

The logo for the Scholar Showcase, featuring a stylized purple 'S' shape composed of three curved lines.

SCHOLAR SHOWCASE

UNIVERSITY OF SOUTH CAROLINA AIKEN

Business and Education Building

15-16 April 2021

Schedule of Events

Thursday, April 15, 2021

3:00pm -4:30pm Poster Hanging (B&E Gym)

Friday, April 16, 2021

Poster Session 1 - 10:00 am – 11:00 am

Poster Session 2 - 11:30 am – 12:30 pm

Poster Session 3 - 2:30 pm – 3:30 pm

Sponsored by USC Aiken Alumni, Celeste Suggs

Poster 1 (Session 3) Bottom Line: The Triple Bottom Line

by Audrey Winters

Mentored by Dr. Santosh Nandi

Poster 2 (Session 1) Identifying the Location of ORF1 and TPase Proteins in *Arabidopsis*

by Tyneisha Bradley

Mentored by Dr. C. Nathan Hancock

Poster 3 (Session 3) Structure-Activity Relationships in the 2,4'-Dihydroxyacetophenone Dioxygenase Reaction

by Faith Oladejo

Mentored by Dr. Kenneth Roberts

Poster 4 (Session 1) Effects of *Idlrap1a* on lipid metabolism in zebrafish

by Cristen Curry

Mentored by Dr. April DeLaurier

Poster 5 (Session 3) Computational predictions of the intermediates in the reaction of di-copper(I) compound with carbon dioxide

by Lauren Miko

Mentored by Dr. Gerard Rowe

Poster 6 (Session 1) Testing of a siRNA targeted to HIV Rev

by Meghann Williams

Mentored by Dr. William Jackson

Poster 7 (Session 3) Exercise and Meditation Effecting Depression

by Emya Morant

Mentored by Dr. Brian Parr

Poster 8 (Session 1) Exploring Bipolar Disorder in Students

by Adam Eubanks

Mentored by Dr. Melissa Martin

Poster 9 (Session 3) The effects of Exercise on Dementia and Alzheimer's

by Ronald Golding

Mentored by Dr. Brian Parr

Poster 10 (Session 1) Generalized Anxiety Disorder and our Students

by Jamilynn Hiers

Mentored by Dr. Melissa Martin

Poster 11 (Session 3) Design, cloning, and testing of an anti-HIV-I Rev small interfering RNA

by Kylie Tager

Mentored by Dr. William Jackson

Poster 12 (Session 1) Exploring Dissociative Disorder in Schools

by Deanna McCord

Mentored by Dr. Melissa Martin

Poster 13 (Session 3) Investigating the Function of the *zmym2* Gene in Developing Zebrafish

by Larissa Arias

Mentored by Dr. April DeLaurier

Poster 14 (Session 1) How Selective Mutism Impacts a Child in the School System

by Skyla Watson

Mentored by Dr. Melissa Martin

Poster 15 (Session 3) Dyin' How They Lived: How Your Occupation Determined How Perished In 1920s-30s Aiken County

by Amber Bussey

Mentored by Dr. Andrew Dyer

Poster 16 (Session 1) Examining the Performance of the Multi-Core Workstation and High-Performance Computing

by Keith McBride and Christopher Brunswick

Mentored by Dr. Bethany Fralick

Poster 17 (Session 3) Analyzing the anti-retroviral activity of a pro-apoptotic HIV-based expression system

by Madison Carelock

Mentored by Dr. William Jackson

Poster 18 (Session 1) Continuous Improvement and RCM of SRTE Ice Plant

by Adam Harley, Cameron Bedenbaugh and Matthew Beeler

Mentored by Dr. Bethany Fralick

Poster 19 (Session 3) Creating a HIV-dependent mCherry reporter control plasmid

by Campbell Crook

Mentored by Dr. William Jackson

Poster 20 (Session 1) Characteristics of a Competitive Baton Twirler

by Alexis Dicks

Mentored by Dr. Andrew Hatchett

Poster 21 (Session 3) Genomic Population Structure of the American Wood Stork

by Erin Doran

Mentored by Dr. Kristina Ramstad

Poster 22 (Session 1) Effect of Exercise on Depression

by Andrew Kolczynski

Mentored by Dr. Brian Parr

Poster 23 (Session 3) Deaths of Aiken and Charleston County: Looking at a cohort of men born in 1900

by Harley King

Mentored by Dr. Andy Dyer

Poster 24 (Session 1) The Effects of Exercise on Depression

by Nicholas Sanders

Mentored by Dr. Brian Parr

Poster 25 (Session 3) The Effect of BUD8 and TAL1 on Transposition

by Zara Lacera

Mentored by Dr. C. Nathan Hancock

Poster 26 (Session 1) The Effect of Exercise and Cognitive Thinking

by Jordan Thompson

Mentored by Dr. Brian Parr

Poster 27 (Session 3) Tissue culture treatment of wheat to induce mobilization of an *mPing* based activation tag.

