ORDER OF EVENTS

Poster Session 1 ......................................................................................................................... 8:30 AM - 10:00 AM
Education
Social Sciences

Poster Session 2 ......................................................................................................................... 10:30 AM - 12:00 PM
Life Sciences, Physical Sciences, Mathematics, & Water

Poster Session 3 ......................................................................................................................... 12:30 PM - 2:00 PM
Business
Computer Science, MIS, Cybersecurity, & Statistics
Health Sciences

Poster Session 4 ......................................................................................................................... 2:30 PM- 4:00 PM
Arts & Humanities
Engineering, Transportation, & Energy
2018 MENTORS

The Office for Undergraduate Research would like to give a special thanks to all the mentors of the 2018 URCA Participants

Ajay Agrawal
Holger Albrecht
Rebecca Allen
Armen Amirkhanian
Darrell Arnold
Carla Atkinson
Jeremy Bailin
Thomas Baker
Yuping Bao
Jason Bara
Angela Barber
Jennifer Barnes
Kerry Barnett
Joan Barth
John Beeler
Laura Berkowitz
Angela Billings
Joshua Bittle
Kyle Black
Alan Blum
Anneliese Bolland
Elizabeth Bollen
David Bolus
Andrei Bombin
Marco Bonizzoni
Greg Bott
Caroline Boxmeyer
Chris Brazel
Luke Brewer
Shelby Brooks
Anthony Buhr
Susan Burkett
Sherwood Burns-Nader
Jeremy Butler
Guy Caldwell
Kim Caldwell
Lauren Cardon
Deborah Casper
Carolyn Cassady
Subhabrata Chakraborti
Kelsey Chappetta
Yuanyuan Chen
Shinae Choi
Stanislava Chttaranova-Rudloff
Lukasz Ciesla
Jordan Cissell
Sagy Cohen
Julianne Coleman
Matthew Confer
Frances Conners
Ana Corbalán
James Cover
Jennifer Cox
Chris Crawford
Tony Cremo
Kristi Crowe-White
Nathan Culmer
Nathan Culmer
Matthew Curtner-Smith
Thang Dao
Mildred Dawson-Hardy
Andre Denham
Grayson Dennis
Andrew Dewar
David Dixon
Diana Dolliver
Ellary Draper
Paul Drnevich
Jack Dunkle
Ryan Earley
Rebecca Eaton
Mark Elliott
Amy Ellis
Tasnuva Enam
Michael Esco
John Estes
Jennifer Evans
Michael Fedewa
Janna Fierst
David Ford
Todd Freeborn
Philip Gable
Anthony Gaeta
Robert Gaines
Marysia Galbraith
Sara Gallman
Gabriela Garcia-Soto
Tess Gemberling
Jim Gleason
Andrea Glenn
Diana Gomez
Memorie Gosa
Andrew Graettinger
Ann Graves
Jeff Gray
Tiffany Green
Darrin Griffin
Ed Griffin
Nahide Gungordu
Heather Gunn
Vishal Gupta
Ali Gurbuz
Sevgi Gurbuz
David Hale
Joanne Hale
Matthew Hampton
Michelle Harcrow
Mallory Hardiman
David Hardy
Peter Harms
Nikita Harris
William Hart
Asma Hatoum-Aslan
Adam Hauser
Marcia Hay-McCutcheon
Conor Henderson
Tori Henley
Maria Hernandez-Reif
Ken Hill
Yang-Ki Hong
Holland Hopson
Jennifer Howeth
Qiang Huang
Stacy Hughey-Surman
Brett Hunter
Kristin Irwin
Keisha Ivy
Lawrence Jackson
Matthew Jarrett
Rishikesh Jena
Ju Won Jeon
Paan Jindapon
Elizabeth Johnson
Mitch Johnson
Paige Johnson
Allen Johnston
Seung Eun Jung
Sara Kaylor
David Keellings
Hanna Kim
Seonsin (Margaret) Kim
Yonghyun (John) Kim
Lance Kinney
Kevin Kocot
Lingyan Kong
Frankie Santos Laanan
Virginia Lamoureux
Zachary Lee
David Leech
Leah LeFebvre
Cheng-Yu Li
Dawn Li
Junhao Li
Bronwen Lichtenstein
Allen Linken
Megan Lippe
Dilin Liu
Zhongqi Liu
Tao Liu
Juan Lopez-Bautista
Riley Lovejoy
Jeffrey Lozier
Christina Lu
Yang Lu
Christopher Lynn
Kristin Maki
Martha Makowski
Lou Marino
Bryan Martinez
Russell Matthews
Olivia May
George McClure
Sara McDaniel
Kristina McDonald

