



Chesler Daniel Mathis mentored by Heather Peterson

**Poster 72 - Decreasing Absenteeism and Increasing Attendance with Mrs. Bell**

Stephanie Bell mentored by Bridget Coleman

**Poster 73 - Asphalt Over Graniteville: Dividing a Black Community**

Simon P Berry mentored by Heather Peterson

**Poster 74 - Building a Thinking Classroom in the Math Lab**

Amy C Kule mentored by Bridget Coleman

**Poster 75 - Outside the Family: Black Mill Workers in Graniteville**

Amy Herring mentored by Heather Peterson

**Poster 76 - Characteristics of Effective Nursing Preceptors**

Gabrielle Hoover, Kiana Davis, Kendra Bouknight mentored by Mary Gaffney

**Poster 77 - Getting Old Hurts: The average age of death in Aiken County, South Carolina in 1915 and 1960**

Caden Combs mentored by Andrew Dyer

**Poster 78 - Early Rehabilitation Impact on Arthroplasty**

Sheila K Torres, Savannah Dederscheck, William Eaves mentored by Mary Gaffney

**Poster 79 - How the Barbie movie affects gender expectations**

Genesis M Allen mentored by Amanda Waymer

**Poster 80 - The Effectiveness of Cannabinoids in Chronic Pain Management**

Avery Arico, Georgia Gray, Amaya Walker mentored by Jean Pawl

**Poster 81 - Fishing App**

Grant Hulland David Welcher mentored by Hala Strohmier

**Poster 82 - Hospital Resource Scarcity: Clinical Decision Making: COVID-19 Pandemic**

Terri Zummach, Shelby Enevoldsen, Jordan A Stovall mentored by Jean Pawl

**Poster 83 - VetVoice Capstone Presentation**

Hayden Comer, Aaron Karius, Jaymee Kambel mentored by Hala Strohmier

**Poster 84 - Nurse Staffing and its Effects on Patient Outcomes**

Jacob Nathaniel Corey, Kayla Carter, Madison P Mercer mentored by Mary Gaffney

**Poster 85 - Use of Social Networks in Higher Education**

Praisely Vinson, Blake Strawhorn, Jayde McKinney mentored by Hala Strohmier

**Poster 86 - Incretin-based therapies and their adverse effects**

Angela Calonia, Ashley Wheeler, Heidi Gyselinck mentored by Mary Gaffney

**Poster 87 - Scheduling Tool Application**

Sophie Rose Lyon mentored by Hala Strohmier

**Poster 88 - Cardiometabolic Risk in Children**

Alexandria Yger, Miranda Rose Parham, Luke Furtick mentored by Mary Gaffney

**Poster 89 - Exploring Machine Learning and AI in Academia**

Vincent T Langner, Fardeen Mohamed, Ethan Wood mentored by Hala Strohmier

**Poster 90 - Palliative Care Effect on Emergency Department Utilization**

Brett Corliss, Alyssa Buckmon, Taylor Jameson mentored by Mary Gaffney

**Poster 91 - Differentiating the Role of Acetaminophen on Cognitive and Affective Pain Empathy**

Tyler Robbins mentored by Laura Swain

**Poster 92 - Cardiac Rehabilitation**

Bridget Boyleston, Sadie Mckay, Destiny Burns mentored by Mary Gaffney

**Poster 93 - Optimization of the *Pong* Transposase Protein**

Zara Lacera mentored by C. Nathan Hancock

**Poster 94 - Opioid Overdose Kit Accessibility**

Carrington Brooke Harris, Kaitlyn Stone, Kinsley Mullins mentored by Mary Gaffney

**Poster 95 - Understanding the effects of combined loss of *tbx5a* and *tbx5b* genes in zebrafish development**

Jumanah Al-Soudi mentored by April DeLaurier

**Poster 96 - Does childhood obesity contribute to the worsening of childhood asthma?**

Hailey Evans, Avigai Reyes, Alyssa Hughes mentored by Mary Gaffney

**Poster 97 - The Hunger Games: Child Mortality by Infectious Disease in Charleston and Baltimore Counties**

Cassidy Eckles mentored by Andrew Dyer

**Poster 98 - Lower Back Injuries in Nursing**

Shiolin Cymia Raiford, Jessica Montoya, Morgan Holmes mentored by Mary Gaffney

**Poster 99 - Accident-Prone: The correlation of accident-related deaths between sex and ethnicity.**

Toby Slade Hall mentored by Andrew Dyer

**Poster 100 - The Importance of Education: Graniteville and Aiken**

Emma Chartier mentored by Heather Peterson

**Poster 101 - Dissonant, colored heartbeats pulsing to the other world: Exploring the inequalities in white and colored child mortality during the Great Depression compared to the peak year of the economic boom of the 1940s**

Charles Vazquez mentored by Andrew Dyer

**Poster 102 - Dust and Scales: The Story of Adam Retold**

Chesler Daniel Mathis mentored by Elizabeth Georgian

**Poster 103 - Cradle to Grave: Childbirth-Related Deaths in Aiken and Charleston Before and After Modern Medicine**

Victoria Fort mentored by Andrew Dyer

**Poster 105 - Poverty Related Stress and Imposters Syndrome Among Young Adults**

Leanna Byrnes Bryant mentored by Bridget Cho

**Poster 106 - Bilinguals Influencing Bilingual Education**

Jessica Ramirez-Granados mentored by Amanda Waymer

**Scholar Showcase Organizing Committee:**

Dr. Bill Jackson  
Dr. C. Nathan Hancock  
Dr. Jeremy Culler  
Dr. Michele Harmon  
Dr. Matthew Miller  
Dr. Michelle Vieyra

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Prof. Brad Reinhart

**Center for Research Excellence**

**USCA Office of Academic Affairs**