

**~ Morning Presentations ~****Morning Oral Presentations: Social Sciences and STEM A***First Place***Role of Cardiomyocyte-Specific Transforming Growth Factor Beta1 in Adult Heart Disease***Danielle Prisendorf*, Biological Sciences (major), Chemistry minor - Senior

Dr. Mohamad Azhar, Cell Biology and Anatomy

Dr. Mrinmay Chakrabarti, Cell Biology and Anatomy

*Second Place***Immunofluorescent Optimization: a framework for investigation into WWP1 regulation of ECM turnover during embryonic heart development***Savannah Bowers*, Biological Sciences (major), Interdisciplinary Studies (major) - Junior

Dr. Lydia Matesic, Department of Biological Sciences

**Morning Poster: Arts, Humanities, and Social Sciences A***First Place***Validity of Transition Analysis 3 Using Individuals of Known Ages***Skyler Yakes*, Anthropology (major), Criminal Justice minor – Senior

Dr. Sharon DeWitte, Department of Anthropology

*Second Place***Higher Expectations: Women's Place in the Office of the Solicitor General***Kaitlyn McCue*, Journalism (major), Political Science minor - Senior

Dr. Jessica Schoenherr, Department of Political Science

*Honorable Mention***Spatial and Temporal Analysis of Cancer Misinformation on Social Media in the United States***Serena Harn*, Information Science (major), Data Science minor - Sophomore

Dr. Amir Karami, Information Science, School of

**Morning Poster: Arts, Humanities, and Social Sciences B***First Place-Tie***Less Gatekeeping, More Girlbosses: Diversity, Equity, and Inclusion in STEM Higher Education***Dorathe Lee*, Biochemistry and Molecular Biology (major) - Junior

Dr. Charles Schumpert, Department of Biological Sciences

*First Place-Tie***To Raise or Raze: Nahuatl Speakers in Mexico***Isabel Sans*, History (major), Spanish (major) - Freshman

Prof. Michael Gavin, Department of English Language and Literature

Ms. Kaitlyn Smith, Department of English Language and Literature

*Second Place***Uncertainty and Common Pool Resources***Weston Watts*, Mathematic (major), Economics (major) - Sophomore

Dr. Philip Brookins, Department of Economics

**Morning Poster: Biology and Biomedical Sciences A***First Place***A High-Throughput Drug Testing Pipeline for Colon Cancer Organoid Avatars***Shrey Patel*, Biomedical Engineering (major), Neuroscience minor - Senior

Dr. Phillip Buckhaults, Department of Drug Discovery &amp; Biomedical Sciences

*Second Place*

**Hybrid Materials based on Gelatin-stabilized Amorphous Calcium Phosphate Nanoparticles and MXene Nanoflakes for use in Guided Bone Regeneration Membranes**

Mary Walden, Biomedical Engineering (major) - Senior

Dr. Nader Taheri-Qazvini, Department of Chemical Engineering

Mrs. Gelareh Rezvan, Department of Chemical Engineering

*Honorable Mention*

**Mystery in The Lab: Examination of Cross Hair Sections of a Shrunk Heads (Tsantsa)**

Blaine Newton, Associate in Science - Sophomore; USC Union

Dr. Lee Morris, Science, USC Union

**Morning Poster: Biology and Biomedical Sciences B**

*First Place-Tie*

**Preventing adaptive therapeutic resistance to CDK4/6 inhibition with CDK8/19 inhibitors: a mechanistic study**

Amanda Eckstrom, Biochemistry and Molecular Biology (major), Spanish minor - Senior

Dr. Eugenia Broude, Department of Drug Discovery & Biomedical Sciences

*First Place-Tie*

**Does a 2x Dose of Different Vitamin B12 Forms Affect Tau Phosphorylation and Expression of Proteins That Regulate Tau Phosphorylation?**

Allen Mundok, Biology (major) - Senior; USC Upstate

Dr. Kimberly Shorter, Division of Natural Sciences and Engineering, USC Upstate

*Second Place*

**Increased ovarian cancer incidence in mice overexpressing human MMP14**

Lauren James, Biological Sciences (major) - Sophomore

Dr. Frank Spinale, Cell Biology and Anatomy

Dr. Holly LaVoie, Cell Biology and Anatomy

*Honorable Mention*

**HIV-1 Tat-induced inhibition of dopamine transport by the human norepinephrine transporter is attenuated by tyrosine 467 mutations**

Darby Porter, Chemistry (major), Neuroscience minor - Junior

Dr. Jun Zhu, Department of Drug Discovery & Biomedical Sciences

*Honorable Mention*

**Identifying Protein Targets of Itaconate Modification**

Shoba Swaminathan, Biological Sciences (major), Chemistry minor - Senior

Dr. Norma Frizzell, Pharmacology, Physiology, and Neuroscience

*Honorable Mention*

**Uncovering the Regulatory Regions in Miniature Inverted Repeat Transposable Elements**

David Weidner, Biology (major) – Dec'21 graduate; USC Aiken

Dr. C. Nathan Hancock, Department of Biology and Geology, USC Aiken

Dr. Priscilla Redd, Department of Biology and Geology, USC Aiken

**Morning Poster: Biology and Biomedical Sciences C**

*First Place*

**Exploring the effects of reduced Fig4 expression on axonal transport and mitochondrial function**

Jeremy Money, Chemical Engineering (major) - Senior

Mary McElveen, Baccalaureus Artium et Scientiae (major) - Sophomore

Dr. Jeff Twiss, Department of Biological Sciences

Ms. Irene Dalla Costa, Department of Biological Sciences

*Second Place*

**Experimental Reinforcement Using Laboratory Island Populations of *Drosophila melanogaster***

Graham McLaughlin, Biological Sciences (major) - Senior

Dr. Brian Hollis, Department of Biological Sciences

## Morning Poster: Biology and Biomedical Sciences D

### First Place

#### **The Study of the Interaction between Nonstructural Protein 1 of the SARS Coronaviruses and Host Proteins**

*Yevgeniy Gerassimovich*, Chemistry (major), Biology (major) - Senior; USC Upstate

