Undergraduate Research & Creative Activity Conference

Oral and Poster Presentations

Schedule of Events

THE UNIVERSITY OF ALABAMA

April 17, 2014
Bryant Conference Center
PARTICIPATING COLLEGES & SCHOOLS

URCA COORDINATORS

Chair - Dr. Carl A. Pinkert, Vice President for Research
Arts & Sciences - Dr. Roger Sidje
Blackburn Institute - Dr. Philip Westbrook
Capstone International - Dr. Teresa Wise
Culverhouse College of Commerce - Dr. Diane Johnson
Communication & Information Sciences - Dr. Carol Mills
Education - Dr. David Hardy
Engineering - Dr. John Wiest
Emerging Scholars - Dr. Ann Webb
Graduate School - Dr. Dave Francko
Honors College - Dr. Shane Sharpe
Human Environmental Sciences - Dr. Lori Turner
Nursing - Dr. Cassandra Ford
Social Work - Dr. Javonda Williams
Student Affairs - Dr. Mark Nelson
Student Government Association - Ms. Allison Montgomery
University Libraries - Dr. Millie Jackson
April 17, 2014

Dear Participants:

Welcome to the Seventh Annual University of Alabama Undergraduate Research and Creative Activity Conference. We are excited to have over 500 students representing all academic disciplines participating in this year’s event. This is a record number of participants and the continued growth in participation proves that research and creative activities have become a hallmark of the undergraduate experience at The University of Alabama.

Our faculty constantly seeks new opportunities to engage our undergraduate students in quality research, discovery and creative endeavors that will define their academic experience at the Capstone. We want to give special thanks to those faculty members who have mentored our student presenters today; as our talented students begin what we hope will be a long journey of scholarly achievement and discovery. We also offer hearty congratulations to our student participants for their contributions to the impressive body of work presented today.

Through the collaborative efforts of the Office for Research, the Graduate School, the Undergraduate Research and Creative Activities Committee and a number of colleges and schools, this has become a premier event at The University of Alabama. Sincere thanks to these groups for making today’s conference possible through their tireless efforts in planning and development.

We celebrate this established tradition of annually recognizing the research and creative accomplishments of our best and brightest undergraduate students.

Sincerely,

Judy Bonner  
President

Carl A. Pinkert  
Vice President for Research
# TABLE OF CONTENTS

Schedule of Events ................................................................................................................... 5
Schedule of Oral & Poster Presentations .............................................................................. 6

College of Arts & Sciences .......................................................................................... 6
  Division of Fine Arts & Humanities .............................................................................. 6
  Division of Science & Mathematics ............................................................................. 8
  Division of Social Sciences ......................................................................................... 17
Culverhouse College of Commerce ........................................................................... 22
College of Communication & Information Sciences ............................................. 23
College of Education .................................................................................................. 26
College of Engineering ............................................................................................... 27
College of Human Environmental Sciences ........................................................... 31
Capstone College of Nursing ..................................................................................... 33
School of Social Work ................................................................................................ 36
Emerging Scholars ....................................................................................................... 36
  Division of Fine Arts & Humanities .............................................................................. 36
  Division of Science, Mathematics & Engineering .................................................... 38
  Division of Social & Behavioral Sciences, Business & Education ...................... 44
Map of Bryant Conference Center ....................................................................................... 50
Tags to Abstracts* and Additional Resources ..................................................................... 51
Acknowledgements ................................................................................................................. 51

*Abstracts can be found online at [www.osp.ua.edu/urca-2014-abstracts.pdf](http://www.osp.ua.edu/urca-2014-abstracts.pdf) or by using the tags under Additional Resources on page 51.

The presentation information included in this Program and in the online Abstract document is intended to represent exactly what was submitted by the student. Errors can occur in the transfer process.
Schedule of Events

Wednesday, April 16
1:00pm-4:00pm | Bryant Conference Center
Oral Presentation Check-in/Upload PowerPoint - All Colleges
Poster Presentation Check-in and Set-up - Other than Arts & Sciences

Thursday, April 17
All Events at the Bryant Conference Center

7:30am - 8:00am
Poster Presentation Check-in and Set-up - Other than Arts & Sciences

8:00am - 11:00am
Poster Presentations - Other than Arts & Sciences

8:15am - 8:45am
Oral Presentation Check-in/Upload PowerPoint - Arts & Sciences

9:00am - 1:00pm
Oral Presentations - Arts & Sciences

11:00am - 11:45am
Poster Presentation Break Down - Other than Arts & Sciences

11:45am - 1:00pm
Poster Presentation Check-in and Set-up - Arts & Sciences

1:00pm - 3:00pm
Judges’ Preliminary Review of Posters - Arts & Sciences

1:00pm - 1:45pm
Oral Presentation Check-in/Upload PowerPoint - Other than Arts & Sciences

2:00pm - 5:00pm
Oral Presentations - Other than Arts & Sciences

3:00pm - 6:00pm
Poster Presentations - Arts & Sciences

Wednesday, April 23
11:30am-1:00pm | South Zone, Bryant Denny Stadium
Recognition Luncheon
COLLEGE OF ARTS & SCIENCES

DIVISION OF FINE ARTS & HUMANITIES

SCHEDULE OF ORAL PRESENTATIONS

Lackey Room

9:00
Eric Nubbe, Art and Art History
Faculty Mentor: Craig Wedderspoon, Art and Art History
Nucor Children's Charity Classic Auction

9:20
Amber Smith, English
Faculty Mentor: Nikhil Bilwakesh, English
Closing the Distance of Far, Far Away: The Purpose of Fairy Tale in Maxine Hong Kingston's The Woman Warrior and Herta Mueller's The Land of Green Plums

9:40
Dave Nearing, History
Faculty Mentor: John Beeler, History
Remarks on the Arctic Whale-Fishery, 1611-1783 With an Econometric Productivity Analysis of British Arctic Whaling Ports 1770-1775

10:00
Emily Peace, Music
Faculty Mentor: Andrea Cevasco, Music
Deciphering the Law: A Comparison of Music Therapy in Early Intervention Settings in Alabama and Georgia

10:20
Mary Young, Music
Faculty Mentor: Andrea Cevasco, Music
A Comparison of Therapeutic Music Professionals Used in a Medical Setting

10:40
Lauren Key, Music
Faculty Mentor: Andrea Cevasco, Music
Modified Musical Instruments and Technology for Individuals with Multiple Disabilities and Their Application Within a Music Therapy Setting

11:00
Jonathan Ramos, Music
Faculty Mentor: Andrea Cevasco, Music
A Cross-Analysis of Asian and Latino Family Systems in America

11:20
Ian Connell, Music
Faculty Mentor: Andrea Cevasco
Hospice Music Therapy and The Six Domains of Human Experience
11:40
Leighton Carlock, Religious Studies
Faculty Mentor: Steven Ramey, Religious Studies
Myth as Illusion

12:00
Charlotte Olson, Theatre and Dance
Faculty Mentor: Sarah Barry, Theatre and Dance
Frederick Ashton

12:20
Alex Davis, English
Russell Robertson, English
Lauren Gilmer, English
Drew Pendleton, English
Faculty Mentor: Jessica Hollander, English
Analysis of Jewel in Faulkner's "As I Lay Dying"

DIVISION OF FINE ARTS & HUMANITIES

LISTING OF POSTER PRESENTATIONS
In the Division of Fine Arts & Humanities, the initial judging of the poster presentations will take place between 1:00 and 3:00pm without the students being present. Beginning at 3:00pm, the judges will meet with each student and discuss his or her presentation.

1
Kathryn Gallagher, American Studies
Faculty Mentor: Jeffrey Melton, American Studies
Gender and Mobility

2
Christina Irion, Telecommunications and Film
Sarah Catherine Perry, Human Nutrition and Hospitality Management
Kiley Pfeifer, Culverhouse School of Accountancy
Kaley Hogan, Capstone College of Nursing
Faculty Mentor: Jessica Hollander, English
Dewey Dell - an Analysis

3
Edward Woodall, History
Faculty Mentor: Josh Rothman, History
Research Possibilities of a Runaway Slave Ad Database

4
Savannah Feezor, Music
Faculty Mentor: Andrea Cevasco, Music
The Effects of Music and Multimodal Stimulation on Positive and Negative Behavioral Responses of Premature Infants

5
Karrie Elpers, Psychology
Faculty Mentor: Ansley Gilpin, Psychology
Undergraduates' High in Religiosity Have Increased Fantastical Beliefs
DIVISION OF SCIENCE & MATHEMATICS

SCHEDULE OF ORAL PRESENTATIONS
Oral presentations in the Division of Science & Mathematics have been divided into 3 groups and will be held in the Wilson, Birmingham and the Central Bank rooms at the Bryant Conference Center.

In each group, judges will select the top two oral presentations; other presentations may be selected for Honorable Mention. The students with the top two oral presentations in each group will then present to the judges from one of the other groups. This second presentation will take place in the room where the student initially presented.

Group 1  Wilson Room

9:00
Molly Cook, Biological Sciences
Faculty Mentor: Ryan Early, Biological Sciences
Prey Response to Predation Risk in Acidified Environments

9:20
Ronneshia Jackson, Biological Sciences
Faculty Mentor: Julie Olson, Biological Sciences
Diversity of secondary metabolite genes in symbiotic bacterial communities

9:40
Matthew Larkin, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
The metabolic determinant underlying the rate of energy use during prolonged fasting for the diamondback water snake, Nerodia rhombifer.

10:00
Grant Fairchild, Biological Sciences
Faculty Mentor: Kimberlee Caldwell, Biological Sciences
Use of microRNAs to identify novel neurodegenerative genes in C. elegans

10:20
Katy Buddemeyer, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
Negative Calorie Food: Fact or Fiction?