by Angela Plemmons

Mentored by Dr. C. Nathan Hancock

Poster 28 (Session 1) Cognitive Function and Exercise

by Abby Williams

Mentored by Dr. Brian Parr

Poster 29 (Session 3) Determining the role of gooseoid in craniofacial skeletal development in zebrafish

by Chasey Shabdue

Mentored by Dr. April DeLaurier

Poster 30 (Session 1) The Effect of Exercise Environment on Health: A Review of the Literature

by Kimberly Zorn

Mentored by Dr. Brian Parr

Poster 31 (Session 3) Egg specific expression of ORF1 and Transposase in Arabidopsis.

by David Weidner

Mentored by Dr. C. Nathan Hancock

Poster 32 (Session 1) The Impact of COVID-19 Precautions on Social Anxiety

by Ashton Blush

Mentored by Dr. Maureen Carrigan

Poster33 (Session 2) Community Acquired Pneumonia and the Pneumococcal Vaccine

by Amanda Bates, Victoria Riddle, Richatta Holmes and Erica Faircloth

Mentored by Dr. Mary Gaffney

Poster 34 (Session 3) Synthesis of new pyridine amide compound for metal organic frame-work

by Andrew Fuller

Mentored by Dr. Gerard Rowe

Poster 35 (Session 2) Racial Disparities and Perinatal Outcome

by Ti'Aunte Bethea, Sophie King and Kayla LaCroix

Mentored by Dr. Mary Gaffney

Poster 36 (Session 3) Long Lost Loved Ones

by Jennifer Farrer

Mentored by Dr. Andrew Dyer

Poster 37 (Session 2) Utilizing Bacteriophage to Inhibit Bacterial Growth

by Madison Ackroyd

Mentored by Dr. Charles Hancock

Poster 38 (Session 3) No Doctor Present: A comparison of location and race in South Carolina in 1925

by Bailey Hamilton

Mentored by Dr. Andy Dyer

Poster 39 (Session 2) Developing and testing an HIV-based tBid expression system to selectively induce apoptosis

by Nina Adams

Mentored by Dr. William Jackson

Poster 40 (Session 1) SWOT Analysis of the South Carolina Emergency Management Division

by Evan Jenkins

Mentored by Dr. Sarah Young

Poster 41 (Session 2) Differences in Death Certificate Detail Among Black and White Americans in the 1950s and 1960s

by Daija Bryant

Mentored by Dr. Andrew Dyer

Poster 42 (Session 3) Measuring Sedimentation Along the Congaree River, SC

by Juan Maldonado

Mentored by Dr. Jessica Sullivan

Poster 43 (Session 2) Cloning and Testing of an Anti-HIV Vif Short Hairpin RNA

by Caroline Cockrell

Mentored by Dr. William Jackson

Poster 44 (Session 3) Can drones be used to estimate the hatching success of WOST?

by Hannah Mayo

Mentored by Dr. Kristina Ramstad

Poster 45 (Session 2) Cloning firefly luciferase as a reporter gene in plasmids that will be used to test HIV-dependency

by Andrew Gregory and Kaitlynn Cook

Mentored by Dr. William Jackson

Poster 46 (Session 3) The Influence of Penicillin on Child Death Rates Before and After 1945

by Tanner Starnes

Mentored by Dr. Andy Dyer

Poster 47 (Session 2) Does the Nuclear Export Signal Affect Harbinger Transposition in Human Cells?