2
Draft 3/27/18
2018 MENTORS

Ian McDonough
Michael McKain
Donna Meester
Brenda Mendiola
Jessica Mendoza
Claudia Mewes
Heidi Michael
Joshua Mickler
Alyssia Miller
Carol Mills
Michele Montgomery
Mercedes Morales-Alemán
Ryan Moran
Jacqueline Morgan
Stacy Morgan
Laura Myers
Jefrey Naidoo
Preethi Nair
Youni Nam
Akshay Narkhede
Jen Nickelson
Zachary Nickerson
Alvin Niuh
Hyunjin Noh
Brucker Nourse
Semih Olcmen
Charles O'Neill
Igor Ostrovskiy
Kathryn Oths
Zhongliang Ouyang
Clara Owings
Shanlin Pan
Eliot Panek
Patricia Parmelee
Angela Paschal
Dana Patton
Margaret Peacock
Paul Pecorino
Joshua Pederson
Qing Peng
Randy Persaud
Josh Pierce
Meghan Poljak
Jason Pontillo
Sonya Pritzker
Paul Puzinauskas
Shuai Qian
Ying Qin
Rachel Raimist
Uzma Raja
Shreyas Rao
Laura Razzolini
Jenna Reardanz
Laura Reed
Robert Reed
Kevin Richards
Daniel Riches
Lawrence Roberts
Stacey Robinson
Beverly Roskos
Randy Salekin
Rebecca Salzer
Rachel Sanders
Hunter Sartain
Vincent Scaflani
Jason Scofield
Clare Scott
Kevin Shaughnessy
Jenny Shaw
Meghan Shewmake
Yeon Shin
Pravin Shinde
Brenda Smith
Chase Smith
Clint Smith
Todd Smith
Timothy Snowden
Rohan Sood
Firat Soylu
Ellen Spears
Catanya Stager
Michael Steinberg
Cayman Stephen
Rachel Stephens
Tori Stone
William Story
Harold Stowell
Kimberly Stowers
Shane Street
Joseph Styga
Ryan Summers
Darren Surman
Jack Sykstus
Libo Tan
Brian Taylor
Stephen Tedeschi
Jennifer Thies
Greg Thompson
Hunter Threadgill
Geoffrey Tick
Theodore Tomeny
Xiao Tong
Glenn Tootle
Gregory Tortoriello
Casey Totenhagen
Wang-Kong Tse
Heath Turner
Lori Turner
Sheik Ullah
Brian van Ee
Monica Vasiliiu
Vishesh Vikas
John Vincent
Alex Voris
Ruigang Wang
Lesley Weaver
Mark Weaver
Theresa Welbourne
Philip Westbrook
Chris Whaley
Nicholas White
Marilyn Whitman
Melissa Wilmarth
Elizabeth Wilson
Jonathan Wingo
Tricia Witte
Emily Wittman
Evan Wujcik
Chuan Xu
Mesut Yavuz
James Yelverton
Lea Yerby
John Yoder
Siyuan Zhang
Qichen Zhao
Shan Zhao
<table>
<thead>
<tr>
<th>Mentor</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebecca Allen Keisha Ivy</td>
<td>Laura Acker&lt;br&gt;Art therapy and older people: A systematic review</td>
</tr>
<tr>
<td>Patricia Parmelee</td>
<td>Grace Albright, Lindsay Stager&lt;br&gt;Moderating Effects of Coping on Objective and Subjective Health in Older Adults</td>
</tr>
<tr>
<td>Anneliese Bolland</td>
<td>Heidi Alexander&lt;br&gt;Students vs. Textbooks: A Mixed Methods Study</td>
</tr>
<tr>
<td>Doctor Deborah, Casper Doctor, Sherwood Burns-Nader</td>
<td>Samantha Anderson&lt;br&gt;An Examination of Facebook Communication among Chronically Ill Adolescents and Their Best Friends for Themes of Positive and Negative Affect and Support</td>
</tr>
<tr>
<td>Kristina McDonald</td>
<td>Emily Barnett&lt;br&gt;Narcissists and Interest in Learning Accurate Information About the Self</td>
</tr>
<tr>
<td>Tricia Witte</td>
<td>Emily Barnett, Alex Liveoak, Madisen Reece, Kellie Walsh&lt;br&gt;What did I get myself into?: Reasons for assisting intoxicated peers and outcomes of helping behavior</td>
</tr>
<tr>
<td>David Bolus</td>
<td>Mallory Brown&lt;br&gt;Women in STEM: &quot;We Belong Here!&quot;</td>
</tr>
<tr>
<td>Theresa Welbourne</td>
<td>Rebekah Brunner&lt;br&gt;Women in IPO</td>
</tr>
<tr>
<td>Doctor Deborah, Casper Doctor, Sherwood Burns-Nader</td>
<td>Lenna Brysacz, Savannah Stewart, Anna Lee Cook, Harper Singleton&lt;br&gt;Grant Writing for Marion Alabama</td>
</tr>
<tr>
<td>Sara McDaniel</td>
<td>Caroline Bundesman&lt;br&gt;Depression and Intimacy Among Women in Same-Sex Relationships</td>
</tr>
<tr>
<td>Darrin Griffin</td>
<td>Sydney Burkhart&lt;br&gt;Learning American Sign Language via Virtual Reality</td>
</tr>
<tr>
<td>Philip Westbrook, Elizabeth Wilson</td>
<td>Justin Crofoot&lt;br&gt;No Child Left Behind Policy Critique</td>
</tr>
<tr>
<td>Bronwen Lichtenstein</td>
<td>John Denton&lt;br&gt;Accept or Decline?: Deciding Factors in a Voluntary HIV Testing Program for Probationers and Parolees</td>
</tr>
</tbody>
</table>