Group 2  Birmingham Room

9:00
Zoe Nichols, Biological Sciences
Faculty Mentor: Natasha Dimova, Geological Sciences
Assessing Anthropogenic Impacts Along the Long Valley Watershed

9:20
Sean Mendez, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences
TreadWheel - Novel Exercise Apparatus for D. melanogaster.
9:40
Braxton Greer, Biological Sciences
Faculty Mentor: Stevan Marcus, Biological Sciences
**Endocytosis During the Cellular Response to Avicin**

10:00
Sean Miller, Chemistry
Faculty Mentor: David Dixon, Chemistry
**Comparison of Gas-Phase Acidities of Phosphorylated and Unaltered Amino Acids**

10:20
Steven Spellmon, Chemistry
Faculty Mentor: David Dixon, Chemistry
**Reactivity of Aqueous +4 Cations**

**Group 3 Central Bank Room**

9:00
Megan Johnston, Chemistry
Faculty Mentor: Kevin Shaughnessy, Chemistry
**Palladium-Catalyzed Direct Intramolecular Arylations Using Water-Soluble Phosphine Ligands**

9:20
Meredith Rickard, Chemistry
Faculty Mentor: David Dixon, Chemistry
**From Waste to Fuels and Feedstocks: Reduction of CO₂, Using Main-Group Catalysts**

9:40
Allison Montgomery, Chemistry
Faculty Mentor: Marco Bonizzoni, Chemistry
**Simulants of intermolecular interactions in PAMAM dendrimers**

10:00
Travis Atchley, Chemistry
Faculty Mentor: Silas Blackstock, Chemistry
**Donor-Acceptor Cocrystallization for Molecular Assembly**

10:20
Hudson Pierce, Chemistry
Faculty Mentor: Kevin Shaughnessy, Chemistry
**Synthesis of Air-Stable Palladium Precatalysts and Their Reactivity in Suzuki Cross-Coupling Reactions**

10:40
Shuwen Yue, Chemical and Biological Engineering
Faculty Mentor: David Dixon, Chemistry
**Computational Studies of the Conversion of Biomass to Biofuels**
DIVISION OF SCIENCE & MATHEMATICS

LISTING OF POSTER PRESENTATIONS

In the Division of Science & Mathematics, the poster presentations have been divided into 5 groups. The initial judging of the poster presentations will take place between 1:00 and 3:00pm without the students being present. Beginning at 3:00pm, judges will meet with each student and discuss his or her presentation. From each group, the top two poster presentations will be selected. The second round of judging will consist of ten poster presentations, the top two from each group.

Group 1

6
Leah Leonard, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences
*Genotype-by-Diet Interactions for Body Weight in Drosophila melanogaster*

7
Jonathan Belanich, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
*Tarantulas vs. Scorpions: Digestive energetics and efficiencies of drinking versus eating*

8
Chase Golden, Biological Sciences
Faculty Mentor: Ryan Early, Biological Sciences
*Exploring the Salinity Preference of Mangrove Rivulus Fish *Kryptolebias marmoratus*

9
Jonathan Grammer, Biological Sciences
Faculty Mentor: John Clark, Biological Sciences
*The Phylogenetic placement of Lampadaria (Gesneriaceae): an enigmatic plant genus from the New World tropics*

10
Alexandra Waits, Biological Sciences
Faculty Mentor: Ryan Early, Biological Sciences
*Temperature Effects on Sex Steroids and Gene Expression in the Hermaphroditic Fish Kryptolebias marmoratus*

11
Ashley Alexander, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
*Testing the Cooking Hypothesis in Human Evolution*

12
Richard Seeber, Biological Sciences
Faculty Mentor: Ryan Earley, Biological Sciences
*Clones and Crosses: Pursuing the Genetic Basis of Phenotypic Traits in Mangrove Rivulus Fish*

13
Courtney Rentas, Biological Sciences
Faculty Mentor: Kimberlee Caldwell, Biological Sciences
*Phenazines cause toxicity in C. elegans neurological models*
14
**Allison Adams**, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences
*QTL affecting genotype-by-diet interactions of larval triglyceride levels*

15
**Olivia Grubbs**, Biological Sciences  
**Sawyer Mullen**, Biological Sciences
Faculty Mentor: Julie Olson, Biological Sciences  
*Streptomyces species: can those who produce neurodegenerative compounds also help us fight infections?*

16
**Zachary Diltz**, Biological Sciences
Faculty Mentor: Leslie Rissler, Biological Sciences  
*Analysis of Drosophila Niche Modeling*

17
**Luke Bishop**, Biological Sciences
Faculty Mentor: Ryan Earley, Biological Sciences  
*Revealing the Effects of Endocrine Disrupting Compounds on the Behavior and Physiology of Fish: Dose-Response Relationships*

18
**Ruth Bishop**, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences  
*The Roles of Endocannabinoids and Their Chemical Relatives in Drosophila melanogaster Metabolism*

19
**Emily Liang**, Biological Sciences  
**Brian McWilliams**, Biological Sciences
Faculty Mentor: Matthew Jenny, Biological Sciences  
*Age and Sex Effects on Learning and Memory in Zebrafish*

**Group 2**

20
**Joana Hubickey**, Biological Sciences  
**Matt Kieffer**, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences  
*The Effects of Laminin A Mutation on Metabolic Phenotypes in Drosophila melanogaster*

21
**Erin McMinn**, Biological Sciences  
**Emily Peel**, Biological Sciences
Faculty Mentor: Janis O'Donnell, Biological Sciences  
*The Effects of the Common Soil Bacteria, S. venezuelae on Drosophila melanogaster*

22
**Victoria Moore**, Biological Sciences
Faculty Mentor: Jennifer Howeth, Biological Sciences  
*Measuring Seasonal Lake Zooplankton Community Dynamics with Emphasis on Daphnia lumholtzi*
23
Joshua Blackwell, Biological Sciences
Faculty Mentor: Juan Lopez-Bautista, Biological Sciences
*Digitizing the algal herbarium of The University of Alabama*

24
Caitlin Marsh, Biological Sciences
Faculty Mentor: Julie Olson, Biological Sciences
*Diversity of Biosynthetic Genes Associated with Symbiotic Bacterial Communities*

25
Eric Wenzinger, Biological Sciences
Adam Lazarus, Biological Sciences
Faculty Mentor: Janis O'Donnell, Biological Sciences
*Pilot Studies for a Whole Genome Screen for Autism-Related Gene Networks*

26
Meagan Reif, Biological Sciences
Carrie Fisher, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
*Testing the adaptive correlation between feeding habits and digestive physiology for snakes*

27
Danny Laderberg, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
*Carbohydrate breakdown and the regulation of blood glucose for the diamondback water snake*

28
Garrett Diltz, Biological Sciences
Faculty Mentor: Leslie Rissler, Biological Sciences
*The Effect of Incomplete Sampling on Species Tree Accuracy*

29
Tanner Hallman, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences
*Genotype-by-Diet Interaction on Protein normalized Triglyceride levels in Drosophila melanogaster*

30
Ashley Gilchrist, Biological Sciences
Faculty Mentor: Laura Reed, Biological Sciences
*Life History Determinants: Physiological Mechanisms of Egg Dumping in Drosophila melanogaster Using Extreme Phenotypes and Genetic Mapping*

31
Robert Ward, Biological Sciences
Faculty Mentor: Juan Lopez-Bautista, Biological Sciences
*A Molecular Investigation of Distromatic Ulva (Ulrophyceae, Chlorophyta) from Central Chile*

32
Hunter Dean, Biological Sciences
Faculty Mentor: Janis O'Donnell, Biological Sciences
*The Effects of Positively Charged Nanoparticles on Survival and Fertility in Drosophila melanogaster*
33
Samanta Mukkamala, Biological Sciences
Faculty Mentor: Stevan Marcus, Biological Sciences
The huntingtin interacting protein 1 homolog, End4, is essential for mitochondrial stress response induced by the anti-tumor drug avicin G in Schizosaccharomyces pombe

Group 3

34
Haleigh Hulsey, Biological Sciences
Faculty Mentor: Jason Scofield, Human Development and Family Studies
Startle Response to Auditory Stimuli

35
De'Anna Trunnell, Biological Sciences
Ryan Colainni, Biological Sciences
Faculty Mentor: Janis O'Donnell, Biological Sciences
Early Exposure to the Herbicide Paraquat May Increase Risk of Parkinson's Disease

36
Zachary Thomas, Biological Sciences
Alex Uptain, Biological Sciences
Elisa Kahn, Biological Sciences
Faculty Mentor: Janis O'Donnell, Biological Sciences
Modeling abberant behavior of autism spectrum disorder

37
Catherine Cofer, Chemistry
Faculty Mentor: Marco Bonizzoni, Chemistry
Solubilization of hydrophobic molecules by hyperbranched polyelectrolytes

38
Katheryn Adam, Chemistry
Faculty Mentor: Marco Bonizzoni, Chemistry
An off-the-shelf sensing system for physiologically relevant phosphates

39
Maranda Burns, Chemistry
Faculty Mentor: David Dixon, Chemistry
Comprehensive Study of the Bond-dissociation Pathways for Glycine and Alanine Dipeptide Anions and their Corresponding Amides

40
Lynda Truong, Chemistry
Faculty Mentor: Stephen Woski, Chemistry
Cyanocarbazoles as Universal Base Candidates

41
Anthony Curto, Chemistry
Faculty Mentor: Elizabeth Papish, Chemistry
Analysis of Transformation of Iridium Water Oxidation Catalysts - What is the Nature of the True Catalyst?
Morgan Whitaker, Chemistry
Faculty Mentor: David Nikles, Chemistry
*Polymer Coated Magnetic Nanoparticles: Formation and Usage for Cancer Therapy*

Jesse Gettinger, Chemistry
Lindsey Cobb, Chemical and Biological Engineering
Benjamin McCormick, Chemistry
Faculty Mentor: David Nikles, Chemistry
*Drug Binding and Isothermal Release from Polymer Micelles*

Margaret Johnson, Chemistry
Faculty Mentor: David Nikles, Chemistry
*On the Use of Rhodamine B as Nanothermometer to Measure the Local Temperature in Magnetically Heated Polymer Micelles*

Lauren Hagler, Chemistry
Faculty Mentor: Silas Blackstock, Chemistry
*Increasing the Pi Electron Density in a Pyrazole Donor Molecule to Explore its Donor-Acceptor Bonding with Quinones*

Catherine King, Chemistry
Faculty Mentor: Robin Rogers, Chemistry
*Biorenewable Chitin Films from an Ionic Liquid Process as a Platform for Advanced Functional Materials*

Mallory Smith, Chemistry
Faculty Mentor: Paul Rupar, Chemistry
*Boron Containing Fluorenes*

**Group 4**

Peter Mullins, Chemistry
Faculty Mentor: Robin Rogers, Chemistry
*Understanding Amidoxime Selectivity for Uranium through Coordination Studies*

Clarence Mullins, Chemistry
Faculty Mentor: Kevin Shaughnessy, Chemistry
*Design of phosphines as ligands for the palladium-catalyzed arylation of malonates*

Sean Perry, Chemistry
Faculty Mentor: David Nikles, Chemistry
*Synthesis in MnBI Nanoparticles Through A Two-Stage Nucleation Then Growth Mechanism*

Gabrielle Lowrey, Geography
Faculty Mentor: Sagy Cohen, Geography
*Suspended Sediment and Turbidity in the Black Warrior River*
Tanner Howitz, Geological Sciences
Clayton Jernigan, Geological Sciences
Harris Hunter, Geological Sciences
Faculty Mentor: Harold Stowell, Geological Sciences
New Evidence for Loading During Metamorphism of the Emuckfaw Group, Eastern Blue Ridge, Alabama

Parker Baxter, Geological Sciences
Faculty Mentor: Joe Lambert, Geological Sciences
How Stalagmites are Used in Paleoclimate Research in the Southeast (USA)

Patrick Hawkins, Geological Sciences
Bradley Chiri, Geological Sciences
Faculty Mentor: Rona Donahoe, Geological Sciences
Experimental microcosm study of the effects of Deepwater Horizon MC-252 oil and COREXIT 9500 chemical dispersant on the geochemistry of salt marsh seawater

