2021 Auburn Research Student Symposium Oral Presentation Winners

I. **University-Wide Undergraduate Student Winners in Science, Technology, Engineering, and Mathematics**

- <u>1st Place</u>: Shalom Kim, Chemistry and Biochemistry (AUM), "Remdesivir Triphosphate blocks DNA synthesis and promotes exonucleolytic activity of mitochondria DNA polymerase gamma"

- <u>2nd Place</u>: Elijah Carroll, Entomology and Plant Pathology, "Visitation of beneficial insects to seasonal honeydew produced by crape myrtle bark scale (*Coccidae: Eriococcidae*)"

- <u>3rd Place</u>: Sarah Cain, Forestry and Wildlife Science, "Analyzing the efficacy of pellet count surveys to estimate density of white-tailed deer (*Odocoileus virginianus*)"

II. **University-Wide Graduate Student Winners in Science, Technology, Engineering, and Mathematics**

- <u>1st Place</u>: Kaelyn Fogelman, Fisheries, Aquaculture and Aquatic Sciences, "Using aerobic scope to evaluate the thermal tolerance of aquatic invertebrates"

- <u>2nd Place</u>: Paul Swiney, Aerospace Engineering, "Preliminary analysis of the aerodynamic responses of a red-tailed hawk traversing a vertical gust"

- <u>3rd Place</u>: Roman Vasquez, Mathematics and Statistics, "Bipartite graphs and line segments defined by sets"

III. **University-Wide Undergraduate Student Winners in Human Sciences, Social Sciences, Creative Arts, Nursing and Humanities**

- <u>1st Place</u>: Stanley Wijaya, Nutrition, Dietetics and Hospitality Management, "Obesity modulates colorectal cancer predicted drug sensitivity in a consensus molecular subtype specific manner"

- <u>2nd Place</u>: Molly Morris, Nutrition, Dietetics and Hospitality Management, "Exploration of the interaction of mood disturbance, serum fibrinogen, and gut microbiome in adults"

- <u>3rd Place</u>: Elise Sappington, Anthropology, "Experiences of international students enrolled in a U.S. university during Covid-19"

IV. **University-Wide Graduate Student Winners in Human Sciences, Social Sciences, Creative Arts, and Humanities**

- <u>1st Place</u>: Juliana Parma, Kinesiology, "Stay positive: A meta-analysis of enhanced expectancies on motor learning"

- <u>2nd Place</u>: Priscilla Ayine, Nutrition, Dietetics and Hospitality Management, "The children's eating behaviors: Relation to child weight status and maternal education"

- <u>3rd Place</u>: Ebenezer Harrison, Consumer and Design Sciences, "Brand personification strategies in real time marketing on Twitter: Drivers of consumer engagement"

V. College and School Awards

1. College of Agriculture

- Undergraduate Student Winner: Rachel Osborne, Poultry Science, "Analysis of poultry processing wastewater microbial load throughout wastewater stream"

- Graduate Student Winner: Aya Hussain, Fisheries, Aquaculture and Aquatic Sciences, "Relationship between aerobic scope and thermal tolerance of white-legged shrimp (*Litopenaeus vannamei*) in low-salinity culture systems"

2. College of Architecture, Design, & Construction

- Undergraduate Student Winner: Cecily Anderson, Environmental Design, "Auburn refuge project"
- Graduate Student Winner: N/A

3. Raymond J. Harbert College of Business

- Undergraduate Student Winner: N/A

- Graduate Student Winner: Alexander Hamrick and Sana Zafar, Management, "The good, the bad, and the lucky: Causal attributions for prior outcomes and subsequent risk-taking"

4. College of Education

- Undergraduate Student Winner: Mary McCullough, Kinesiology, "Stride hip internal rotation is associated with pain in collegiate softball pitchers"

- Graduate Student Winner: Christopher Loftin, Music Education, "Visual engagement: Name standards and choral large group assessment rubrics"

5. Samuel Ginn College of Engineering

- Undergraduate Student Winner: Peter Abraham, Chemical Engineering, "Obesity modulates the colorectal cancer tumor transcriptome in a consensus molecular subtype-specific manner "

- Graduate Student Winner: Amod Parkhi, Chemical Engineering, "Carbon dioxide capture from the pulp and paper mill limekiln: Process and techno-economic analysis"

6. School of Forestry and Wildlife Sciences

- Undergraduate Student Winner: N/A

- Graduate Student Winner: Javier Hernandez Diaz, Forestry and Wildlife Sciences, "Lignin nanoparticles for protective coatings of mass timber products"

7. College of Human Sciences

- Undergraduate Student Winner: Erin Casolaro, Hunger Solutions, "Financial implications of personal gardening among elderly in rural Alabama"

- Graduate Student Winner: Erin Cooper, Human Development and Family Studies, "Dyadic links among Adverse Childhood Experiences (ACEs), mindfulness, and relationship quality in couple relationship education (CRE) study participants at program entry"

8. College of Liberal Arts

- Undergraduate Student Winner: Zoe Lakin, Art History, "Lilla Cabot Perry: experimental painting and gendered spaces in Impressionism"
- Graduate Student Winner: N/A

9. School of Nursing

- Undergraduate Student Winner: N/A
- Graduate Student Winner: N/A

10. Harrison School of Pharmacy

- Undergraduate Student Winner: N/A
- Graduate Student Winner: Kelli McDonald, Pharmacology, "Neuroprotective signaling metabolite, β-hydroxybutyrate, reduces oxidative stress and augments mitochondrial functions in hippocampal neurons"

11. College of Sciences and Mathematics

- Undergraduate Student Winner: Davis Arthur, Physics, "Development of a multiparticle spectrometer)"
- Graduate Student Winner: Jenna Pruett, Biological Sciences, "Developmental temperatures differentially affect survival across life stages"

12. College of Veterinary Medicine

- Undergraduate Student Winner: Anna Wilson, "Evaluation of neurotransmitter concentrations in the prefrontal cerebral cortical gray matter of cats with phosphoprotein enriched in astrocytes 15 kDa (PEA15) loss of function"
- Graduate Student Winner: Anne Maguire, Biomedical Sciences, Intravenous AAV gene therapy improves pre-and post-mortem outcomes in a feline model of Sandhoff Disease"

13. Auburn University at Montgomery

- Undergraduate Student Winner: N/A
- Graduate Student Winner: N/A