Dr. Anita Nag, Division of Natural Sciences and Engineering, USC Upstate

### Second Place

#### **Assessing the Effects of High-Fat Diets on Adipose tissue and Immune Response**

*Megan Glover*, Biological Sciences (major), Health Promotion, Education, and Behavior minor - December 2021

Dr. Alissa Armstrong, Department of Biological Sciences

## Morning Poster: Biology and Biomedical Sciences E

### First Place

#### **Functional Analysis of STN1 Winged Helix (wH) Domains**

*Anna Bazell*, Biological Sciences (major), Criminal Justice minor - Senior

Dr. Jason Stewart, Department of Biological Sciences

Mr. Logan Schuck, Department of Biological Sciences

### Second Place

#### **Development of mucoadhesive nanoparticles for delivery of all trans retinoic acid**

*Sydney Wheeler*, Biomedical Engineering (major) - Senior

Dr. Michael Gower, Department of Chemical Engineering

Mr. Nicholas Colonna, Department of Biomedical Engineering

## Morning Poster: Biology and Environmental Sciences A

### First Place

#### **Signaling Responses of Tomato Plants and Cells to the Green Leaf Volatile cis-3-hexenol**

*Kirsten Fisher*, Biochemistry and Molecular Biology (major) - Senior

Dr. Johannes Stratmann, Department of Biological Sciences

### Second Place

#### **The Successes and Pitfalls: Deep Learning Effectiveness in a Chernobyl Field Camera Trap Application**

*Rachel Maile*, Biological Sciences (major), Spanish (major) - Junior

Dr. Timothy Mousseau, Department of Biological Sciences

## Morning Poster: Biology and Environmental Sciences B

### First Place

#### **Using DNA Barcoding to Assess Differences in Diets of Highly Migratory Species in the Northwest Atlantic**

*Benjamin Hurley*, Marine Science (major), Political Science minor - Senior

Dr. Joseph Quattro, Earth, Ocean, and Environment, School of

### Second Place

#### **Exploring the Plasticity of Mixotrophy: Responses of *Cryptomonas ovata* to glucose addition along a light gradient**

*Dylan Davis*, Biological Sciences (major) - Senior

Dr. Jeff Dudycha, Department of Biological Sciences

Ms. Rachel Schomaker, Department of Biological Sciences

## Morning Poster: Chemistry, Physics, and Math A

### First Place

#### **Investigation of essential iron-binding proteins from the fungal pathogen *Candida albicans***

*Chloe Jackson*, Biochemistry and Molecular Biology (major) - Senior

Dr. Caryn Outten, Department of Chemistry and Biochemistry

Mr. David Eap, Department of Chemistry and Biochemistry

### Second Place

#### **Interactions of $\beta$ -Lactam Antibiotics-Transition Metal Complexes with $\beta$ -Lactamase**

*Isabelle Lytle*, Biochemistry and Molecular Biology (major) - Senior

Dr. Maksymillian Chruszcz, Department of Chemistry and Biochemistry

## Morning Poster: Chemistry, Physics, and Math B

### First Place

#### **A “Broken-Hearted” Corannulene Bowl: Strain Energy Release via an Electron Shuttle Reaction**

*Megan Francis*, Public Health (major) – Dec’21 graduate

Prof. Natalia Shustova, Department of Chemistry and Biochemistry

### Second Place

#### **Study of the Structure and Activity of UDP-glycosyltransferase Originating from *Tetranychus urticae***

*Shannon Henry*, Biochemistry and Molecular Biology (major), Mathematics minor - Senior

Prof. Maksymilian Chruszcz, Department of Chemistry and Biochemistry

Mr. Ricardo Hernandez, Department of Chemistry and Biochemistry

## Morning Poster: Engineering and Computing A

### First Place

#### **Green Plasma Technology for Siloxane Removal**

*Luke Heagen*, Civil Engineering (major) - Senior

Dr. Shamia Hoque, Department of Civil and Environmental Engineering

### Second Place-Tie

#### **Video Based Estimation of Surface Currents in a Tidal Inlet**

*Benjamin Middour*, Marine Science (major) - Senior

Dr. George Voulgaris, Earth, Ocean, and Environment, School of

Mr. Douglas Cahl, Earth, Ocean, and Environment, School of

### Second Place-Tie

#### **Measurement and Modeling of Low-Altitude Air-Ground Channels in Two Frequency Bands**

*Nathan Stofik*, Electrical Engineering (major), Computer Science minor - Senior

Dr. David Matolak, Department of Electrical Engineering

Dr. Alphan Sahin, Department of Electrical Engineering

## Morning Poster: Health Sciences A

### First Place

#### **Verbal Fluency and the Broad Autism Phenotype**

*Kathryn Klein*, Biological Sciences (major), Experimental Psychology (major) - Junior

Dr. Jessica Klusek, Department of Communication Sciences and Disorders

### Second Place-Tie

#### **Health Disparities in Dominican Republic**

*Heather Brown*, Biological Sciences (major) - Senior

Dr. David Simmons, Department of Anthropology and Health Promotion, Education and Behavior