by Dania Hailat

Mentored by Dr. Priscilla Redd and C. Nathan Hancock

Poster 48 (Session 3) Exploring Child Mortality Rates Between Races: Aiken South Carolina Over the Years

by Erica Jamerson

Mentored by Dr. Andy Dyer

Poster 49 (Session 2) Cloning and testing the effects of Tat siRNAs on a HIV-dependent reporter gene

by Q'May Qourters

Mentored by Dr. Q'May Qourters

Poster 50 (Session 3) Examining the Implementation of Mindfulness Activities on Achievement and Social-Emotional Learning for Students with Disabilities

by Emily Bostedor

Mentored by Dr. Melissa Martin

Poster 51 (Session 2) Exercise and Anxiety Disorder

by Markayla Davis

Mentored by Dr. Brian Parr

Poster 52 (Session 3) Advocating for Students with Mental Health Issues

by Gracie Taylor

Mentored by Dr. Deborah McMurtrie

Poster 53 (Session 2) Post COVID-19 Business Plan Proposal for Small Town Gym

by Brittany Temples

Mentored by Prof. Brent Hoover

Poster 54 (Session 3) Monitoring and Control System DCS Upgrade (SRNL)

by John Bunch, Christopher Mills and Daniel Stevens

Mentored by Dr. Bethany Fralick

Poster 55 (Session 2) Economics and Child Mortality: Comparing Aiken and Hampton Counties in 1915 and 1935

by Erykah Buckner

Mentored by Dr. Andy Dyer

Poster 56 (Session 3) Stability of Al₂O₃ Nanofluids

by Caroline Dempsey

Mentored by Dr. Titan Paul

Poster 57 (Session 2) Respiratory Hellfire: Infectious Disease Deaths in Children and Young Adults during the 1920s and 1950s

by Joseph Costello

Mentored by Dr. Andrew Dyer

Poster 58 (Session 3) The Stability of Nanoparticles in Base Fluids

by James Hale and Andrew Kricke

Mentored by Dr. Titan Paul

Poster 59 (Session 2) The Effect of Race on Medical Diagnosis Across Southern Counties in the Last 100 Years

by Zachary Dabbs

Mentored by Dr. Andy Dyer

Poster 60 (Session 3) Stability of Ionic Liquid Based Nanofluids Using UV Spectroscopy

by Anna Hawcroft

Mentored by Dr. Titan Paul

Poster 61 (Session 2) The Effect of Infectious Diseases on Race and Gender in Rural Edgefield County

by Maxwell Marsh-Upson

Mentored by Dr. Andrew Dyer

Poster 62 (Session 3) Radiative properties of Al₂O₃ Nanoparticles Enhanced Ionic Liquids (NEILs) for direct absorption solar collectors

by Melanie Howe

Mentored by Dr. Titan Paul

Poster 63 (Session 2) 1918 Pandemic: Age comparison of Men and Women

by Samantha Pollack

Mentored by Dr. Andrew Dyer

Poster 64 (Session 3) Quantifying Physical Fitness and Functional Fitness Deficits in Adults

by Brynn Bonner and Matthew Osborn

Mentored by Dr. Brian Parr

Poster 65 (Session 2) Media's Impact on School Performance

by Andrew Putman

Mentored by Dr. Anne Poplin

Poster 66 (Session 3) Effects of Exercise and the Recovery of Traumatic Brain Injury

by Mark Griggs

Mentored by Dr. Brian Parr

Poster 67 (Session 2) Advanced High School Courses' Impact on Anxiety: Classes of 2012-2020 and 2021-2024

by Shelton Schutte

Mentored by Dr. Anne Poplin

Poster 68 (Session 3) Quality of Life with LVADs

by Cameron Nunnery, Walker Buist and Kyle Ready

Mentored by Dr. Mary Gaffney

Poster 69 (Session 2) Creation of a CIP Method for the Heat Exchangers at Rolls-Royce

by Caroline Dempsey, Melanie Howe and Austin Locklear

Mentored by Dr. Bethany Fralick

Poster 70 (Session 3) Mental Health Consequences of COVID-19 on the Aging Population

by Kayla Patterson, Aelina Clark and Tess Husen

Mentored by Dr. Mary Gaffney

Poster 71 (Session 2) Monitoring Computer Information and Settings

by Jeffrey Lipford

Mentored by Dr. Zhenheng Li

Poster 72 (Session 3) Nursing Burnout Related to COVID-19

by Morgan Powell, Jada Lee and Torie Bell

Mentored by Dr. Mary Gaffney

Poster 73 (Session 2) SRNL Tool Design Process

by Daniel Nwachukwu, Christopher Seigler and Aaron George

Mentored by Dr. Bethany Fralick

Poster 74 (Session 3) Medication Adherence with the Use of Smartphone Apps

by Ann Ray, Ashley Eldredge and Daija Gary

Mentored by Dr. Mary Gaffney

Poster 75 (Session 2) Metal-Organic Frameworks in Nuclear Packaging: A Design Supporting the Practical Use of Experimental Materials in Nuclear Packaging