**Poster Session 1 | 8:30-10:00**

**Social Sciences & Education**
<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
<th>Title</th>
<th>Mentor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ross D'Entremont</td>
<td>12</td>
<td>Effects of the Alabama Accountability Act on Rural versus Urban Private Schools</td>
<td>Brenda Mendiola, Elizabeth Wilson</td>
</tr>
<tr>
<td>Claire Estep</td>
<td>19</td>
<td>Emergence of Third Spaces: Exploring Trans Student Campus Climate Perceptions within LGBTQ Collegiate Environments</td>
<td>Anneliese Bolland</td>
</tr>
<tr>
<td>Sydney Evans</td>
<td>28</td>
<td>The Impact of High School Education on Students' Recreational Reading</td>
<td>Elizabeth Wilson, Julianne Coleman</td>
</tr>
<tr>
<td>Anthony Fant, Tanner Mullenix</td>
<td>66</td>
<td>Group Creativity and the Incubation Effect</td>
<td>Beverly Roskos-Ewoldsen Qichen Zhao</td>
</tr>
<tr>
<td>Anna Field</td>
<td>5</td>
<td>Autism Spectrum Disorder Knowledge Among Rural and Urban Teachers in Alabama</td>
<td>Theodore Tomeny</td>
</tr>
<tr>
<td>Amanda Flamerich</td>
<td>90</td>
<td>Male and Female Ad Processing: The Selectivity Hypothesis</td>
<td>Lance Kinney</td>
</tr>
<tr>
<td>Jessica Freim</td>
<td>4</td>
<td>Diversity Awareness within the Greek System</td>
<td>Peter Harms, Dan Bachrach</td>
</tr>
<tr>
<td>Megan Friend, Zachary Ziegenhorn</td>
<td>6</td>
<td>The Benefits of Interactive Media Programs within Schools</td>
<td>David Bolus</td>
</tr>
<tr>
<td>Alicia Gallo, Parker Renton, Blarie Taggart</td>
<td>85</td>
<td>How to deal with your drunk roommate: College students' perceptions about the most and least helpful ways to assist intoxicated peers</td>
<td>Tricia Witte</td>
</tr>
<tr>
<td>Katerina Garcia</td>
<td>58</td>
<td>Empathic Reactions in Women with Psychopathic Traits</td>
<td>Andrea Glenn, Virginia Lamoureux</td>
</tr>
<tr>
<td>Courtney Geary</td>
<td>91</td>
<td>Cuban Prison Conditions, Guantánamo Bay, and the Politicization of Human Rights Abuses</td>
<td>David Bolus</td>
</tr>
<tr>
<td>Kennedy George</td>
<td>35</td>
<td>Parent Sense of Satisfaction and Efficacy before an after a Parent Mediated Autism Intervention</td>
<td>Angela Barber</td>
</tr>
<tr>
<td>Alyson Giordano, Jasmyn King, Aja Lucky, Jacob Salaj</td>
<td>16</td>
<td>Bystander intervention for sexual assault and dating violence on college campuses: Common ways of helping peers</td>
<td>Tricia Witte</td>
</tr>
<tr>
<td>Alex Grady</td>
<td>82</td>
<td>Actual and Perceived Student Norms of College Students' Alcohol and Other Drug Use: Comparative Study of Greek Membership and Non-Membership</td>
<td>Frankie Santos Laanan, Elizabeth Wilson</td>
</tr>
<tr>
<td>Rebecca Griesbach</td>
<td>2</td>
<td>Mobilization Against Resegregation</td>
<td>Darren Surman</td>
</tr>
<tr>
<td>Emily Hall</td>
<td>34</td>
<td>Self-Presentation as a Mediator of Aggression and Narcissism</td>
<td>Andrea Glenn</td>
</tr>
<tr>
<td>Roxanna Hare, Courtney Diebold, Jack Schwartz, Julianna Boskus</td>
<td>53</td>
<td>Perceiving Nuances and Punctuation from Online Textual Communications</td>
<td>Jessica Mendoza, Beverly Roskos</td>
</tr>
<tr>
<td>Wyatt Harrison</td>
<td>47</td>
<td>The Social Dynamics of Reddit</td>
<td>Elliot Panek</td>
</tr>
<tr>
<td>Name</td>
<td>Page</td>
<td>Title</td>