### Second Place-Tie

#### **Inquiry into Grip Strength Via Volumetric Analysis of the Brain**

*Joshua Hutto*, Biological Sciences (major) - Senior

Dr. Roger Newman-Norlund, Department of Communication Sciences and Disorders

## Morning Poster: Health Sciences B

### First Place

#### **The Associations between Older Adults’ Sleep Patterns and Their Positive and Negative Affect**

*Tyler Gheen*, Exercise Science (major), Psychology minor - Senior

Dr. Chih-Hsiang Yang, Department of Exercise Science

Ms. Vanessa Bartholomew, Student / Co-Author

### Second Place

#### **Effect of social comparative feedback on motor learning differs based on dopaminergic genetics**

*Rachel Bohnenkamp*, Biological Sciences (major), Spanish minor - Senior

Dr. Jill Stewart, Department of Exercise Science

Dr. Allison Lewis, Department of Exercise Science

## Morning Poster: Health Sciences C

### First Place-Tie

#### **Implications of Discharge Communication in Health-Care**

*Rebecca Fanta*, Nursing - RN (major) - Senior

Dr. Ronda Hughes, College of Nursing

### First Place-Tie

#### **Examining Food Spending of DIET Guidelines Research Participants and Effects on Dietary Adherence**

*Madelyn France*, Public Health (major) - Senior

Dr. Brie Turner-McGrievy, Department of Health Promotion, Education and Behavior

Dr. Mary Wilson, Department of Health Promotion, Education and Behavior

Ms. Shiba Bailey, Department of Health Promotion, Education and Behavior

## Morning Poster: Health Sciences D

### First Place

#### **Health Behavior and Anxiety Changes During the COVID-19 Pandemic in a University Population**

*Etienne Thiria*, Biomedical Engineering (major), Neuroscience minor - Senior

Dr. Susan Steck, Department of Epidemiology and Biostatistics

Dr. Christine Pellegrini, Department of Exercise Science

Ms. Bezawit Kase, Department of Epidemiology and Biostatistics

### Second Place

#### **Conceptual vocabulary scores as a diagnostic tool for Spanish-English bilingual learners**

*Rose Luna*, Biochemistry and Molecular Biology (major) - Senior

Dr. Lisa Fitton, Department of Communication Sciences and Disorders

### Honorable Mention

#### **Perspectives of Primary Care Physicians on the Shortage of Primary Care Supply in Rural Georgia**

*Melinda Busman*, Biological Sciences (major), Interdisciplinary Studies (major) - Senior

Dr. Peiyin Hung, Department of Health Services Policy and Management

### Honorable Mention

#### **The Age of Initiation of Vaping and Association with Vaping Intensity and Risk of Combustible Tobacco Cigarette Smoking**

*Andy Hu*, Biochemistry and Molecular Biology (major), Economics minor - Senior

Dr. Anthony Alberg, Department of Epidemiology and Biostatistics

## Morning Poster: Psychology and Neuroscience A

### First Place

#### **Ketogenic diet reverses mitochondrial dysfunction in hippocampus of aging female rats with impaired memory**

*Karinne Cobb*, Baccalaureus Artium et Scientiae (major) - Junior

Dr. Joseph McQuail, Pharmacology, Physiology, and Neuroscience

Mr. Tyler Cox, Pharmacology, Physiology, and Neuroscience

Ms. Erin Gorman, Pharmacology, Physiology, and Neuroscience

### Second Place

#### **Medical complications of comorbid $\alpha$ -thalassemia and pediatric sickle cell disease**

*Sreya Varanasi*, Baccalaureus Artium et Scientiae (major) - Junior

Dr. Jeffrey Schatz, Department of Psychology

Ms. Sarah Bills, Department of Psychology

### Honorable Mention

#### **Building A Data Processing Pipeline for Research on the Early Detection of Autism**

*Francis Villanueva*, Computer Science (major), Mathematic (major) - Senior

Dr. Jessica Bradshaw, Department of Psychology

Dr. Xiaoxue Fu, Department of Psychology

## Morning Poster: Psychology and Neuroscience B

### First Place

#### **Greeks Getting It On: An Examination of Hookup Culture in Greek Letter Organizations**

*Jordan Deger*, Experimental Psychology (major), Mass Communications minor - Senior

Dr. Michael McCall, Department of Psychology

*Second Place-Tie*

**The Association Between Obesity, Neuroinflammation, and Depression in Female Rats Fed a High Fat Diet**

*Maria Bykalo*, Exercise Science (major), Neuroscience minor - Senior

Dr. Lawrence Reagan, Pharmacology, Physiology, and Neuroscience

*Second Place-Tie*

**Allergic to Sound: development of audiovisual stimuli**

*Skylar Linder*, Experimental Psychology (major), Interdisciplinary Studies (major) - Junior

Dr. Svetlana Shinkareva, Department of Psychology

Ms. Sewon Oh, Department of Psychology

**Morning Poster: Psychology and Neuroscience C**

*First Place*

**Establishing the Signature of Neural Activation Following Social Preference in Fmr1 Mutant Mice**

*Drew Buoniconti*, Biochemistry and Molecular Biology (major) - Senior

Dr. Fiona Hollis, Pharmacology, Physiology & Neuroscience

*Second Place*

**There's an App for That: Examining the Role of Social Media and Smartphone Technology in Supporting Youth Mental Health**

*MacKenzie Bewley*, Experimental Psychology (major), Counselor Education minor - Senior

Dr. Nicole Zarrett, Department of Psychology

Dr. Stephen Taylor, Department of Psychology

**Morning Poster: Psychology and Neuroscience D**

*First Place*

**Programming the postnatal mitochondrion: effects of gestational stress on brain metabolism and behavior**

*Breanna Robertson*, Experimental Psychology (major), Biology minor - Senior

Dr. Fiona Hollis, Pharmacology, Physiology, and Neuroscience

Mrs. Erin Goreman-Sandler, Pharmacology, Physiology, and Neuroscience

*Second Place*

**The Relationship between Acculturation, Enculturation, and Asian Americans' Attitudes Towards Seeking Professional Help During the COVID-19 Pandemic**

*Isabella Ouyang*, Biological Sciences (major), Environmental Science (major) - Sophomore

Dr. Kimberly Becker, Department of Psychology

Ms. Wendy Chu, Department of Psychology

**Morning Poster: Experiential Learning and GLD A**

*First Place*

**My Journey of Self-Discovery and Self-Worth**

*Gianna Modicamore*, Marketing (major), Management (major) - Senior

Mr. Rico Reed, National Resource Center for FYE and Students in Transition

*Second Place-Tie*

**Professional and Civic Engagement: The U101 Peer Leader Experience**

*Elizabeth Divers*, Management (major), Operations and Supply Chain (major) - Senior