Leighton Wilson, Mathematics
Faculty Mentor: Shan Zhao, Mathematics
An Exploration of Various Operator Splitting Schemes for Solving the Nonlinear Poisson Boltzmann Equation

Emily Schmidt, Physics and Astronomy
Faculty Mentor: Karen Burns, Physics and Astronomy
People.ua.edu

Jonathon Romero, Physics and Astronomy
Faculty Mentor: William Butler, Center for Materials for Information Technology
Formation Energy of Full Heusler Alloys

Sergei Wallace, Physics and Astronomy
Faculty Mentor: Claudia Mewes, Physics and Astronomy
Micromagnetic investigations of spatial fluctuations of the first order perpendicular anisotropy in thin films

Sarah McFann, Chemical and Biological Engineering
Faculty Mentor: Anthony Arduengo, Chemistry
Characterization of Picolinium Quinodimethane under Electro-Optic Device Conditions

Max Mittenthal, Chemical and Biological Engineering
Faculty Mentor: Robin Rogers, Chemistry
Enhanced membrane transport of ionic liquids using a polyethylene glycol based counter-ion
Group 5

61
Charles Millirons, Chemical and Biological Engineering
Faculty Mentor: Ryan Early, Biological Sciences
*Consistent individuals differences in behavior: do certain personalities confer greater fitness?*

62
Amanda Volk, Chemical and Biological Engineering
Faculty Mentor: David Nickles, Chemistry
*Multifunctional Gold Nanoparticles*

63
Kindle Williams, Chemical and Biological Engineering
Katherine Donaldson, Chemical and Biological Engineering
Faculty Mentor: Stephen Woski, Chemistry
*Molecular Electronics: Synthesizing the Technology of the Future*

64
Brian Goodall, Chemical and Biological Engineering
Faculty Mentor: David Nikles, Chemistry
*Isolation of Manganese-Bismuth Nanoparticles for Application in High-Energy Magnets*

65
Jordyn Merriam, Chemical and Biological Engineering
Faculty Mentor: Laura Reed, Biological Engineering
*Effects of the Mediterranean Diet on Metabolic Phenotypes*

66
Abigail Paulson, Chemical and Biological Engineering
Adam Beg, Chemistry
Faculty Mentor: David Nikles, Chemistry
*Magnetic Particles with a Polycaprolactone Coating and Preparation of Magnetic Micelles for Drug Delivery*

67
Danielle Herubin, Chemical and Biological Engineering
Faculty Mentor: David Nikles, Chemistry
*Synthesis of Bismuth-Oxychloride Nanorods and Nanocubes*

68
David Burkhalter, Civil, Construction and Environmental Engineering
Faculty Mentor: Milton Ward, Biological Sciences
*Analysis of The Potential Ecological Impact of Controlled River Water Withdrawals on Floodplain Ecosystems Using 3D Modeling*

69
Nick Johnson, Electrical and Computer Engineering
Faculty Mentor: Claudia Mewes, Center for Materials and Information Technology
*Origin of the Anisotropy in CoFe/MgO Multilayer Structures*

70
Matthew Grybas, Mechanical Engineering
Faculty Mentor: Jeremy Bailin, Physics and Astronomy
*Synthetic Images of Simulated Galaxies*
71
Paul Davis, Mechanical Engineering
Faculty Mentor: David Nikles, Chemistry
Nanotechnology in Knee Surgery

72
Grace Silverstein, Mechanical Engineering
Faculty Mentor: Jeremy Bailin, Physics and Astronomy
Detecting the 3-D Structure of Nearby Galaxies

73
Christine Talley, Human Nutrition and Hospitality Management
Faculty Mentor: Laura Reed, Biological Sciences
Genotype-by-diet interaction effect on blood sugar in Drosophila

74
Cole Buchanan, Biological Sciences
Faculty Mentor: Glenn Davis, Community Health Sciences
Investigating the Effects of Fatigue in Emergency Medical Service Providers

DIVISION OF SOCIAL SCIENCES

SCHEDULE OF ORAL PRESENTATIONS

Smith Board Room

9:00
Trevor Chidester, Anthropology
Faculty Mentor: Keith Jacobi, Anthropology
Denisovans: From a Pinky to a People

9:20
Mark Ortiz, New College
Faculty Mentor: Darren Surman, New College
Resistance Qua Recomposition: Post-Critical Reflections on Non-Capitalist Politics

9:40
Jason Lewis, Political Science
Faculty Mentor: Daniel Levine, Political Science
Negative Externalities and Land Market Operations in Mandate Palestine

10:00
Grace Hoover, Chemical and Biological Engineering
Faculty Mentor: Marisa Giggie, Community Health Sciences
Psychiatric Co-morbidity in Collegiate Recovery Communities
DIVISION OF SOCIAL SCIENCES

LISTING OF POSTER PRESENTATIONS
In the Division of Social Sciences, the presentations have been divided into 3 groups. The initial judging of the poster presentations will take place between 1:00 and 3:00pm without the students being present. Beginning at 3:00pm, judges will meet with each student and discuss his or her presentation. From each group, the top two poster presentations will be selected. The second round of judging will consist of six poster presentations, the top two from each group.

Group 1

75
Jessica Mays, Anthropology
Faculty Mentor: Matthew Wolfram, Anthropology
"The med-science "we" and the pre-med "you": The classroom socialization of pre-med student identity"

76
Theresa Mendez, Anthropology
Faculty Mentor: Matthew Wogram, Anthropology
"That's totally normal!": The discourse of "normal motherhood" in a La Leche League meeting

77
Jonathan Belanich, Anthropology
Faculty Mentor: Christopher Lynn, Anthropology
"Sex and Lies: A Study of Cultural Knowledge and Mating Success"

78
Lauren Nolan, Anthropology
Nathaniel Graham, Anthropology
Faculty Mentor: Christopher Lynn, Anthropology
Religious Signaling and Commitment in the Central Church of Christ in Tuscaloosa

79
Lauren Pratt, Anthropology
Faculty Mentor: Christopher Lynn, Anthropology
Human Evolution at the Hearth: the Relaxation Response and fire's influence on human psychophysiology

80
Cole Cecchini, Biological Sciences
Faculty Mentor: Debra McCallum, Institute for Social Science Research
Helping Children Make Healthy Food Choices: Progressive Agriculture Safety Day Program

81
Yanet Manresa, Biological Sciences
Hillarie James, Biological Sciences
Faculty Mentor: Christopher Lynn, Anthropology
The Effects of Rap Music on Evolutionary Attitudes and Literacy

82
Maxton Thoman, Biological Sciences
Faculty Mentor: John Higginbotham, Community Health Sciences
Fit Sprint: A Healthy Gaming Initiative seeking to contain the spread of Childhood Obesity
Samuel Andersen, Biological Sciences  
Faculty Mentor: Chelley Alexander, Community Health Sciences  
The impact of lay worker education on the frequency of ER visits and hospitalization and use of preventive medication and rescue inhalers in asthma patients

Amy Deeble, Communicative Disorders  
Amy Hase, Human Development and Family Studies  
Faculty Mentor: John Lochman, Psychology  
Fights versus Teases: Exploring how Semantic Changes Affect Survey Results

Marie Tucker, Communicative Disorders  
Faculty Mentor: Angela Barber, Communicative Disorders  
Autism Spelling Project

Bethany Herndon, Criminal Justice  
Jason Atchison, Criminal Justice  
Faculty Mentor: Mark Lanier, Criminal Justice  
The Effects of Prejudice on the Legal System and Conviction Decisions

Group 2

Momoko Suma, Criminal Justice  
Faculty Mentor: Ariane Prohaska, Criminal Justice  
The comparison of the homelessness in Japan and the United States

Eric Roddy, Philosophy  
Faculty Mentor: John Wheat, Community Health Sciences  
Undergraduate Pre-Medical Education Reform

Nick Goga, Political Science  
Faculty Mentor: Dana Patton, Political Science  
Factors Attributing to Diminished Representation of Women in STEM Degree Majors

Chelsea Jarvis, Political Science  
Faculty Mentor: Dana Patton, Political Science  
Sexual Assault at the University of Alabama
91  
**Sam Gerard**, Political Science  
Faculty Mentor: Dana Parson, Political Science  
*Religion And Public Policy: How Abortion Provisions Differ Based On Religiosity Of A Region*

92  
**Justin Heck**, Political Science  
Faculty Mentor: Joseph Smith, Political Science  
*Distinguishing language of Tea Party candidates*

93  
**Katherine Love**, Psychology  
Faculty Mentor: Jeffrey Parker, Psychology  
*The Role of Body Image in Early Adolescents' Vulnerability to Friendship Jealousy and Aggression*

94  
**Laura Smith**, Psychology  
**Katherine Love**, Psychology  
Faculty Mentor: Tricia Witte, Human Development and Family Studies  
*Conceptualizing Nonsuicidal Self-Injury as a Process Addiction*

95  
**Zach Beasley**, Psychology  
**Bryan Poole**, Psychology  
**Sydney Gruber**, Psychology  
Faculty Mentor: Phillip Gable, Psychology  
*Time Perception in Negative Affects: The Role of Motivational Direction*

96  
**Elise Goubet**, Psychology  
Faculty Mentor: Matthew Jarrett, Psychology  
*Hot and Cool Executive Functioning Deficits: Associations with Eating Disorder Symptomatology*

97  
**Caroline Mayberry**, Psychology  
Faculty Mentor: John Lochman, Psychology  
*Leaders in Deviant Peer Groups: A Study In Childhood Characteristics*

98  
**Will Whitham**, Psychology  
Faculty Mentor: Beverly Roskos, Psychology  
*Wayfinding in Urban and Non-Urban Environments*

99  
**Hannah Brewer**, Psychology  
Faculty Mentor: Karen Salekin, Psychology  
*Juror Perception of Culpability and Its Impact on Verdict and Sentencing: Defendants With and Without Intellectual Disability*

100  
**Taylor Peterson**, Psychology  
Faculty Mentor: James Hamilton, Psychology  
*A Text Analysis Study of Illness Narratives in Factitious Disorder*
Group 3

101
Yang Chen, Psychology  
Tenisha Lynch, Psychology  
James Cranford, Psychology  
Kristy Shoji, Psychology  
Caitlin Tighe, Psychology  
Faculty Mentor: Natalie Dautovich, Psychology  
*Tossing and Turning: The Role of Anxious Arousal in Sleep Outcomes*

102
Audrey Gunn, Psychology  
Faculty Mentor: James Hamilton, Psychology  
*Tornado Trouble: The Negative Effects of Avoidant Coping in the Face of a Natural Disaster*

103
Livia Guadagnoli, Psychology  
Faculty Mentor: James Hamilton, Psychology  
The Interaction between Tornado Exposure and Attachment Style on Post-Traumatic Stress Disorder in a College Sample