<td>Mentor</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Julianne Heany</td>
<td>96</td>
<td>The thoughts, attitudes, and fears of pre-internship music therapy students, pre-service music education students, and music therapy and education professors.</td>
<td>Mentor: Ellary Draper</td>
</tr>
<tr>
<td>Helmi Henkin</td>
<td>78</td>
<td>The effects of leaders' mindfulness embodiment on child outcomes in Coping Power and Mindful Coping Power programs</td>
<td>Mentor: Caroline Boxmeyer</td>
</tr>
<tr>
<td>Madeline Hirschfield</td>
<td>9</td>
<td>Exploring the Effect of Social Rejection on Freshman Retention</td>
<td>Mentor: Joshua Pederson</td>
</tr>
<tr>
<td>Madeline Hirschfield</td>
<td>10</td>
<td>Political Discussions Within the Family: Examining Difficult Family Conversations</td>
<td>Mentor: Carol Mills</td>
</tr>
<tr>
<td>Kylie Hopkins</td>
<td>59</td>
<td>Is Divorce Fair?: The Gender Dynamics of Property Disposition</td>
<td>Mentor: Bronwen Lichtenstein</td>
</tr>
<tr>
<td>Justine Hostler</td>
<td>23</td>
<td>Impact of Mock Code Simulation based education on a New Nurses comfort and confidence.</td>
<td>Mentor: Clara Owings</td>
</tr>
<tr>
<td>Brittany Ingram</td>
<td>38</td>
<td>The effects of diagnosed ADD/ADHD on baseline neurocognitive performance and symptom reporting</td>
<td>Mentor: Ryan Moran</td>
</tr>
<tr>
<td>Suzannah Ingram</td>
<td>41</td>
<td>Poverty and Maternal Depression: A Closer Look at Food Insecurity in the United States</td>
<td>Mentor: Melissa Wilmarth</td>
</tr>
<tr>
<td>Angelina Jones</td>
<td>71</td>
<td>Cognitive Decline in Down Syndrome Adolescents and Adults</td>
<td>Mentor: Fran Conners</td>
</tr>
<tr>
<td>Stephanie Keck</td>
<td>15</td>
<td>Are men involved in Greek life at the University X knowledgeable of the counseling services available to them on campus?</td>
<td>Mentor: David Hardy, Elizabeth Wilson</td>
</tr>
<tr>
<td>Margaret Korb</td>
<td>26</td>
<td>Poster</td>
<td>Mentor: Matthew Curtner-Smith</td>
</tr>
<tr>
<td>Sydney Lang</td>
<td>73</td>
<td>How Fundamentalism, Empathy, and the Big Five Influence Religiosity</td>
<td>Mentor: Tess Gemberling</td>
</tr>
<tr>
<td>Rachel Lee</td>
<td>37</td>
<td>Sub-Criterion A Trauma</td>
<td>Mentor: Jessica Mendoza</td>
</tr>
<tr>
<td>Sera Levy, Andrew Penunuri,</td>
<td>86</td>
<td>Madison Smith, Blaire Taggart</td>
<td>The Association Between Trauma and Alcohol Use in College and Community Samples</td>
</tr>
<tr>
<td>Cecilia Long</td>
<td>8</td>
<td>Counselor Education Students Perceptions of Alabama Anti-Bullying Programming</td>
<td>Mentor: Elizabeth Wilson, Mildred Dawson-Hardy</td>
</tr>
<tr>
<td>Claire Manderfield</td>
<td>65</td>
<td>Gender Role Norms in High School Girls' Social Groups and STEM Interest</td>
<td>Mentor: Joan Barth</td>
</tr>
<tr>
<td>McKenna McCracken</td>
<td>63</td>
<td>Gender Differences In World of Warcraft</td>
<td>Mentor: Joan Barth Kelsey Chappetta</td>
</tr>
<tr>
<td>Katherine Metcalf</td>
<td>24</td>
<td>Beware of Big Brother: Teaching High School Students How to analyze Human Desire in George Orwell's 1984 Through a Lacanian Psychoanalytic Lens</td>
<td>Mentor: Lauren Cardon</td>
</tr>
</tbody>
</table>
Megan Michael
Hot and Cold Executive Functioning in Individuals with Restrictive Disordered Eating
*Mentor:* Matthew Jarrett