*Second Place-Tie*

**Time Management in Professional and Civic Engagement**

*Sarah Gustafson*, Chemical Engineering (major) - Senior

**Morning Poster: Experiential Learning and GLD B**

*First Place*

**Learning to Bridge the Gap Between Your Academic Interests and Career**

*Kaitlyn Coghlan*, Chemical Engineering (major) - Senior

Dr. Kristina Grob, Arts; USC Union

Dr. Kelly Goldberg, Department of Anthropology

*Second Place*

**Leadership and Engagement with a Caring Profession Background**

*Mason Beckom*, Social Work (major) - Senior

Morning Poster: Experiential Learning and GLD C

*First Place*

**Professional and Civic Engagement in Environmental Practices**

*Gracie Leatherman*, Environmental Studies (major), Geography (major) - Senior

Mr. David DeWeil, Capstone Scholars Program

*Second Place*

**A Place to Live, a World to Explore**

*Sharla Williams*, Experimental Psychology (major), Anthropology minor - Senior

Ms. Gina Spence, Center for Integrative and Experiential Learning

Morning Poster: Experiential Learning and GLD D

*First Place*

**Inclusion & Its Different Faces**

*Nainaa Oberoi*, Mathematic (major), Health Promotion, Education, and Behavior minor - Senior

*Second Place-Tie*

**Teaching Tactfulness**

*Sully Hutto*, Experimental Psychology (major), Counselor Education minor - Junior

*Second Place-Tie*

**Discovering Cultural Perspectives in Denmark**

*Courtney Rinehart*, International Business (major), Operations and Supply Chain (major) - Senior

Morning Poster: Experiential Learning and GLD E

*First Place*

**Leading to Leave a Legacy**

*Morgan Mochulski*, Business Economics (major), Marketing (major) - Senior

*Second Place*

**Embracing Differences: Review on how one internship changed how I see things**

*Samantha Gudger*, Biological Sciences (major), German minor - Senior

Mr. David DeWeil, Capstone Scholars Program

*Honorable Mention*

**Customer Service Interventions and Perceptions**

*Samantha Shavitz*, Hospitality Management (major), Business Administration minor - Senior

Ms. Briahna Ismail, Undergraduate Research

Morning Poster: Experiential Learning and GLD - Policy and Governance A

*First Place*

**Discovering an Interconnected World Through Meaningful Discussion**

*Patrick Anderson*, International Business (major), Finance (major) - Senior

Dr. Denise Wellman, Student Affairs and Academic Support

*Second Place*

**Finding Femininity in the Corporate World**

*Kylie Purcaro*, Marketing (major), Management (major) - Senior

*Honorable Mention*

**Respecting the Dignity of All Persons: Education Through Student Conduct**

*Taylor Wedge*, Public Health (major), Business Administration minor - Senior

Morning Poster: Experiential Learning and GLD - Cultural Diversity A

*First Place-Tie*

**Studying abroad in Gothenburg, Sweden**

*Allison Boone*, International Business (major), Finance (major) - Senior

*First Place-Tie*

**Lessons learned from studying in three continents- a GLD Global Learning Reflection**

*Julia Signorelli*, International Business (major), Finance (major) - Senior

*Second Place*

**International organizations**

*Yiming (Krystal) Qi*, Hospitality Management (major), Event Management minor - Senior

**Morning Poster: Experiential Learning and GLD - Education A**

*First Place*

**Music Field Day**

*Madie Willard*, Music (major) - Senior

Dr. Alex Carrico, School of Music

*Second Place*

**Supplemental Instruction to Future Math Teacher: Applying and Developing Math Pedagogy**

*Jenna Gallichio*, Mathematic (major) - Senior

*Honorable Mention*

**Building Rapport and Forming Meaningful Connections with Autistic Individuals**

*Makaylen Cook-Compton*, Experimental Psychology (major), Religious Studies minor - Senior

Mrs. Sheri Foxworth, Earth, Ocean, and Environment, School of

*Honorable Mention*

**Taking Journalism and Using It to Educate About Spotting Fake News**

*Kaylin Daniels*, Mass Communications (major) - Senior

**Morning Poster: Experiential Learning and GLD - Entrepreneurial A**

*First Place*

**Navigating Leadership Through Professional Franchises in the Sports Industry**

*Caleigh Stenger*, Sport and Entertainment Management (major), Psychology minor - Senior

*Second Place*

**Examining The Impact Of Financial Literacy On Women Of Color**

*Synovia Bell*, Finance (major) - Senior

*Honorable Mention*

**Turning a Creative Outlet into a Small Business**

*Alyssa Svinte*, Public Relations (major), Business Administration minor - Senior

**Morning Poster: Experiential Learning and GLD - Wellness and Health A**

*First Place*

**The Story of Mental Health**

*Brenan Dimery*, Finance (major), Management (major) - Senior

*Second Place-Tie*

**Relay For Life**

*Emily Smitheimer*, Elementary Education (major) - Senior

*Second Place-Tie*

**Healthcare in Mexico: Growing my Pre-Professional Health Horizons to Serving Abroad**

*Tyler String*, Exercise Science (major) - Senior

Mr. Jay Pou, Department of History

*Honorable Mention*

**Cultivation of Personal Growth and Passions**

*Emily Rougelot*, Experimental Psychology (major), Counselor Education minor - Senior

**Morning Poster: Experiential Learning and GLD - Wellness and Health B**

*First Place*

**Promoting Healthy Youth Development Through the Lenses of Public Health and Psychology**

*Diana Rizzo*, Public Health (major) - Senior



*Second Place*

**Early Prevention of Psychological Problems in Children and Youth**

*Jillian Boose*, Public Health (major), Psychology minor - Senior

**Morning Poster: Experiential Learning and GLD - Wellness and Health C**

*First Place*

**Graduation with Leadership Distinction in Professional and Civic Engagement: The Interconnectedness of Public Health**

*Annalee Brody*, Public Health (major), Business Administration minor - Senior

Dr. Crystal Murillo, College of Nursing

*Second Place*

**The Many Factors of Patient Care**

*Talia McCool*, Public Health (major) - Senior

Prof. Maria Sophocleous, Department of Health Promotion, Education and Behavior

*Honorable Mention*

**School-Based Interventions for Children and Adolescents to Reduce Childhood Obesity in Rural South Carolina**

*Harlan Derry*, Exercise Science (major), Interdisciplinary Studies (major) - Senior