104
Elizabeth Bistrong, Psychology  
Faculty Mentor: John Lochman, Psychology  
Effects of the April 27, 2011 Tornado on Parental Functioning

105
Katie Kurcharski, Psychology  
Faculty Mentor: James Hamilton, Psychology  
Prevalence of PTSD Among College Students in the Wake of Natural Disasters

106
Meghan Shewmake, Psychology  
Faculty Mentor: James Hamilton, Psychology  
*A Bogus Pipeline Study on Excessive Illness Reporting*

107
Meghan Stallworth, Psychology  
Faculty Mentor: Joan Barth, Institute for Social Science Research  
Classmates, Sisters and Friends: The Effects of Micro Social Systems on Women’s Future Life Goals

108
Sophia Eldred, Psychology  
Faculty Mentor: Angela Barber, Communication Studies  
Patterns of executive function within a college population of students with ASD

109
Jillian Krieger, Psychology  
Juliann Friel, Psychology  
Faculty Mentor: Beverly Thorn, Psychology  
Relationships among pain intensity, vital signs, and psychosocial variables in patients presenting to the Emergency Department for pain

110
Michael Owens, Psychology  
Faculty Mentor: Beverly Thorn, Psychology  
Chronic Pain in Emerging Adults: Perceived Stress and Cytomegalovirus Antibody Titers
111
Hunter Rodriquez, Psychology
Faculty Mentor: William Hart, Psychology
Self-Handicapping Through Feedback Manipulation

112
Hannah Medders, Psychology
Kimberly Still, Psychology
Faculty Mentor: Jason Scofield, Human Development and Family Studies
Language and Shape in Children’s Categorization: A multimodal approach

113
Emily Capps, Psychology
Faculty Mentor: Tricia Witte, Human Development and Family Studies
The Mediation Role of Marital Conflict in the Associations Between Parental Problem Drinking and Children’s Social Information Processing

114
Daniel Klein, Computer Science
Faculty Mentor: Joseph Smith, Political Science
Comparing Supreme Court Opinions Across Time

CULVERHOUSE COLLEGE OF COMMERCE

SCHEDULE OF ORAL PRESENTATIONS

Logan Room

9:00
John Pounders, Economics, Finance and Legal Studies
Faculty Mentor: Susan Chen, Economics, Finance and Legal Studies
The Impact of the Supplemental Nutrition Assistance Program on Elderly Diet Quality

9:20
Neil Chakraborti, Economics, Finance and Legal Studies
Faculty Mentor: David Ford, Management and Marketing
Impact Fees Study

LISTING OF POSTER PRESENTATIONS

1
Jeffrey Wysong, Mathematics
Faculty Mentor: Rob Morgan, Management and Marketing
STEM Student Retention

2
Stephen Allen, Economics, Finance and Legal Studies
Faculty Mentor: Matt Van Essen, Economics, Finance and Legal Studies
Stress Testing a Fundamental Prediction in Game Theory

3
Katherine O’Connor, Economics, Finance and Legal Studies
Faculty Mentor: Matt Van Essen, Economics, Finance and Legal Studies
Economic Experiments of Fair Division
Logan Tarbox, Information Systems, Statistics and Management Science
Elizabeth Roberts, Information Systems, Statistics and Management Science
Faculty Mentor: David Hale, Information Systems, Statistics and Management Science

Alabama Birding Trails Mobile App

Stephanie Morris, Computer Science
Faculty Mentor: Richard Swatloski, Technology Transfer
Database Integration and Data Analysis

COLLEGE OF COMMUNICATION & INFORMATION SCIENCES

SCHEDULE OF ORAL PRESENTATIONS

Group 1  Nichols Room

2:00
Kathryn Taylor, Communication Studies
Faculty Mentor: Meredith Bagley, Communication Studies
Pentadic Criticism: America IS Beautiful

2:20
Kelly Hite, Telecommunications and Film
Spinks Megginson, Telecommunications and Film
Megan Breese, Telecommunications and Film
Katie Malone, Telecommunications and Film
Faculty Mentor: Chandra Clark, Telecommunications and Film
Tuscaloosa Arts and Beverages

2:40
Sarah Elizabeth Tooker, Communication Studies
Mary Sellers Shaw, Communication Studies
Haley White, Communication Studies
Faculty Mentor: Meredith Bagley, Communication Studies
A Campus Culture: Addressing Diversity Issues in the University Greek System

3:00
Victoria Griffiths, Communication Studies
Faculty Mentor: Meredith Bagley, Communication Studies
Why We Work Hard: A commentary on American motivation

3:20
John Brinkerhoff, Communication Studies
Faculty Mentor: Jason Black, Communication Studies
The World’s Great Father: Paternalistic Rhetoric’s Continuities in U.S. Presidential Interventionist Discourse

3:40
Arielle Latiolais, Communication Studies
Faculty Mentor: Meredith Bagley, Communication Studies
Resurrecting the Monster: A Queer Feminist Reading of Disney’s Female Villains
Group 2  Logan Room

2:00
Danielle Springsteen, Telecommunications and Film
Kristen Bolden, Telecommunications and Film
Lauria Jenkins, Telecommunications and Film
Morgan Wagner, Telecommunications and Film
Faculty Mentor: Chandra Clark, Telecommunications and Film
New Media Plan for Red Cross of West Alabama

2:20
Jonathan Norris, Journalism
Faculty Mentor: George Daniels, Journalism
Miss Sorority Row

2:40
Tori Vines, Advertising and Public Relations
Aimee Lindamood, Advertising and Public Relations
Payton Brown, Advertising and Public Relations
Faculty Mentor: Theresa Henley, Advertising and Public Relations
How to Make Mary Kay More Appealing to Women 18-25

3:00
Mary Katherine Patterson, Advertising and Public Relations
Faculty Mentor: Dylan McLemore, Journalism

3:20
Leah Bradford, Telecommunications and Film
Drew Bryant, Telecommunications and Film
Taylor Crosby, Telecommunications and Film
Sarah Hollingsworth, Telecommunications and Film
Faculty Mentor: Chandra Clark, Telecommunications and Film
City of Alberta: Looking to the Future

3:40
Hannah Ward, Telecommunications and Film
Brandon Refour, Telecommunications and Film
Lena Hardy, Telecommunications and Film
Alexis Karr, Telecommunications and Film
Faculty Mentor: Chandra Clark, Telecommunications and Film
Tuscaloosa One Place

LISTING OF POSTER PRESENTATIONS

6
Leigh Rusevlyan, Telecommunication and Film
Danny Ryan, Telecommunication and Film
Faculty Mentor: Rachel Raimist, Telecommunication and Film
Black Warrior Film Festival
7 Morgan Kendrick, Telecommunication and Film
Calvin Ross, Telecommunication and Film
Faculty Mentor: Christina Frantom, Telecommunication and Film
Caption That!

8 Courtney Kaderbek, Telecommunication and Film
Faculty Mentor: Rick Dowling, Telecommunication and Film
Captioning Workflow and Documentation: Research, Comparison, and Best Practices

9 Kelly Ward, Journalism
Faculty Mentor: George Daniels, Journalism
Beat Writer Football Bloggers who "Feed the Beast": A Study of Corporate Strategy in Sports Blogging

10 Leah Dunkel, Telecommunications and Film
Connor Mills, Telecommunications and Film
Shayla Garrett, Telecommunications and Film
Kristina Cruz, Telecommunications and Film
Faculty Mentor: Rachel Raimist, Telecommunications and Film
Capitol School Center for Digital Literacy

11 Joy Harris, Journalism
Shelby Burbach, Theatre and Dance
Morgan Whitten, Art and Art History
Faculty Mentor: Alana Baldwin, Journalism
Accessible Website Design

12 Emmie Bodiford, Journalism
Faculty Mentor: Chip Brantley, Journalism
Anatomy of a Trial

13 Jeyoung Oh, Advertising and Public Relations
Faculty Mentor: Yonghwan Kim, Telecommunications and Film
Digital Publics in Social Movement: How the Public Participates in Gangjeong Movement on Facebook
COLLEGE OF EDUCATION

SCHEDULE OF ORAL PRESENTATIONS

Logan Room

10:30
Allison Stelling, English
Faculty Mentor: Elizabeth Wilson, Curriculum and Instruction
The Effect of Hope on High School Student Achievement and Perspective

10:50
Anna Forrister, Educational Leadership, Policy and Technology Studies
Faculty Mentor: Philo Hutcheson, Educational Leadership, Policy and Technology Studies
A History of Court Cases and School Desegregation in Alabama: All Due Deliberate Speed over the Decades

LISTING OF POSTER PRESENTATIONS

14
Katelyn Moss, Anthropology
Faculty Mentor: Philo Hutcheson, Educational Leadership, Policy and Technology Studies
The Politics of Charter Schools: A Case Study in the State of Alabama

15
Keisha Cook, Mathematics
Faculty Mentor: Elizabeth Wilson, Curriculum and Instruction
The Relationship Between African American K-12 Perceptions and Their Participation in STEM Fields

16
Sydney Page, Political Science
Faculty Mentor: Elizabeth Wilson, Curriculum and Instruction
Assessing Educational Policies Addressing College Preparedness Across The United States

17
Mercedes Hisbrook, History
Faculty Mentor: Sharon Nichols, Curriculum and Instruction
Historical Survey of Past and Current Trends of the Involvement of Women in Physics

18
Phillip Sullivan, Consumer Sciences
Faculty Mentor: Elizabeth Wilson, Curriculum and Instruction
How Generational Cycles Affect Educational Advancement
LISTING OF POSTER PRESENTATIONS

19
Thomas Ludwig, Chemical and Biological Engineering
Faculty Mentor: Heath Turner, Chemical and Biological Engineering
Molecular Simulation of Ionic Liquid-Bismuth Telluride Interfaces

20
Travis Brady, Aerospace Engineering and Mechanics
Faculty Mentor: Vinu Unnikrishnan, Aerospace Engineering and Mechanics
Computational Modeling of Normal and Cancerous Cells

21
Cody Rickard, Mechanical Engineering
Faculty Mentor: Brian Jordon, Mechanical Engineering
Process Effects on the Microstructure and Strength of Dissimilar Friction Stir Welded Aluminum

22
Robert Douglas, Metallurgical and Materials Engineering
Faculty Mentor: Su Gupta, Metallurgical and Materials Engineering
Bit Patterned Media Using Block Copolymer Templating on FePt

23
Mark Koren, Aerospace Engineering and Mechanics
Faculty Mentor: Amy Lang, Aerospace Engineering and Mechanics
Laminar Boundary Layer Growth over Butterfly Scale Inspired Geometries

24
Michael Ikegami, Electrical and Computer Engineering
Faculty Mentor: Dawen Li, Electrical and Computer Engineering
Simulation Study of Inverted Solar Cells Based on Low-Bandgap Polymers