by Mallorie Prandy, Alexander Hart and Quin-Tasia Utsey

Mentored by Dr. Bethany Fralick

Poster 76 (Session 3) The Effects of Exercise on ADHD

by Tyler Rembowski

Mentored by Dr. Brian Parr

Poster 77 (Session 2) Quantifying Physical Fitness and Functional Fitness Deficits in Adults

by Brynn Bonner and Matthew Osborn

Mentored by Dr. Brian Parr

Poster 78 (Session 3) Exercise and Dementia

by Kennedy Smith

Mentored by Dr. Brian Parr

Poster 79 (Session 2) BMI Relationship to Forced Vital Capacity (FVC), Forced Expiratory Volume (FEV1), and Forced Expiratory Flow (FEF) in University Students

by Catherine Garvin

Mentored by Dr. Christopher DeWitt

Poster 80 (Session 3) Co-morbidities as Predictors of COVID-19 Mortality

by Hannah Sommer, Nicole Moore and Mikayla Morales

Mentored by Dr. Mary Gaffney

Poster 81 (Session 2) How Has the Culture of Hip-Hop Music Helped to Influence a Sense of Being in African American Adolescents in the CSRA Through a Use of Parasocial Interactions and Social Cognitive Theory in 2020?

by Kennedy Brown

Mentored by Dr. Anne Poplin

Poster 82 (Session 3) Hypercoagulopathies and Covid 19

by Nathaniel Tate, Alyce Goldman and Melissa Munoz

Mentored by Dr. Mary Gaffney

Poster 83 (Session 2) The Inequality of Climate Change

by Breanna Florido

Mentored by Dr. Christine Wernet

Poster 84 (Session 3) Intravenous Drug Users with Infective Endocarditis: Treatment, Recurrence, and Mortality

by Cassidy Tronco, Mika Alday and Katyra Holden

Mentored by Dr. Mary Gaffney

Poster 85 (Session 2) World War I Trench Art as a Reflection of the Individual Themes in Soldiers First-Hand Accounts

by Savill Jensen

Mentored by Dr. Anne Poplin

Poster 86 (Session 3) Smart Infusion Pumps and Safe Medication Administration

by Skyler Baker, Amanda DeLuca and Katey Rogers

Mentored by Dr. Mary Gaffney

Poster 87 (Session 2) Different Generations' Media Use: A Phenomenological Study

by Kara Loyd

Mentored by Dr. Anne Poplin

Poster 88 (Session 3) Imposter syndrome and new graduate nurses

by Megan Martin

Mentored by Dr. Mary Gaffney

Poster 89 (Session 2) What are the lived experiences of students in Advanced Placement classes at an academically gifted high school, regarding workload and their lives outside of class, from 2019-2020?: A phenomenology

by Mika Mayo

Mentored by Dr. Anne Poplin

Poster 90 (Session 3) Evaluation of PC-CARE, a dyadic parenting intervention for young children in foster care

by Emma Swanson

Mentored by Dr. Bridget Cho

Poster 91 (Session 2) Stroke Mortality in Aiken: 1930 vs 1950

by Destenny Savoris

Mentored by Dr. Andrew Dyer

Poster 92 (Session 3) Student Demographics and Retention for Palmetto College

by Marjorie George

Mentored by Dr. Benjamin Triana

Poster 93 (Session 2) How Well can High School Students Evaluate and Understand Different Types of Nonverbal Communication

by Kaeleigh Seigler

Mentored by Dr. Anne Poplin

With Gratitude

We wish to thank UofSC Aiken alumna, Ms. Celeste Suggs, for her generous contribution and continuous support of Scholar Showcase.



We also wish to thank the following:

Scholar Showcase Organizing Committee:

Dr. Bill Jackson

Dr. C. Nathan Hancock

Dr. Jeremy Culler

Dr. Michele Harmon

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Prof. Brad Reinhart

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