Mrs. Gina Spence, Center for Integrative and Experiential Learning

**~ Afternoon Presentations ~**

**Afternoon Poster: Arts, Humanities, and Social Sciences E**

*First Place*

**The National Politics of Global Justice: Portrayals of the ICC in Kenyan Media**

*Abby Chapin*, International Studies (major), Interdisciplinary Studies (major) - Post-Grad

Dr. Meredith DeBoom, Department of Geography

*Second Place*

**Mass Murder, Mass Shootings, and Active Shooter: A Comparison across Definitions and Data Sources**

*Rachel Rodriguez*, Criminology and Criminal Justice (major), Russian (major) - Senior

Dr. Ashley Mancik, Department of Criminology and Criminal Justice

**Afternoon Poster: Arts, Humanities, and Social Sciences F**

*First Place*

**The Wordification Project**

*Dhruv Pai*, Computer Science (major) - Senior

*John Angelidis*, Computer Information Systems (major), Business - Senior

*Lexington Whalen*, Computer Science (major) - Sophomore

*Nathan Bickel*, Computer Science (major) – Freshman

Dr. Stanley Dubinsky, Department of English Language and Literature

*Second Place*

**Spread of Vaccine Mis(Dis)information on Social Media**

*Jacqueline Purtell*, Statistics (major), Advertising and Public Relations minor - Junior

Dr. Amir Karami, Information Science, School of

*Honorable Mention*

**Childhood Food Insecurity and Type 2 Diabetes/Prediabetes Prevalence among South Carolina Adults**

*Shardae Lamar*, Political Science (major) - Senior

Dr. Monique Lyle, Department of Political Science

**Afternoon Poster: Arts, Humanities, and Social Sciences G**

*First Place*

**Linguistic Distance Measures: Methods for quantifying similarity between languages**

*Vivian D'Souza*, Computer Science (major) - Sophomore

*Ashley Bickham*, Computer Science (major), Japanese minor - Sophomore

*Jackson Ginn*, Computer Science (major), Mathematic (major) - Freshman

*Lexington Whalen*, Computer Science (major) - Sophomore

*Dawson Peterson*, Linguistics - Graduate Student

Dr. Stanley Dubinsky, Department of English Language and Literature

*Second Place*

**Meditation as a Means of Reducing Aggression and Racial Implicit Bias within an Eyetracking Shoot/No-Shoot Task**

*Caden Jackson*, Liberal Studies - Junior; USC Palmetto College

Dr. Randy Lowell, Psychology; USC Union

*Honorable Mention*

**Inferring the Preferences of Presidential Candidates from Their Tax Policy Proposals**

*John Ryan*, Economics (major), Mathematic (major) - Senior

Prof. Jason DeBacker, Department of Economics

## Afternoon Poster: Biology and Biomedical Sciences H

### First Place

#### **Development, Fabrication, and Testing of Porcine Artery Active Response Testing Device "PAARTy"**

*Jackson Goldsmith*, Mechanical Engineering (major) - Sophomore

Dr. John Eberth, Cell Biology and Anatomy

Mr. Colton Kostelnik, Cell Biology and Anatomy

Ms. Breanna Pederson, Cell Biology and Anatomy

### Second Place

#### **The Influence of Progerin on DNA End-Joining**

*Alannah DiCintio*, Biological Sciences (major) - Senior

*Madeline Ries*, Biological Sciences (major) - Senior

*Andrew Gasperson*, Biological Sciences (major) - Senior

Dr. Alan Waldman, Department of Biological Sciences

### Honorable Mention

#### **Determining if the Bases Adjacent to the mPing Element Impact Transposition**

*Monica Colon-LaBorde*, Biology (major) - Sophomore; USC Aiken

Dr. C. Nathan Hancock, Department of Biology and Geology, USC Aiken

### Honorable Mention

#### **The Effects of Emodin on Chemotherapy-Induced Skeletal Muscle Atrophy**

*Mitchell NeSmith*, Public Health (major) - Senior

Dr. Angela Murphy, Pathology, Microbiology, and Immunology

Dr. Brandon VanderVeen, Pathology, Microbiology, and Immunology

## Afternoon Poster: Biology and Biomedical Sciences I

### First Place

#### **Development of an In Vitro System to Test the Inhibitors of Dead Box RNA Helicase 3**

*Charlotte Pollack*, Biochemistry and Molecular Biology (major), Spanish minor - Junior

Dr. Michael Shtutman, Department of Drug Discovery & Biomedical Sciences

### Second Place

#### **Characterizing the Genes Affecting mPing Transposition in Yeast**

*Zara Lacera*, Biology (major) - Sophomore; USC Aiken

Dr. C. Nathan Hancock, Department of Biology and Geology, USC Aiken

Dr. Priscilla Redd, Department of Biology and Geology, USC Aiken

## Afternoon Poster: Biology and Biomedical Sciences J

### First Place

#### **3-Nitro-2-Phenyl-2H-Chromene Analogues as Dual Inhibitors of Trypanosomatid Parasitic Targets**

*Shane Carey*, Biology (major) - Senior; USC Beaufort

Dr. Edward D'Antonio, Department of Natural Sciences, USC Beaufort

### Second Place

#### **The Role of Early Exposure Antibiotics on the Risk of Developing Early Onset Colorectal Cancer**

*Lydia Ebel*, Biological Sciences (major) - Senior

*Ibrahim Hasnie*, Biological Sciences (major) - Junior

Dr. Marj Pena, College of Arts and Sciences

## Afternoon Poster: Biology and Biomedical Sciences K

### First Place

#### **Identifying the location of ORF1 and TPASE proteins in Arabidopsis**

*Tyneisha Bradley*, Biology (major), Psychology minor - Senior; USC Aiken

Dr. C. Nathan Hancock, Department of Biology and Geology, USC Aiken

### Second Place

#### **Development of Phosphatidylserine: Presenting Particles to Target Macrophages in Muscle Regeneration**

*Emily Ariail*, Biomedical Engineering (major) - Senior

Dr. Michael Gower, Department of Chemical Engineering

Mr. Kidochukwu Atube, Department of Chemical Engineering

## Afternoon Poster: Biology and Environmental Sciences E

### First Place

#### **Genomic Analysis of *Rhodotorula Spheerocarpa* ETNP2018 Reveals Adaptations to the Marine Environment**

*Dylan Lane*, Biological Sciences (major), Marine Science minor - Senior

Dr. Xuefeng Peng, Earth, Ocean, and Environment, School of

### Second Place

#### **Oviposition Site and Egg Mass Characteristics of a New Member of the Two-marked Treehopper (*Enchenopa binotata*) Species Complex**