25
Tarif Haque, Computer Science
Chris Chockley, Computer Science
Faculty Mentor: Jeff Gray, Computer Science
Learning Symbolic Hand and Finger Motion Gestures
26
Haoming Yan, Chemical and Biological Engineering
Jia Yue, Chemical and Biological Engineering
Faculty Mentor: Hung-Ta Wang, Chemical and Biological Engineering
Mechanical Property Measurements of Bismuth Telluride Two-Dimensional Nanosheets

27
Rob Grady, Civil, Construction and Environmental Engineering
Faculty Mentor: Zheng O'Neill, Mechanical Engineering
Development of an Energy Model for a UA Residential Hall

28
Cooper Vanjar, Chemical and Biological Sciences
Faculty Mentor: Hung-Ta Wang, Chemical and Biological Engineering
The Thermoelectric Property Characterization of the PEDOT: PSS-Te Nanowire Composite

29
Carson Perrella, Chemical and Biological Engineering
Faculty Mentor: Christopher Brazel, Chemical and Biological Engineering
Polymer-Nanocomposite Gels for Magnetic Heating and Drug Release

30
Andrew Wrist, Aerospace Engineering and Mechanics
Faculty Mentor: Paul Hubner, Aerospace Engineering and Mechanics
A Comparison of Various Free Leading Edge-Membrane Wing Configurations in Low Reynolds Number Flow

31
Samuel Schwarm, Metallurgical and Materials Engineering
Faculty Mentor: Subhadra Gupta, Metallurgical and Materials Engineering
A Statistical Optimization of Perpendicular Anisotropy and Damping for Ta-Inserted Double CoFeB/MgO Interface MTJ's

32
Elizabeth Haley, Capstone College of Nursing
Faculty Mentor: Yonghyun Kim, Chemical and Biological Engineering
Role of Basic Fibroblast Growth Factor in Glioblastoma Stem Cell Expansion

33
Christian Brewton, Computer Science
Anna Zimmerman, History
Faculty Mentor: Stephen Lovell, Computer Science
Determining the Mood of Someone Through Facebook Feeds

34
Joshua Moon, Chemical and Biological Engineering
Faculty Mentor: Christopher Brazel, Chemical and Biological Engineering
Computational Heat Transfer Modeling for Magnetic Hyperthermia Treatment of Cancer

35
Russell Hancock, Mechanical Engineering
Faculty Mentor: Brian Fisher, Mechanical Engineering
Autoignition of n-Heptane in a Direct-Injection Constant-Volume Combustion Chamber
36
Derek Overlock, Computer Science
Lumin Shi, Computer Science
Faculty Mentor: Xiaoyan Hong, Computer Science
Visualizing Underwater Sensor Networks with the Underwater Sensor Network Web Simulator

37
David Roveda, Chemical and Biological Engineering
Faculty Mentor: Jason Bara, Chemical and Biological Engineering
The Synthesis of Rigid Bis(Imidazolium) Polymers for Use as Membranes

38
Claire Harper, Mechanical Engineering
Julia Rozanski, Mechanical Engineering
Faculty Mentor: Marcus Ashford, Mechanical Engineering
Characterization of Exotic Alternative Fuels

39
Michael Carton, Metallurgical and Materials Engineering
Faculty Mentor: Su Gupta, Metallurgical and Materials Engineering
Combined interface and bulk anisotropy free layers for MgO based MTJ

40
Samantha Tilson, Chemical and Biological Engineering
Faculty Mentor: Yonghyun Kim, Chemical and Biological Engineering
The Effect of Y-27632 on the Propagation of Cancer Stem Cells

41
Matthew Rodriguez, Computer Science
Faculty Mentor: Richard Swatloski, Technology Transfer
Data Mining of Technology Transfer Information

42
Drew Lansdell, Civil, Construction and Environmental Engineering
Faculty Mentor: Wei Song, Civil, Construction and Environmental Engineering
Bridge Weigh-In-Motion using Finite Element Analysis

43
Megan Hathcock, Mechanical Engineering
Faculty Mentor: Paulius Puzinauskas, Mechanical Engineering
Electronic Throttle Control

44
Nicholas Davies, Mechanical Engineering
Faculty Mentor: Eric Giannini, Civil, Construction and Environmental Engineering
An App for Concrete Mixture Design

45
Alexander Jenkins, Chemical and Biological Engineering
Faculty Mentor: Jason Bara, Chemical and Biological Engineering
3-D Printing for CO2 Capture and Chemical Engineering Design
46
Nikolaus Luhrs, Electrical and Computer Engineering
Gatlin LaRochelle, Electrical and Computer Engineering
Faculty Mentor: Yang-Ki Hong, Electrical and Computer Engineering
UHF Ferrite Antenna for Unmanned Aerial Vehicle (UAV) Applications

47
Gregory Cabot, Electrical and Computer Engineering
Vaishali Batra, Electrical and Computer Engineering
Samantha McPeak, Electrical and Computer Engineering
Faculty Mentor: Susha Kotru, Electrical and Computer Engineering
Labview Programming for Research Analysis

48
James Koch, Mechanical Engineering
Faculty Mentor: Marcus Ashford, Mechanical Engineering
Developing Mixed-Mode Internal Combustion Technology

49
Michael Aston Raddatz, Chemical and Biological Engineering
Faculty Mentor: Yonghyum Kim, Chemical and Biological Engineering
Membrane Proteomics of Fluid Shear Stress-Resistant Leukemia Stem Cells

50
Tina Sheikhzeinoddin, Civil, Construction and Environmental Engineering
Owen Killeen, Civil, Construction and Environmental Engineering
Faculty Mentor: Eric Giannini, Civil, Construction and Environmental Engineering
Better Bamboo Bikes

51
Zach Thompson, Metallurgical and Materials Engineering
Faculty Mentor: Greg Thompson, Metallurgical and Materials Engineering
Site-Specific Sample Extraction Using a Focused Ion Beam for Atom Probe Tomography

52
Owen Killeen, Civil, Construction and Environmental Engineering
Nathan Klenke, Civil, Construction and Environmental Engineering
Faculty Mentor: Eric Giannini, Civil, Construction and Environmental Engineering
Advancement of a Rapid Concrete Durability Test

53
John Hunt, Mechanical Engineering
Faculty Mentor: Keith Williams, Mechanical Engineering
Controlled Distribution of Ionic Liquids

54
Huston Rogers, Electrical and Computer Engineering
Faculty Mentor: Keith Williams, Mechanical Engineering
Modernization of Previously Obsolete Industrial Robots

55
Brent Chester, Electrical and Computer Engineering
Faculty Mentor: David Nikles, Chemistry
The Impact of Nanotechnology on the Food Industry
Caitlin Hanley, Computer Science
Faculty Mentor: Monica Anderson, Computer Science
Event-Driven Programming Environment for FINCH Robots

Hannah Bowers, Chemical and Biological Engineering
Faculty Mentor: Margaret Liu, Chemical and Biological Engineering
High-Level Expression of Targeted Anti-Cancer Biopharmaceuticals Using CHO Cell

Meghan Wilgus, Information Systems, Statistics and Management Services
Benjamin Romano, Computer Science
Luke Colburn, Computer Science
Faculty Mentor: Chris Sims, Computer Science
Severe Weather Training and Familiarization Using Virtual Reality Technology

COLLEGE OF HUMAN ENVIRONMENTAL SCIENCES

LISTING OF POSTER PRESENTATIONS

Samantha LaManna, Clothing, Textiles and Interior Design
Bria Robinson, Clothing, Textiles and Interior Designs
Casey Straughn, Clothing, Textiles and Interior Designs
Faculty Mentor: Marcy Kootz, Clothing, Textiles and Interior Designs
The "Carrie Project"

Kristen Guenther, Human Nutrition and Hospitality Management
Katherine Boles, Human Nutrition and Hospitality Management
Mary Hales, Human Nutrition and Hospitality Management
Jourdann Rhodes, Human Nutrition and Hospitality Management
Faculty Mentor: Lori Greene, Human Nutrition and Hospitality Management
Minority, Low-Socioeconomic Status Associated with Diabetes Risk; A Review

Molly Neeb, Human Nutrition and Hospitality Management
Becky McGuigan, Human Nutrition and Hospitality Management
Kaylie Booth, Human Nutrition and Hospitality Management
Cindy DeVoe, Human Nutrition and Hospitality Management
Sidney Smith, Human Nutrition and Hospitality Management
Faculty Mentor: Lori Greene, Human Nutrition and Hospitality Management
Exploring Nutritional Interventions and Their Impact on the Quality of Diet in College Students

Madden Hogan, Human Nutrition and Hospitality Management
Mary Garner, Human Nutrition and Hospitality Management
Hannah Grogan, Human Nutrition and Hospitality Management
Holly Klotzly, Human Nutrition and Hospitality Management
Faculty Mentor: Lori Greene, Human Nutrition and Hospitality Management
Sensory Nutrition Education as a Primary Learning Method for Children: A Review
Michelle Meadows, Human Nutrition and Hospitality Management
Carlie Robertson, Human Nutrition and Hospitality Management
Kyle Parker, Human Nutrition and Hospitality Management
Margit Sample, Human Nutrition and Hospitality Management
Faculty Mentor: Lori Greene, Human Nutrition and Hospitality Management
*Diet Trends, Food Availability, and Obesity Risk among Low-Income, Minority Children: A Review*

Jordan Stone, Human Development and Family Studies
Faculty Mentor: Tricia Witte, Human Development and Family Studies
*Attitudes Toward Dating Violence Among College Students*

Brent Strickland, Health Science
Derek Owen, Health Science
Faculty Mentor: Lori Turner, Health Science
*Careers in Health Education and Health Promotion*

Elizabeth Russell, Human Development and Family Studies
Shannon Mysak, Human Development and Family Studies
Faculty Mentor: Maria Hernandez-Reif, Human Development and Family Studies
*Comparison of Feeding Behaviors Between Breastfed and Bottlefed Infants*

Demi Eckhoff, Human Nutrition and Hospitality Management
Faculty Mentor: Amy Ellis, Human Nutrition and Hospitality Management
*Understanding Resting Energy Expenditure Differences in Individuals with Duchenne Muscular Dystrophy: A Literature Review*

Kaitlyn Robinson, Human Development and Family Studies
Kelly Wilson, Human Development and Family Studies
Faculty Mentor: Maria Hernandez-Reif, Human Development and Family Studies
*Cortisol (stress hormone) levels from 6 months to 1 year and their relation to infant and toddler development*

Kelli Reese, Health Sciences
Laura Freeman, New College
Faculty Mentor: Pamela Payne-Foster, Community Health Sciences
*An Innovative Model to Recruit Rural Persons Living With HIV/AIDS into a Faith-Based Research Study*

Jessica Smith, Human Nutrition and Hospitality Management
Faculty Mentor: Amy Ellis, Human Nutrition and Hospitality Management
*Optifast: More than just a weight loss solution.*

Sarah Tharani, Health Sciences
Alex Clausen, Biological Sciences
Faculty Mentor: Jason Scofield, Human Development and Family Studies
*Children's Trust in Testimony in the Formation of Opinions*
SCHEDULE OF ORAL PRESENTATIONS

Nichols Room

9:45
Liz Alley, Information Systems, Statistics and Management Science
Spencer Baer, Computer Science
Faculty Mentor: Felicia Wood, Capstone College of Nursing
Diabetes101: an iOS application

LISTING OF POSTER PRESENTATIONS

74
Karis Dison, Capstone College of Nursing
Danielle Drews, Capstone College of Nursing
Matthew Dodson, Capstone College of Nursing
Victoria Eatmon, Capstone College of Nursing
Veronica DiChiara, Capstone College of Nursing
Stephanie DiChiara, Capstone College of Nursing
Erin Dittrich, Capstone College of Nursing
Faculty Mentor: Paige Johnson, Capstone College of Nursing
Promoting Change One Grocery List at a Time

75
Alina Wilhelm, Capstone College of Nursing
Lesley Wildes, Capstone College of Nursing
Emily Williams, Capstone College of Nursing
Hannah Williams, Capstone College of Nursing
Leah York, Capstone College of Nursing
Koury Young, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing
Lack of Access to Healthcare in Windham Springs, AL

76
Emma Harms, Capstone College of Nursing
Paige Henderson, Capstone College of Nursing
Camille Hayes, Capstone College of Nursing
Alayna Hinton, Capstone College of Nursing
Bethany Holley, Capstone College of Nursing
Victoria Henderson, Capstone College of Nursing
Sean Jackson, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing
Who's Your Doc?