Breanna Mitchell
An Exploration of Attachment, Facebook Jealousy and Former Friends
*Mentor:* Deborah Casper, Tiffany Green

Nicole Moczisko
It is alright to be a psychopath if you are white: An exploration of jury sentencing of psychopaths based on racial differences
*Mentor:* Jennifer Cox

Elizabeth Mojica
Educational Inequities in Relation to High School Performance
*Mentor:* Laura Razzolini

Sarah Moore
The Impact of Previous Calculus Experience on the Post-Secondary Calculus Student Experience
*Mentor:* Jim Gleason, Martha Makowski

Cory Myers, Austin George,
Socio-Economic Impact of West Alabama Non-Profits
*Mentor:* David Ford

Ilia Nazario
Exploring the Relationship Between Parental Psychological Control, Rejection Sensitivity, and Relational Aggression
*Mentor:* Kristina McDonald

Grace Parente
Adults’ Judgments of Contrasting Words
*Mentor:* Jason Scofield, Catanya Stager, Joshua Mickler

Emily Passmore, Amanda White,
Jakeias McGee, Daniel Zhang, Curren Shah
Socio-Economic Impact of Non-Profits in West Alabama
*Mentor:* David Ford

Andrew Penunuri, Alex Liveoak
Future Orientation in High-Drinking Peer Groups
*Mentor:* Tricia Witte

Alexandria Perry
Influences of competence and response latency on judgments of awkwardness and veracity
*Mentor:* Darrin Griffin

Mackenzie Pike
Examining Power Through Nonverbal Communication in Professor’s Online Profile Photos
*Mentor:* Darrin Griffin

Madyson Potter, Alexa Tomlak
The Effect of Video Game Training on Spatial Skills
*Mentor:* Beverly Roskos Andre Denham

Madeleine Powell
Can't Remember? Ask your Emotions
*Mentor:* Philip Gable Hunter Threadgill

Taylor Puckett
Prevalence of Body Piercings and Tattoos among Undergraduates
*Mentor:* Christopher Lynn

Samuel Reece, Riley Raynor,
Will Henson
LAMP
*Mentor:* David Bolus

Rachel Remmes
Structural Brain Features Associated with Autism in Children: a VBM Study
*Mentor:* Firat Soylu

Annebel Roberson
A survey of the thoughts and attitudes of music faculty and staff towards music therapy
*Mentor:* Ellary Draper

Leah Rubinoff
The Emergence of Friendships into Antipathies on Social Media
*Mentor:* Deborah Casper, Tiffany Green