*Kayla Reizer*, Biology (major), Psychology minor - Junior; USC Upstate

Dr. Jonathan Storm, Division of Natural Sciences and Engineering, USC Upstate

## Afternoon Poster: Biology and Environmental Sciences F

### First Place

#### **Identifying Boundary Layer Structure from Aircraft Observations of Hurricanes**

*Sophia Grimsley*, Environmental Science (major) - Senior

Dr. April Hiscox, Department of Geography

### Second Place

#### **Seasonal Use of Gopher Tortoise Burrows in Coastal Beach Dunes**

*Kaitlyn Dirr*, Biological Sciences (major), Marine Science minor - Junior

Dr. Joshua Stone, Department of Biological Sciences

Dr. Matthew E. Kimball, Baruch Marine Field Laboratory

## Afternoon Poster: Biology and Environmental Sciences G

### First Place

#### **Small UAVs can be used to estimate hatching success in the American wood stork**

*Hannah Mayo*, Biology (major) - Senior; USC Aiken

Dr. Kristina Ramstad, Department of Biology and Geology, USC Aiken

### Second Place

#### **ENVR 480: The Effects of Complete Egg Removal on Maternal Alligator Nest Attendance**

*Clarissa Tuten*, Environmental Science (major) - Senior

*Issac Murphy Abbott*, Environmental Studies (major) - Senior

## Afternoon Poster: Chemistry, Physics, and Math E

### First Place

#### **Bromide and Iodide Mapping of South Carolina Rivers: What Kinds of DBPs Form in the Wonderful Iodine State?**

*Samantha Rush*, Chemistry (major), Environmental Studies minor - Senior

Dr. Susan Richardson, Department of Chemistry and Biochemistry

### Second Place

#### **Photophysics of Coordinatively Immobilized Photoswitches in Metal-Organic Frameworks**

*Kelly Forrester*, Biochemistry and Molecular Biology (major) - Sophomore

Prof. Natalia Shustova, Department of Chemistry and Biochemistry

## Afternoon Poster: Engineering and Computing D

### First Place

#### **Static American Sign Language Recognition Using Neuromorphic Hardware**

*James Seekings*, Computer Science (major), Mathematic (major) - Junior

*Sara Hendrix*, Computer Science (major) - Freshman

Dr. Ramtin Zand, Department of Computer Science and Engineering

Mr. Peyton Chandarana, Department of Computer Science and Engineering

### Second Place

#### **Development of Computational Models for Polymer Scission**

*Marie Burns*, Chemical Engineering (major), Mathematics minor - Junior

Dr. Andreas Heyden, Department of Chemical Engineering

*Honorable Mention*

**Nanoparticle Size Effect on Stability of Ionic Liquids (ILs) Based Nanofluids**

*Anna Hawcroft*, Industrial Process Engineering (major) - Junior; USC Aiken

Dr. Titan Paul, Department of Mathematical Sciences and Engineering, USC Aiken

**Afternoon Poster: Engineering and Computing E**

*First Place*

**UAV Rapidly-Deployable Stage Sensor with Electro-permanent Magnet Docking Mechanism for Flood Monitoring in Undersampled Watersheds.**

*Corinne Smith*, Mechanical Engineering (major), Computer Science minor - Junior

Dr. Austin Downey, Department of Mechanical Engineering

*Second Place*

**Designing Novel and Exotic Protein Structures Using ProteinSolver and AlphaFold**

*Xeerak Muhammad*, Computer Engineering (major) - Senior

Dr. Jianjun Hu, Department of Computer Science and Engineering

**Afternoon Poster: Health Sciences G**

*First Place*

**Tricare Beneficiary Experiences with Pediatric Specialty Healthcare: Feasibility Study**

*Natalie Trimble*, Nursing - Generic (major) - Sophomore

Dr. Cynthia Corbett, College of Nursing

Dr. Pamela Wright, College of Nursing

Dr. Kimberly Taylor, College of Nursing

*Second Place*

**The Relationship Between Work Engagement, Depression, Anxiety, and COVID-19 Anxiety in Physician Assistant Students**

*Sydney Pepper*, Public Health (major), Biology minor - Senior

Dr. Michael Wirth, College of Nursing

Dr. Robin Dawson, College of Nursing

**Afternoon Poster: Health Sciences H**

*First Place*

**Early Healthcare Communication Skills Training in an Undergraduate Honors Laboratory Course**

*Khushi Patel*, Nursing - Generic (major) - Sophomore

*Kayla Rugh*, Nursing - Generic (major) - Sophomore

Dr. Robin Dawson, College of Nursing

Dr. Cynthia Corbett, College of Nursing

Dr. Phyllis Raynor, College of Nursing

*Second Place*

**Disrupting inequities experienced by children from under-resourced areas: A focus on early literacy assessment through the Reach Every Reader Project**

*Caroline Boykin*, Public Health (major), Psychology minor - Senior

*Madison Sterne*, Public Health (major) - Senior

Dr. Lisa Fitton, Department of Communication Sciences and Disorders

Ms. Kimberly Briseño, Department of Communication Sciences and Disorders

**Afternoon Poster: Health Sciences I**

*First Place*

**Triatomine-Ectoparasite Relationship: A Preliminary Investigation from the Southwestern United States**

*Hanna Waltz*, Biological Sciences (major), Anthropology (major) - Junior

Dr. Melissa Nolan, Department of Epidemiology and Biostatistics

*Second Place*

**Physical Activity Levels Are Associated with Mental Health Outcomes in Daily Life: A 7-day Experience Sampling Study in College Students**