77
Tommi Walters, Capstone College of Nursing
AuBrey West, Capstone College of Nursing
Blake Stafford, Capstone College of Nursing
Claire Turner, Capstone College of Nursing
Morgan Todd, Capstone College of Nursing
Ellen Wills, Capstone College of Nursing
Jami Stehlin, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing
Access to Healthy Lifestyle Choices
Karis Dison, Capstone College of Nursing
Faculty Mentor: Leigh Tubbs, Capstone College of Nursing

Tiny Toes, Tiny Nose, Tiny Pain? A Review of Pain Control in the Neonatal Intensive Care Unit

Katy Frazier, Capstone College of Nursing
Mary Halles, Capstone College of Nursing
Katie Gouse, Capstone College of Nursing
Brooke Hansen, Capstone College of Nursing
Kinsley Fowler, Capstone College of Nursing
Ann Francis, Capstone College of Nursing
Mary Feelings, Capstone College of Nursing
Faculty Mentor: Paige Johnson, Capstone College of Nursing

Elrod-Moores Bridge-Echola Community Assessment

Alex Bullough, Capstone College of Nursing
Paul Brooks, Capstone College of Nursing
Morgan Buko, Capstone College of Nursing
Meagan Busby, Capstone College of Nursing
Morgan Canada, Capstone College of Nursing
Julie Anna Bonfield, Capstone College of Nursing
Courtney Carroll, Capstone College of Nursing
Faculty Mentor: Paige Johnson, Capstone College of Nursing

Educating Brookwood about Nutrition

Lauren Northcutt, Capstone College of Nursing
Kaitlyn O’Brien, Capstone College of Nursing
Maura Owens, Capstone College of Nursing
Brooke Nail, Capstone College of Nursing
Lindsey Myers, Capstone College of Nursing
Mallory Nelson, Capstone College of Nursing
Shelby Morgan, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing

Traumatic Rates of Infant Mortality in Northport, Alabama

Jordain Rutherford, Capstone College of Nursing
Kilee Saxe, Capstone College of Nursing
Heather Samford, Capstone College of Nursing
Rachael Schiller, Capstone College of Nursing
Lauren Rollings, Capstone College of Nursing
Emily Shurden, Capstone College of Nursing
Jeremy Rosen, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing

Adult Obesity In Tuscaloosa County
83
Yesenia Rivera, Capstone College of Nursing
Zoe Pappas, Capstone College of Nursing
Natalie Perry, Capstone College of Nursing
Maggie Pilsch, Capstone College of Nursing
Ashley Polk, Capstone College of Nursing
Tiffany Rattery, Capstone College of Nursing
Catherine Raulston, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing
Samantha, Alabama: A Focus on Nutrition

84
Ali Anderson, Capstone College of Nursing
Emily Bates, Capstone College of Nursing
Jeremy Blount, Capstone College of Nursing
Sarah Blalock, Capstone College of Nursing
Lindsey Badham, Capstone College of Nursing
Hannah Bishop, Capstone College of Nursing
Katherine Barhydt, Capstone College of Nursing
Faculty Mentor: Paige Johnson, Capstone College of Nursing
Childhood Obesity: An Interactive Approach for Parents & Children

85
Jessica Crook, Capstone College of Nursing
Chelsea Costley, Capstone College of Nursing
Lee Chatham, Capstone College of Nursing
Brandon Caldwell, Capstone College of Nursing
Katie Cox, Capstone College of Nursing
Gracie Davis, Capstone College of Nursing
Alyson Crook, Capstone College of Nursing
Faculty Mentor: Paige Johnson, Capstone College of Nursing
Improving Nutritional Education for Children in Coaling, Alabama

86
Marrisa Marshall, Capstone College of Nursing
Maria Mizerany, Capstone College of Nursing
Kayla Manning, Capstone College of Nursing
Raven McWilliams, Capstone College of Nursing
Amanda Morgan, Capstone College of Nursing
Megan Minter, Capstone College of Nursing
Charla McWilliams, Capstone College of Nursing
Faculty Mentor: Michele Montgomery, Capstone College of Nursing
Accidental Poisoning: Lake View, Alabama
Patrick Joswick, Capstone College of Nursing
Stephanie Kinsey, Capstone College of Nursing
Alexandra Leonelli, Capstone College of Nursing
Hillary Lowery, Capstone College of Nursing
Natalie Littleton, Capstone College of Nursing
Kathryn Knebel, Capstone College of Nursing
Jodi Long, Capstone College of Nursing
Faculty Mentor: Paige Johnson, Capstone College of Nursing
Substance Abuse among Adolescents in the Holt Community

Al-Karim Gilani, Chemical and Biological Engineering
Faculty Mentor: Cassandra Ford, Capstone College of Nursing
Barriers and Facilitators to HIV/AIDS Management

SCHOOL OF SOCIAL WORK

SCHEDULE OF ORAL PRESENTATIONS

Nichols Room

9:00
Érica Sucher, School of Social Work
Faculty Mentor: Javonda Williams, School of Social Work
The Power of Stigma: Correlates of HIV Positive Inmate Segregation among the Recidivism and Occupancy Rates in Alabama Prisons

LISTING OF POSTER PRESENTATIONS

Regina Williams, School of Social Work
Jeremy Howard, School of Social Work
Faculty Mentor: Javonda Williams, School of Social Work
Oppression is Linked: Issues facing the general LGBT population

EMERGING SCHOLARS

DIVISION OF FINE ARTS & HUMANITIES

SCHEDULE OF ORAL PRESENTATIONS

Birmingham Room

2:00
Caitlin Smith, English
Faculty Mentor: Albert Pionke, English
Tennyson's In Memoriam and Digitalizing Bibliography
2:20
Erin Cain, Political Science
Faculty Mentor: Ana Corbalan, Modern Language and Classics
Growing Up in Armed Conflict: Children in Latin American and Spanish War Films

2:40
Taylor Sheeran, English
Faculty Mentor: Amy Dayton, English
Oral Histories: Research Through Storytelling

3:00
Rebecca Kerley, Modern Languages and Classics
Faculty Mentor: Ana Corbalan, Modern Language and Classics
Women’s struggle for equality in the midst of the Spanish Civil War

3:20
Alexandra Harris, Philosophy
Faculty Mentor: Rekha Nath, Philosophy
The Implication of Act Consequentialism for Moral Vegetarianism

3:40
Hannah Russell, English
Faculty Mentor: James Crank, English
The Unpublished Works of James Agee

4:00
Ellisa Bray, Journalism
Faculty Mentor: George Daniels, Journalism
The "Black Twitter" Phenomenon

4:20
Shae Tate, Clothing, Textiles and Interior Design
Faculty Mentor: Lauren Cardon, English
“Fashion in the Land of the Free”

LISTING OF POSTER PRESENTATIONS

ES1
Mitchell Griest, Computer Science
Faculty Mentor: Andy Fitch, Theatre and Dance
Theatrical Set Design: Important Roles, Procedures, and Techniques

ES2
Emily Vork, History
Faculty Mentor: Joshua Rothman, History
Individuality of Slaves in Runaway Advertisements

ES3
Abigail Gandy, Theatre and Dance
Faculty Mentor: Randy deCelle, Theatre and Dance
Stage Management - A Handbook
ES4
Adam Seltzer, History
Faculty Mentor: Andrew Huebner, History
Print Media and its use in selling World War One to the American Public

ES5
Raven Sanders, Psychology
Faculty Mentor: Jennifer Roth-Burnette, New College
Rhetorical Structure, Personal Experience, and Scriptural Narrative: Meaning in the Early African American Spiritual

ES6
Kelly Hunter, Communicative Disorders
Faculty Mentor: Rachel Saffo, Communicative Disorders
Cultural Effects on Parent-Child Interactions

ES7
Ryan Parker, Economics, Finance and Legal Studies
Faculty Mentor: Kenneth Ehrenberg, Philosophy
The Functions of Law

DIVISION OF SCIENCE, MATHEMATICS & ENGINEERING

SCHEDULE OF ORAL PRESENTATIONS

Smith Board Room

2:00
Erin Hein, Chemistry
Faculty Mentor: Laura Busenlehner, Chemistry
The Effects of Mutation on Frataxin Metal Binding and Iron-Sulfur Cluster Synthesis

2:20
Carrie Clower, Geological Sciences
Faculty Mentor: Natasha Dimova, Geological Sciences
Radionuclides in Drinking Water

2:40
Demetrius Edwards, New College
Faculty Mentor: Rick Swatloski, Technology Transfer
Marketing the "Goods": An Analysis of Ideas Succeeding on the Market

LISTING OF POSTER PRESENTATIONS

ES8
Kaitlin Carlson, Chemical and Biological Engineering
Faculty Mentor: Yuping Bao, Chemical and Biological Engineering
Gold Nanoparticles as Biosensing Agents

ES9
Kyle Miskell, Electrical and Computer Engineering
Faculty Mentor: Paolo Rumerio, Physics and Astronomy
900GeV Leptoquark Invariant Mass Reconstruction: A ROOT Analysis of Monte Carlo Jet-Lepton Pair Production
ES10
Jack Ferro, Biological Sciences
Faculty Mentor: Ryan Earley, Biological Sciences
Sex differences in behavior-physiology relationships in mangrove rivulus fish

ES11
Daniel Patterson, Chemistry
Faculty Mentor: Daniel Goebbert, Chemistry
Locating Proton Positions in the Dendrimer PAMAM

ES12
Nicholas Dahl, Electrical and Computer Engineering
Faculty Mentor: Jeff Gray, Computer Science
Image Steganography

ES13
Celia Rudd, English
Faculty Mentor: Pauline Johnson, Civil, Construction and Environmental Engineering
Blackbelt Bamboo: Blessing or Blight?