Brianna Rychlec
Impact of Socioeconomic Status on the Perception of Autism Spectrum Disorder
*Mentor:* Anthony Buhr, Elizabeth Wilson
<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
<th>Title</th>
<th>Mentor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brianna Santobello</td>
<td>50</td>
<td>Who Are We Watching Online?: An Analysis of Lurking on Former Friendships</td>
<td>Deborah Casper, Tiffany Green</td>
</tr>
<tr>
<td>Alex Sents</td>
<td>98</td>
<td>Coffee, College, and Capitalism</td>
<td>Marysia Galbraith</td>
</tr>
<tr>
<td>Melissa Sharpe</td>
<td>83</td>
<td>Examining Predictors of Opioid Use in College Students</td>
<td>Michael Fedewa, Rachel Sanders</td>
</tr>
<tr>
<td>Nisha Singh</td>
<td>72</td>
<td>The interaction between aggression and self esteem in the experience of peer victimization during adolescence</td>
<td>Frances Conners, Kristina McDonald, Jenna Reardanz</td>
</tr>
<tr>
<td>Genevieve Smith</td>
<td>40</td>
<td>Mental Health of Full-time Aging Workers</td>
<td>Shinae Choi</td>
</tr>
<tr>
<td>Don Smith</td>
<td>54</td>
<td>Roles of Communication in Sports Management</td>
<td>Robert Gaines</td>
</tr>
<tr>
<td>Jacquelyn Snipes</td>
<td>22</td>
<td>Peer Facilitation in Nursing Education</td>
<td>Sara Kaylor</td>
</tr>
<tr>
<td>Kailey Sonricker</td>
<td>60</td>
<td>Gender Impact on Executive Level Promotion (subject to change)</td>
<td>Vishal Gupta</td>
</tr>
<tr>
<td>Julia Sponholtz</td>
<td>100</td>
<td>Hearth and Home: The connection between fire, relaxation, and sociability</td>
<td>Christopher Lynn</td>
</tr>
<tr>
<td>Alexandra Stanley</td>
<td>57</td>
<td>Enhancing Prognosis Communication through an Interprofessional Guide: A Feasibility Study</td>
<td>Megan Lippe</td>
</tr>
<tr>
<td>Elizabeth (Ashley) Stinson</td>
<td>84</td>
<td>Examining Limitations in Substance Use Treatment and Recovery Outcomes in Rural vs Urban Communities Across the United States</td>
<td>Tricia Witte</td>
</tr>
<tr>
<td>Michelle Tan, Ashia Lewis</td>
<td>3</td>
<td>DeAnna Lockett</td>
<td>Jacqueline Morgan, David Bolus</td>
</tr>
<tr>
<td>Emily Terry, Katherine Fallon</td>
<td>70</td>
<td>The College and Career Readiness Initiative</td>
<td>Elizabeth Wilson</td>
</tr>
<tr>
<td>Sarah Trulove, Lily Rogers</td>
<td>31</td>
<td>TelePlay</td>
<td>Angela Barber, Lea Yerby</td>
</tr>
<tr>
<td>Caroline Waldo</td>
<td>11</td>
<td>The Effect of Civics Education on the Political Knowledge and Voting Patterns of College Students</td>
<td>Elizabeth Wilson</td>
</tr>
<tr>
<td>Maxine Walters</td>
<td>62</td>
<td>Nevertheless, She Persisted: Exploring Leadership Development of Black Women</td>
<td>Nikita Harris</td>
</tr>
<tr>
<td>Maxine Walters</td>
<td>64</td>
<td>Modern-Day Roots: Exploring the Relationship Between Hair and Identity in African-American College Women in the Age of Social Media</td>
<td>Angela Billings</td>
</tr>
<tr>
<td>E. Michael Wefelmeyer</td>
<td>36</td>
<td>Attention-Deficit/Hyperactivity Disorder (ADHD) Symptoms and the Positive Illusory Bias: The Moderating Roles of Positive Parenting and Cognitive Functioning</td>
<td>Matthew Jarrett</td>
</tr>
<tr>
<td>Kira Wence</td>
<td>21</td>
<td>Evaluating Primary Care Medical Residents in Psychiatry Rotations: What's Important</td>
<td>Nathan Culmer Catanya Stager</td>
</tr>
</tbody>
</table>
Zoë Whitmire 67
The Role of Social Support and Mood in Association with Osteoarthritis Pain
*Mentor: Patricia Parmelee*

Kirsten Williams 77
The Effect of Self-Efficacy on the Career Goals of College and Elementary-Age Students
*Mentor: Joan Barth*

Alexis Winborne 51
A Deaf centered approach to technological needs assessments for communicative assisted devices
*Mentor: Darrin Griffin, Sevgi Gurbuz, Chris Crawford, Ali Gurbuz*