Allison Tracy, Exercise Science (major) - Junior

Dr. Chih-Hsiang Yang, Department of Exercise Science

Ms. Vanessa Bartholomew, School of Public Health

Afternoon Poster: Health Sciences J

*First Place*

**Patients' Perspectives of Medication Use and Adherence Post-Hospital Discharge: A Metasynthesis**

Isabel Stringfellow, Public Health (major), Interdisciplinary Studies (major) - Senior

Dr. Cynthia Corbett, College of Nursing

*Second Place*

**Comparing Multiple Proportions using Marascuillo Method (An analytical study of COVID-19 data in three different care facilities)**

Christian Sterner, Associate in Science - Sophomore; USC Sumter

Antonio Turner, Computer Engineering (major) - Sophomore

Kaitlin Kiser, Nursing (major) - Senior; USC Sumter

Dr. Sher Chhetri, Division of Mathematics, Science, and Engineering; USC Sumter

*Honorable Mention*

**Exploring Religiosity, Perceived Mental Health, and Coping Behaviors of Undergraduate African American College Students During the Covid-19 Pandemic**

Kennedy Golden, Nursing - RN (major) - Senior

Dr. Phyllis Raynor, College of Nursing

Afternoon Poster: Health Sciences K

*First Place*

**Resveratrol improves nitric oxide synthase expression in HUVEC**

Anna Thamasett, Music (major), Chemistry minor – Junior

Dr. Abbi Lane-Cordova, Department of Exercise Science

Dr. Olufunke Arishe, Cardiovascular Translational Research Center

*Second Place*

**Proportion of Cancer Survivors in the United States Who Are Meeting Healthy Lifestyle Guidelines**

Katherine Gregory, Baccalaureus Artium et Scientiae (major) - Junior

Dr. Susan Steck, Department of Epidemiology and Biostatistics

Dr. Jan Eberth, Department of Epidemiology and Biostatistics

Mr. Longgang Zhao, Department of Epidemiology and Biostatistics

Afternoon Poster: Psychology and Neuroscience G

*First Place*

**Estradiol Promotes Social Stress Susceptibility in Female Rats in a Region- and CRF-Specific Manner**

Sarah Mott, Experimental Psychology (major), Neuroscience minor - Senior

Dr. Susan Wood, Pharmacology, Physiology, and Neuroscience

Ms. Brittany Pope, Department of Exercise Science

Ms. Evelyn Harrington, Pharmacology, Physiology, and Neuroscience

*Second Place*

**MET Study: Ecological Validity and Data Quality**

Adam Wenzel, Experimental Psychology (major), Computer Science minor - Senior

Dr. Jessica Bradshaw, Department of Psychology

Dr. Aaron Beckner, Department of Psychology

## Afternoon Poster: Psychology and Neuroscience H

### First Place

#### **Acute Kynurenine Challenge Upregulates Activation of Orexinergic Neurons in the Lateral Hypothalamus**

Hayley Nicholson, Baccalaureus Artium et Scientiae (major) - Junior

Snezana Milosavljevic, Postdoctoral Fellow: Dept. of Pharmacology, Physiology, and Neuroscience

Dr. Ana Pocivavsek, Pharmacology, Physiology, and Neuroscience

Dr. Jim Fadel, Pharmacology, Physiology, and Neuroscience

### Second Place

#### **How Appearance, Gender, and Preparedness Impact Perception On Expert Witness Credibility**

Joi Wilder, Psychology (major), Child Advocacy Studies minor - Senior; USC Upstate

Dr. Susan Ruppel, College of Arts, Humanities, and Social Sciences, USC Upstate

### Honorable Mention

#### **Behavioral Ratings of Narratives: Valence and Arousal**

Savanah Belt, Experimental Psychology (major), Chemistry (major) - Sophomore

Andrew Boldy, Experimental Psychology (major), Physics (major) - Senior

Dr. Svetlana Shinkareva, Department of Psychology

Mr. Xuan Yang, Department of Psychology

### Honorable Mention

#### **Is Attendance Mandatory for Therapy? Applying the REACH Treatment Engagement Framework to Examine YouTube Videos about Mental Health Services**

Haleigh Brown, Experimental Psychology (major), Neuroscience minor - Junior

Dr. Kimberly Becker, Department of Psychology

Ms. Wendy Chu, Department of Psychology

### Honorable Mention

#### **Identifying How Patterns of Adversity Shape Families' Response to the Head Start Program**

Isabella Mallozzi, Experimental Psychology (major) - Junior

Fatima Jatoi, Experimental Psychology (major), Neuroscience minor - Sophomore

Dr. Daniel Cooper, Department of Psychology

### Honorable Mention

#### **The Impact of Covid-19 on Mental Health in Rural and Urban Communities**

Kaitlyn Phillips, Experimental Psychology (major), Counselor Education minor - Senior

Dr. Suzanne Swan, Department of Psychology

## Afternoon Poster: Psychology and Neuroscience I

### First Place

#### **A D-Amino Acid Oxidase Inhibitor Reverses Age-Associated Memory**

Melanie Tieman, Biological Sciences (major), Interdisciplinary Studies (major) - Junior

David Horovitz, Medical Student - 2nd Year Medical Student; USC USC School of Medicine - Columbia