ES14
Genevieve Miller, Biological Sciences
Faculty Mentor: Ryan Earley, Biological Sciences
Uncovering the Mechanism of Heterozygosity in the Mangrove Rivulus

ES15
Patrick Zetterholm, Chemical and Biological Engineering
Faculty Mentor: David Dixon, Chemistry
Computational Studies of Trimethylene Glycol Conversion on a (WO3)3 Nanocluster

ES16
Nicole Chambers, Chemistry
Faculty Mentor: Elizabeth Papish, Chemistry
When you add an electron to Triazole Based Copper Compounds Where does it Go? A Study Relevant to Enzymatic Nitrite Reduction

ES17
Lauren Loeb, Biological Sciences
Alora Terry, Biological Sciences
Faith Lancaster, Biological Sciences
Faculty Mentor: Margaret Johnson, Biological Sciences
In Vitro Transcription and Translation Detects HES-1 Binding Sites in the Promoter of myo-Inositol 1-Phosphate Synthase

ES18
Jacob Ejnes, Geological Sciences
Faculty Mentor: Fred Andrus, Geological Sciences
Mineralogical Examination for Evidence of Aragonite in the Resilifer of Crassostrea Virginianca

ES19
Sydney Kopelic, Biological Sciences
Faculty Mentor: Ryan Earley, Biological Sciences
Salinity Induced Developmental Plasticity in Kryptolebias marmoratus
ES20
Jared Beach, Computer Science
Faculty Mentor: Jeff Gray, Computer Science
*Leap Motion Controller Impact On Digital Music and Music Education*

ES21
Tyler Campman, Chemical and Biological Engineering
Faculty Mentor: Heath Turner, Chemical and Biological Engineering
*Physical Representation of Molecules using Rapid Prototyping*

ES22
Autumn Robinson, Human Development and Family Studies
Alex Heldman, Kinesiology
Faculty Mentor: Jonathan Wingo, Kinesiology
*Effect of Acute Fan Cooling on Maximal Oxygen Uptake During Heat Stress*

ES23
Matthew Baird, Computer Science
Faculty Mentor: Jeff Gray, Computer Science
*Using the Pebble Smart Watch to Automate Hospital Care*

ES24
Allyson Liu, Biological Sciences
Faculty Mentor: Stevan Marcus, Biological Sciences
*Huntingtin interacting protein ortholog, End4, has a role in maintaining mitochondrial organization in the fission yeast, Schizosaccharomyces pombe.*

ES25
Miles Marquette, Biological Sciences
Faculty Mentor: Dana Ehret, Biological Sciences
*Pathologies Associated with Late Cretaceous Shark Teeth*

ES26
Danielle D’Erminio, Chemistry
Faculty Mentor: Patrick Frantom, Chemistry
*The Characterization of alpha-Isopropylmalate synthase from Francisella novicida*

ES27
Shanna Phillips, Chemistry
Faculty Mentor: Stephen Woski, Chemistry
*Synthesis of Modified Carotenoid Dyes for Solar Cell Applications*

ES28
Gabriel Ward, Geological Sciences
Faculty Mentor: Sandy Ebersole, Geological Sciences
*A Study of Paleozoic Ecology from the Lower Bangor Limestone*

ES29
Kaitlyn Dunivan, Civil, Construction and Environmental Engineering
Joanna Urli, Chemical and Biological Engineering
Michael Leffler, Chemical and Biological Engineering
Faculty Mentor: Margaret Liu, Chemical and Biological Engineering
*Improvement of Biopharmaceuticals Production by Cell Line Development*
ES30
Samuel Jones, Biological Sciences
Faculty Mentor: Robert Findlay, Biological Sciences
*Stable Isotope Analysis of N-15 in Daphnia*

ES31
Dustin Bennett, Computer Science
Faculty Mentor: John Lusth, Computer Science
*Development of an Open-Source Auto-tuning Program*

ES32
Jaclyn Schillinger, Physics and Astronomy
Faculty Mentor: Jerry Busenitz, Physics and Astronomy
*Americium-Lithium Slow Neutron Source*

ES33
Eric Terrell, Chemical and Biological Engineering
Faculty Mentor: David Dixon, Chemistry
*Role of Ligand Conformations in the Structure and Reactivity of Palladium-Phosphine Catalysts*

ES34
Timothy Traw, Mechanical Engineering
Faculty Mentor: Keith Williams, Mechanical Engineering
*Challenges of Panoramic Photography*

ES35
Matthew Mercatante, Mechanical Engineering
Faculty Mentor: Ajay Agrawal, Mechanical Engineering
*Development of Flow-Blurring Fuel Injector for High Pressure Usage*

ES36
Donald King, Computer Science
Faculty Mentor: Jaber Abu-Qahouq, Electrical and Computer Engineering
*Wireless Power Transfer*

ES37
Sawyer Foyle, Chemistry
Faculty Mentor: Keith Jacobi, Anthropology
*GCMS Analysis of Synthetic Cadaver Dog Training Scents*

ES38
Jocelyn Newman, Chemistry
Faculty Mentor: Martin Bakker, Chemistry
*Formation and Catalytic Activity of Nickel Nanoparticles Supported on Porous Carbons*

ES39
Rachel Stewart, Computer Science
Faculty Mentor: Jeff Gray, Computer Science
*Mobile Computing for Autistic Young Adults*

ES40
Brendan Clair, Mathematics
Faculty Mentor: Jonathan Wingo, Kinesiology
*Effect of Ice Slurry Ingestion on Thermoregulation during Exercise with Protective Garments in a Hot Environment*
ES41
Aaron Minton, Aerospace Engineering and Mechanics
Faculty Mentor: Vinu Unnikrishnan, Aerospace Engineering and Mechanics
Computational Analysis of Carbon Nanotubes

ES42
Alexander Wolf, Economics, Finance and Legal Studies
Faculty Mentor: Margaret Liu, Chemical and Biological Engineering
Butanol Production by Metabolic Engineered C. tyrobutyricum

ES43
William Hampton, Computer Science
Faculty Mentor: Monica Anderson, Computer Science
Robotic Dead-drops

ES44
Derek Duncan, Electrical and Computer Engineering
Nathaniel Barr, Electrical and Computer Engineering
Faculty Mentor: Susan Burkett, Electrical and Computer Engineering
A Natural Alternative to Conventional Solar Cells

ES45
Ryan Van Voorhis, Physics and Astronomy
Faculty Mentor: Jerome Busenitz, Physics and Astronomy
Lux Zeplin Material Screening Database

ES46
Katie Cater, Biological Sciences
Faculty Mentor: Patricia Sobecky, Biological Sciences
Phosphate-solubilizing bacteria isolated from metal and radionuclide contaminated soil

ES47
Matthew Padgett, Metallurgical and Materials Engineering
Faculty Mentor: Greg Thompson, Metallurgical and Materials Engineering
The Phase Stability in a 50.3Ni-48.7Ti-1Hf (at.%) Shape Memory Alloy

ES48
Alexis Cunningham, Chemical and Biological Engineering
Faculty Mentor: Shane Street, Chemistry
Raman Spectroscopy of Hydrogen Storage in Ammonia Boranes

ES49
Elaine Hanby, Biological Sciences
Faculty Mentor: Jennifer Howeth, Biological Sciences
Effects of Dispersal and Invasion on Pond Community Structure and Ecosystem Function

ES50
Dalton Ford, Chemical and Biological Engineering
Faculty Mentor: Patrick Frantom, Chemistry
Synthesis of MtPMS Variants to Determine the Catalytic Base

ES51
Ryan Scalf, Mechanical Engineering
Faculty Mentor: Kevin Chou, Mechanical Engineering
Exploring 3D Printing
ES52
Dylan Coley, Civil, Construction and Environmental Engineering
Katie Hiles, Civil, Construction and Environmental Engineering
Lauren Lott, Civil, Construction and Environmental Engineering
Madeleine Lewis, Civil, Construction and Environmental Engineering
Faculty Mentor: Glenn Tootle, Civil, Construction and Environmental Engineering
Area Change of Wind River Range Glaciers

ES53
Michael Susa, Mechanical Engineering
Faculty Mentor: Jaber Abu-Quhouq, Electrical and Computer Engineering
Fabrication and Characterization of Power Inductors

ES54
Ryan Patton, Aerospace Engineering and Mechanics
Faculty Mentor: John Baker, Aerospace Engineering and Mechanics
Logistics Maps: Modeling Complex Physical Phenomena Using Simple Algebraic Models

ES55
Ian Prado, Physics and Astronomy
Tyler Speegle, Physics and Astronomy
David Mildebrath, Physics and Astronomy
Faculty Mentor: Jimmy Irwin, Physics and Astronomy
Searching for the Invisible

ES56
Amy Puente, Geological Sciences
Faculty Mentor: Natasha Dimova, Geological Sciences
Development of a Tracer Technique to Evaluate Drip Rates in Caves Using Radon-222

ES57
Davis Diamond, Biological Sciences
Faculty Mentor: Stephen Secor, Biological Sciences
The Impact of Prey Dimension on Digestion

ES58
Evan Phillips, Electrical and Computer Engineering
Joshua Stoddard, Electrical and Computer Engineering
Faculty Mentor: Shuhui Li, Electrical and Computer Engineering
Vector Control Using Artificial Neural Networks for Electric Power and Energy Systems

ES59
Harrison Lanum, Metallurgical and Materials Engineering
Faculty Mentor: Lin Li, Metallurgical and Materials Engineering
Design Tougher Metallic Glass Utilizing Multi-scale Modeling Techniques

ES60
Coady Latimer, Geography
Faculty Mentor: Jason Senkbeil, Geography
Sea Breeze Effects on Coastal Alabama Rainfall

ES61
Ryan Weiner, Aerospace Engineering and Mechanics
Faculty Mentor: Semih Olcmen, Aerospace Engineering and Mechanics
Axisymmetric Cavity Flow
ES62
Jeannie Marshall, Chemical and Biological Engineering
Frank Foley, Chemical and Biological Engineering
Faculty Mentor: Jason Bara, Chemical and Biological Engineering
The Properties of Imidazole Derivatives in CO2 Capture

ES63
Matthew Bries, Electrical and Computer Engineering
Faculty Mentor: Edward Sazonov, Electrical and Computer Engineering
Impedance Based Food Nutritional Analysis

ES64
Samuel Scopel, Biological Sciences
Faculty Mentor: Guy Caldwell, Biological Sciences
Extrachromosomal Array Integration

ES65
Michael Coffey, Electrical and Computer Engineering
Faculty Mentor: Edward Sazonov, Electrical and Computer Engineering
Wearable Devices and Their Design