Erin Yepsen 27
The Financial Accessibility of Children's Museums in the US
*Mentor: Stacy Hughey-Surman, Elizabeth Wilson*
<table>
<thead>
<tr>
<th>Poster Session 2</th>
<th>10:30-12:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Sciences, Physical Sciences, Mathematics, and Water</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaney Adams</td>
<td>72</td>
<td>Age-dependent antipredator behavior in mangrove rivulus fish</td>
</tr>
<tr>
<td><strong>Mentor:</strong> Ryan Earley, Cheng-Yu Li</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Ilham Ali             | 1   | Optimization of Flood Inundation Map Generation from Point Observation Data |
| **Mentor:** Sagy Cohen |

| Amira Aquino          | 52  | Acanthophora dendroides Harvey: a new record for the Atlantic Ocean    |
| **Mentor:** Juan Lopez-Bautista, Gabriela Garcia-Soto |

| Grace Beal            | 15  | Analysis of Gas Distribution in the Circumgalactic Medium              |
| **Mentor:** Jeremy Bailin |

| Whitney Beavers       | 57  | Comparing column and non-column, Trizol-based RNA extraction protocols for the study of LanA transcriptional expression and its genotype by diet interactions in Drosophila melanogaster |
| **Mentor:** Laura Reed, Younji Nam |

| Caroline Beshears     | 11  | Building Reefs: How Artificial Reefs Affect Community Structure       |
| **Mentor:** Michael Steinberg |

| Hope Burnham          | 27  | A Raman Investigation of Ammonia Borane Thermal Decomposition         |
| **Mentor:** Shane Street, Matthew Confer |

| Jalen Cates, Andrew Stewart | 16  | The superconducting properties of YBa2Cu3O7 samples minutely-doped with dysprosium |
| **Mentor:** Adam Hauser |

| Madeline Cesaone      | 75  | Animal patterning and sex-specification: The Intersection of Hox genes and the sex-determination pathway. |
| **Mentor:** John Yoder, Heidi Michael |

| Ashley Chonko         | 32  | Synthesis of Electrospun TiO2 Nanowires for NanoCOT on a Ni Foam Framework for Catalytic Water Splitting |
| **Mentor:** Shanlin Pan, Evan Wujcik, Pravin Shinde, Yang Lu |

| Kasie Coogan          | 43  | Characterizing the Uptake of Quinic Acid and Tannic Acid Coated Iron Oxide Nanoparticles in Cancer Cells |
| **Mentor:** Shreyas Rao, Akshay Narkhede, Yuping Bao |

| Brian Cook            | 2   | Reconstructed Streamflow using Tree Rings in Critical Alabama Watersheds (Undergraduate Research) |
| **Mentor:** Glenn Tootle |

| Lauren Cook           | 82  | Gene-by-Environmental activation of DAF-7/TGF-β signaling in response to exposure to a noxious stimulus in a C. elegans model of Parkinson's Disease |
| **Mentor:** Kim Caldwell, Guy Caldwell, Jennifer Thies |

| Matthew Cooper        | 10  | Analyzing the Effect of Climate Change on Snow Leopard Habitat       |
| **Mentor:** Michael Steinberg |

| Bailey Creighton      | 41  | The Impact of Vitronectin on Cancer Stem Cells in Glioblastoma Multiforme |
| **Mentor:** Yonghyun (John) Kim, Shreyas Rao |

| Jeremy Cummings       | 22  | Active Galactic Nuclei in Non-Merging Galaxies                        |
| **Mentor:** Preethi Nair |

| Owen Cunneely, Kara MacIntyre | 59  | Determining the Influence of Gut Microbiota Composition on D. melanogaster Metabolic Phenotype |
| **Mentor:** Laura Reed, Andrei Bombin |
Alyssa Delia  
Does aggression change in mangrove rivulus when exposed to ethinyl estradiol?  
*Mentor*: Elizabeth Johnson, Ryan Earley

Sarah Deutsch  
Studies of Photon Reconstruction with the CMS Detector at the LHC  
*Mentor*: Conor Henderson

Hannah Dickson  
New garnet Sm-Nd age for garnet zone metamorphism in the western Blue Ridge, Ducktown, TN  
*Mentor*: Harold Stowell, Elizabeth Bollen

Bridget Donahue, Kelly Duerr, Cole Griffith, Ana Sokolenko, Sara Tiberi  
Climate Variability in Southeast US Coastal Streams  
*Mentor*: Glenn Tootle