Dr. Joseph McQuail, Pharmacology, Physiology, and Neuroscience

### Second Place

#### **Circadian-dependent Wakefulness in Kynurenine 3-Monooxygenase Genetically Modified Mice**

Sarisha Menon, Biological Sciences (major), Psychology minor - Senior

Dr. Ana Pocivavsek, Pharmacology, Physiology, and Neuroscience

Dr. Snezana Milosavljevic, Pharmacology, Physiology, and Neuroscience

## Afternoon Poster: Psychology and Neuroscience J

### First Place

#### **Bimanual Object Manipulation and Motor Skills in Infants at Elevated Likelihood for Autism Spectrum Disorder**

Alana Dea, Public Health (major), Psychology minor - Junior

Dr. Jessica Bradshaw, Department of Psychology

Ms. Alexis Federico, Department of Psychology

*Second Place*

**Which Motivations Impact the Relation Between ADHD Symptoms and Simultaneous Use of Alcohol and Marijuana?**

*Caroline Hough*, Experimental Psychology (major), Sociology minor - Senior

Dr. Kate Flory, Department of Psychology

Mr. Joshua Bradley, Department of Psychology

Afternoon Poster: Experiential Learning and GLD AA

*First Place-Tie*

**Serving with your heart by listening with your heart**

*Jared Buteau*, Public Health (major) - Senior

*First Place-Tie*

**The Value of Kaizen**

*Sophia Daddesi*, Operations and Supply Chain (major), Finance (major) - Senior

*Second Place*

**Diversifying Education: Normalizing 'Uncomfortable' Conversations**

*Jacey Caldwell*, Middle Level Education (major) - Senior

Afternoon Poster: Experiential Learning and GLD BB

*First Place-Tie*

**The Impact of Service-Learning**

*Courtney Raven*, Experimental Psychology (major), Social Work minor - Senior

*First Place-Tie*

**Supporting Student's in their Unique First-Year Experience**

*Cecelia Tatro*, Management (major), Marketing (major) - Senior

*Second Place*

**Leading Carolina Productions Through COVID-19**

*Jacob Hoffman*, Sport and Entertainment Management (major) - Senior

Afternoon Poster: Experiential Learning and GLD CC

*First Place*

**The journey from patient to student to provider.**

*Gabriela Carrara*, Public Health (major), Psychology minor - Senior

*Second Place*

**The Free Medical Clinic**

*Brianna Milne*, Biological Sciences (major) - Senior

*Honorable Mention*

**The Importance of Patient Engagement**

*Caolin Byrne*, Public Health (major) - Senior

*Honorable Mention*

**Textbook to Table**

*Marissa Klein*, Exercise Science (major), Business Administration minor - Senior

Dr. Marketa Kubickova, College of Hospitality, Retail, and Sport Management

Afternoon Poster: Experiential Learning and GLD DD

*First Place*

**Gaining product development experience while releasing medical devices that will serve others.**

*Sterling Epps*, Biomedical Engineering (major), Chemistry minor - Senior

*Second Place*

**Diet Disconnect**

*Shantal Gomez Rodriguez*, Public Health (major), Business Administration minor - Senior

*Honorable Mention*

**Show Don't Just Tell: How Hands-On Experience Solidifies Learning**

*Ana Jukic*, Exercise Science (major), Neuroscience minor - Senior

Prof. David DeWeil, Capstone Scholars Program



## Afternoon Poster: Experiential Learning and GLD EE

### First Place-Tie

#### **Cultivating a Community of Creatives**

*Parker Blackburn*, Mass Communications (major), Retailing minor - Senior

### First Place-Tie

#### **Speaking My Mind: What being a student teacher taught me about how language impacts the classroom.**

*Erin Rittershofer*, Elementary Education (major), Sport and Entertainment Management minor - Senior

### Second Place

#### **An Immersive Global History Experience**

*Chasity Reeder*, History (major), Anthropology minor - Senior

## Afternoon Poster: Experiential Learning and GLD FF

### First Place

#### **The Benefits of Hands On Experience for Pre-Health Students**

*Grace Towery*, Biological Sciences (major), Health Promotion, Education, and Behavior minor - Senior

### Second Place-Tie

#### **Greek Lives positive impact on my time at UofSC**

*Erin Dare*, Management (major), Advertising and Public Relations minor - Senior

Prof. David DeWeil, Capstone Scholars Program

### Second Place-Tie

#### **Peer-to-Peer Learning Fosters Community**

*Madeline Rapaport*, Public Relations (major), Business Administration minor - Senior

## Afternoon Poster: Experiential Learning and GLD GG

### First Place

#### **Leadership as a Yunion Resident Mentor**

*Lilian Lamb*, Computer Engineering (major) - Sophomore

### Second Place

#### **The Value Peer Leadership Had on my Collegiate Experience & Beyond**

*Matilda Curley*, Experimental Psychology (major), Criminal Justice minor - Senior

## Afternoon Poster: Experiential Learning and GLD HH

### First Place

#### **Freshman Council: The First Freshman Voice**

*Blakely Hardin*, Political Science (major), Interdisciplinary Studies (major) - Sophomore

### Second Place-Tie

#### **Student Centered Teaching in a Creativity Centered Environment**

*Ashley Bellotte*, Early Childhood Education (major) - Senior

### Second Place-Tie

#### **Studying abroad at the University of South Carolina**

*Tristan Marchena*, Biomedical Engineering (major), Chemistry minor - Senior

## Afternoon Poster: Experiential Learning and GLD II

### First Place

#### **Digital Business Transformation at Work**

*Adam Frederiksen*, Computer Science (major), Political Science (major) - Senior

### Second Place

#### **The Importance of My Finance Internship at Sonoco**

*Audrey Chen*, International Business (major), Finance (major) - Senior

## Afternoon Poster: Experiential Learning and GLD JJ

### *First Place*

#### **Values Will Change over Time**

*Taylor Utter*, Biological Sciences (major), Spanish minor - Senior

### *Second Place*

#### **Going Abroad During a Pandemic**

*Vittoria Gallelo*, Marketing (major), Management (major) - Senior

## Afternoon Poster: Experiential Learning and GLD - Wellness and Health AA

### *First Place*

#### **Colors of the Mind: A Musical Workshop for Mental Wellness**

*Catherine Black*, Music (major), Music Entrepreneurship minor - Senior

### *Second Place*

#### **One Size Doesn't Fit All**

*Alexa Jensen*, Experimental Psychology (major), Criminal Justice minor - Senior

Mrs. Gina Spence, Center for Integrative and Experiential Learning

## Afternoon Poster: Experiential Learning and GLD - Wellness and Health BB

### *First Place*

#### **Igniting Community to Combat Hunger on the UofSC Campus**

*Emilie Brady*, Biomedical Engineering (major) - Senior