ES66
Darrell Forest, Mechanical Engineering
Faculty Mentor: Xiangrong Shen, Mechanical Engineering
Engineers of the Future

ES67
Jacob Tucker, Mechanical Engineering
Faculty Mentor: Zheng O'Neill, Mechanical Engineering
Energy Models of Campus Buildings

DIVISION OF SOCIAL & BEHAVIORAL SCIENCES, BUSINESS & EDUCATION
SCHEDULE OF ORAL PRESENTATIONS

Central Bank Room

2:00
Ola Gerald, Curriculum and Instruction
Faculty Mentor: Sharony Green, History
Life after Emancipation: Freedom as seen through the lives and correspondence of Wesley and Thomas Townsend

2:20
Tatum Roessler, Advertising and Public Relations
Faculty Mentor: Regina Lewis, Advertising and Public Relations
Athletes and Twitter: The Dialogic Principle

2:40
Mackenzie Ross, Advertising and Public Relations
Faculty Mentor: Margot Lamme, Advertising and Public Relations
Mrs. "Bear": Mary Harmon Bryant
3:00
Runqiu (Candice) Ji, Management and Marketing
Faculty Mentor: Regina Lewis, Advertising and Public Relations
*Exploration of Women's Attitudes Towards Mobile Life: China & U.S.*

3:20
Anna Claire Smith, Information Systems, Statistics and Management Science
Faculty Mentor: David Hale, Information Systems, Statistics and Management Science
*Alabama Outdoor Trails Website*

3:40
Kaitlyn Herbert, Advertising and Public Relations
Faculty Mentor: Regina Lewis, Advertising and Public Relations
*Android Versus iPhone*

4:00
Ashley Brown, Economics, Finance and Legal Studies
Faculty Mentor: Rachel Frazier, AIME
*Determining Potential Profitability and Success of UA High Tech Spinoff Companies*

4:20
Grant Hughes, Information Systems, Statistics and Management Science
Faculty Mentor: David Hale, Information Systems, Statistics and Management Science
*The Applications of Information Technology and Website Design*

4:40
Brady Palmer, Modern Languages and Classics
Faculty Mentor: Dilin Liu, English
*A Corpus-Based Study of Terrorism in American English*

**LISTING OF POSTER PRESENTATIONS**

ES68
Rachel Burton, Theatre and Dance
Faculty Mentor: Angela Barber, Communicative Disorders
*Perceptions and Experiences of College Students who Have Autism*

ES69
MaryPat Peeples, Consumer Sciences
Faculty Mentor: Melissa Wilmarth, Consumer Sciences
*An Examination of Americans' Time Spent in Financial Management*

ES70
Michelle Weyhaupt, Psychology
Faculty Mentor: Alexa Tullett, Psychology
*Personality and Frontal Asymmetry*

ES71
Magdalena Chavez, Human Development and Family Studies
Caroline Jones, Human Development and Family Studies
Faculty Mentor: Sherwood Burns-Nader, Human Development and Family Studies
*iPad: A Tool for Distraction in Children Receiving an Immunization*
ES72
Mary McBryde, Management and Marketing
Faculty Mentor: Kristy Reynolds, Management and Marketing
Calorie Postings in Dining Experiences

ES73
Mikaela Becker, Human Development and Family Studies
Faculty Mentor: Matthew Jarrett, Psychology
Attention-Deficit/Hyperactivity Disorder (ADHD) and Comorbid Anxiety: Associations with Academic Functioning in College Students

ES74
Laura Prehn, Communicative Disorders
Faculty Mentor: Anthony Buhr, Communicative Disorders
Dramatic Experience for Treating Children with ASD

ES75
Allyson Pitzel, Curriculum and Instruction
Faculty Mentor: Lee Freeman, Curriculum and Instruction
The Impact of Professional Development for Implementation of New Standards (a study in progress)

ES76
Allison Richard, Biological Sciences
Faculty Mentor: Ansley Gilpin, Psychology
Fantasy Orientation in Child Development

ES77
Madeleine Hull, Biological Sciences
Faculty Mentor: Matthew Jarrett, Psychology
Attention-Deficit/Hyperactivity Disorder (ADHD) and Comorbid Anxiety: Associations with Co-Occurring Symptomatology, Executive Functioning, and Impairment

ES78
Deanna Bowen, Journalism
Faculty Mentor: Kimberly Bissell, Journalism
Using New Media Technologies to Reduce Health Disparities and Obesity in Rural Alabama Children.

ES79
Ally Mitchell, Communicative Disorders
Faculty Mentor: Anthony Buhr, Communicative Disorders
Influence Of Attention To Self On Fluency

ES80
Tyler Sullivan, Geological Sciences
Faculty Mentor: Adam Lankford, Criminal Justice
An Analysis of School Shooters in the United States from 2000-2012

ES81
David Konerman, Economics, Finance and Legal Studies
Faculty Mentor: Kevin Besnoy, Special Education and Multiple Abilities
Addressing Gifted Students
ES82
Laura Yablecki, Economics, Finance and Legal Studies
Faculty Mentor: Le Wang, Economics, Finance and Legal Studies
Changing Economic Status of Women

ES83
Caitlin Thomas, Psychology
Faculty Mentor: Matthew Jarrett, Psychology
Examining Attention Deficit Hyperactivity Disorder in Relation to Psychopathy

ES84
Bailey Holway, Economics, Finance and Legal Studies
Christopher Lancaster, Economics, Finance and Legal Studies
Evan Ashy, Economics, Finance and Legal Studies
Faculty Mentor: Jack Clampit, Management and Marketing
Does Outsourcing Affect Firm Performance? A Global, Large-Scale Event Study of Shareholder Reaction to Outsourcing

ES85
Matthew Anderson, Biological Sciences
Faculty Mentor: Beverly Thorn, Psychology
The Effect of Chronic Pain on Sleep in Emerging Adults

ES86
Breigh Carey, Psychology
Ashleigh Farren, Psychology
Faculty Mentor: Randy Salekin, Psychology
Violence Inhibition Mechanism

ES87
Adam Gunther, Information Systems, Statistics and Management Services
Faculty Mentor: Nikolaos Panagopoulos, Management and Marketing
The Juxtaposition between Marketing and Accounting Rationales on Customer Profitability

ES88
Derek Legenzoff, Economics, Finance and Legal Studies
Faculty Mentor: James Cover, Economics, Finance and Legal Studies
The Effects of Fiscal Policy Shocks in Mexico

ES89
Holly Long, Criminal Justice
Faculty Mentor: Mark Lanier, Criminal Justice
The Presence of Human Trafficking in Florida

ES90
Chelsea Waters, Political Science
Faculty Mentor: Jason DeCaro, Anthropology
Unraveling the Causes of Child Hunger: Food Insecurity, Maternal Health, and Parenting Practices in Mwanza, Tanzania

ES91
Lauren Van Buren, Psychology
Faculty Mentor: Jason DeCaro, Anthropology
Physical Activity Patterns among Older Adults with Osteoarthritis
ES92
Tamunotonte Fenny, Psychology
Faculty Mentor: Kristina McDonald, Psychology
On Guard: Associations of Disrespect Sensitivity with Revenge Goals and Aggression

ES93
Caleigh Everingham, Biological Sciences
Faculty Mentor: Rebecca Allen, Psychology
A Systematic Review of Mental Health Literacy Assessments in Adult Populations

ES94
Gabrielle Lindley, Biological Sciences
Faculty Mentor: Rebecca Allen, Psychology
The Effects of Death Exposure and Bereavement in Certified Nursing Assistants

ES95
Emily Pickle, Psychology
Elizabeth Fromhold, Psychology
Samuel Scheidler, Psychology
Faculty Mentor: Philip Gale, Psychology
Zeroing on the Enemy: Anger Drives Attentional Narrowing

ES96
Hannah Smith, Anthropology
Faculty Mentor: Kathryn Oths, Anthropology
A Decade of Change: The Effects of Cultural and Environmental Change on Child Growth in Highland Peru

ES97
Ashley Ennis, Advertising and Public Relations
Faculty Mentor: Glenn Griffin, Advertising and Public Relations
Advertising Internships

ES98
Daniel Aguillard, Economics, Finance and Legal Studies
Faculty Mentor: Jonathon Halbesleben, Management and Marketing
Understanding Safety Behaviors in the Workplace

ES99
Paige Jackson, Biological Sciences
Eryn Turner, Curriculum and Instruction
Faculty Mentor: Kristina McDonald, Psychology
Reacting to Rejection: Comparing Three Paradigms that Simulate Adolescent Peer Rejection

ES100
Katelyn Senkus, Human Nutrition and Hospitality Management
Faculty Mentor: Linda Knol, Human Nutrition and Hospitality Management
The Effect of Food Insecurity on Children's Food Group Intake

ES101
Marguerite Majure, Psychology
Faculty Mentor: Frances Connors, Psychology
Relation of Socioeconomic Status with Cognitive and Language Measures in Down syndrome
ES102
Stetson Dubberly, Information Systems, Statistics and Management Science
Faculty Mentor: Clay Posey, Information Systems, Statistics and Management Science
When and Why Organizational Security Efforts Backfire: An Examination of Employees' Desensitization to Information Security Messages

ES103
Matthew Tucker, Economics, Finance and Legal Studies
Faculty Mentor: Shane Underwood, Economics, Finance and Legal Studies
Commodity Prices and Market Values

ES104
Perrin Lowrey, Psychology
Virginia Skipper, Psychology
Halley Seyfriend, Biological Sciences
Faculty Mentor: Philip Gable, Psychology
Anger and Disgust Influence Memory

ES105
Kara Fadanelli, Chemical and Biological Engineering
Faculty Mentor: James Hamilton, Psychology
The Great Equalizer: Quantity of Lives Over Quality of Lives

ES106
Ashley Henson, Political Science
Faculty Mentor: Richard Fording, Political Science
Understanding the Role of the Tea Party in the United States Government

ES107
Charlotte Harrison, Management and Marketing
Faculty Mentor: Jullet Davis, Management and Marketing
Promoting Health Awareness Using Social Media

ES108
Whitney Culbreath, Advertising and Public Relations
Faculty Mentor: Suzanne Horsley, Advertising and Public Relations
Communication and Hurricane Sandy: Response to a Natural Disaster

ES109
Hunter Foster, Culverhouse School of Accountancy
Faculty Mentor: Todd DeZoort, Culverhouse School of Accountancy
An Evaluation of Corporate Tax Practices

ES110
Amanda Marotto, Psychology
Faculty Mentor: Randall Salekin, Psychology
Treatment of Psychopathy

ES111
Ciara Malaugh, Political Science
Faculty Mentor: Rebecca Allen, Psychology
An Underutilized Resource: Campus Safe Zone Programs as a Clinical Training Tool
ACKNOWLEDGEMENTS

Special thanks to the Deans and their offices for their support:

College of A&S
College of C&IS
College of Education
College of Engineering
College of HES
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School of Social Work
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