Ashley Eberly  
Predicting the Properties and Covalency of High Oxidation State An(OH)x Complexes  
*Mentor*: David Dixon Zachary Lee, Monica Vasiliu

Brandon Edney  
The Impact of Lonafarnib on the Behavior of Glioblastoma Stem Cells  
*Mentor*: Shreyas Rao, Younghyun Kim

*Mentor*: Glenn Tootle

Olivia Fish  
Assessing the impact of a mushroom-toxin and gene inhibition on the physiology of Drosophila tripunctata  
*Mentor*: Laura Reed, Clare Scott

Carson Foster  
Characterizing effects of nonnutritive artificial sweetener supplemented diets in Drosophila melanogaster metabolism  
*Mentor*: Laura K. Reed

Olivia Gevedon  
Identification of novel factors of neuroinflammaging  
*Mentor*: Stanislava Chtarbanova

Lucas Glisson  
Impact of Temperature Gradients on Phosphorus Content of Mayflies in the Alaskan Tundra  
*Mentor*: Carla Atkinson

Samantha Glukhova  
Role of neutral cholesterol ester hydrolase gene in lifespan and neuroprotection in a C. elegans model of Parkinson’s Disease  
*Mentor*: Guy Caldwell, Siyuan Zhang

Joshua Goble  
The Biodiversity of Deep-Sea Icelandic Aplacophoran Molluscs  
*Mentor*: Kevin M. Kocot

Amber Gomez  
Computational Studies of the Electron and Fluoride Affinities of Early Actinide Oxides and Oxo-Fluorides Complexes  
*Mentor*: Monica Vasiliu, David Dixon

Benjamin Greenberg, Andrew Burks  
Evolution of functional 'trade-offs' in a family of amphibious fish  
*Mentor*: Joseph Styga, Ryan Earley

Zoe Guckien  
Analysis of the Role of cis-Regulatory Elements in RNA Methylation  
*Mentor*: Jack Dunkle

Joline Hartheimer  
Targeting Hyaluronan Interactions for Glioblastoma Stem Cell Therapy  
*Mentor*: Yonghyun (John) Kim, Shreyas Rao

Tessa Hawkins  
Biodiversity and Population Genetics of Wirenia argentea (Mollusca, Solenogastres)  
*Mentor*: Kevin Kocot
Christopher Hicks
Investigating genetic regulators of the conserved signaling molecule wingless in Drosophila melanogaster
*Mentor: John Yoder*

Nathan Holt
Application of Independent Component Analysis and Signal Processing for Biomedical Imaging and Early Detection of Cancer
*Mentor: John Yoder*

Adam Holzhauer
microRNAs as Potential Therapeutic Targets of Parkinson's Disease
*Mentor: Seongsin (Margaret) Kim*

James Hong
Magneto-Coulomb Drag and Hall Drag in Double-Layer Dirac Systems
*Mentor: Wang-Kong Tse*

James Howard
Application of air-stable palladium(II) precatalysts to Suzuki cross-coupling reactions and C-H activation of pyridine N-oxides
*Mentor: Guy Caldwell, Brucker Nourse, Laura Berkowitz*

Addison Iszler
Noncovalent interactions between anionic probes and PAMAM dendrimer hosts
*Mentor: Marco Bonizzoni, Nicholas White*

Benjamin Jones
Improving Effectiveness of Time Splitting Methods for Electrostatic Analysis of Solvated Biomolecules
*Mentor: Shan Zhao, Sheik Ullah*

Alyssa Kandow
Effects of Zebra Mussel Invasion on Water Quality in Texas Reservoirs
*Mentor: Jennifer Howeth, Riley Lovejoy*

Elizabeth Kantzler
Biodiversity and Mitogenomics of Deep-sea Euphosinidae
*Mentor: Kevin Kocot*

Hannah Kim
Rate of dissociation of chromium(III) from transferrin under endosomal conditions monitored by EPR
*Mentor: John Vincent*

Matthew Kiszla
A Bacteriophage Response to Antibiotic Resistance in Proteus Mirabilis
*Mentor: Asma Hatoum-Aslan*

Elliot Lakner
Molecular Structures and Energetics of Small Palladium Clusters
*Mentor: David Dixon, Randy Persaud*

Skyler Lambert
The Basics of Proteomics: Enhanced Ionization of Peptides using Al(III)
*Mentor: David Dixon, Randy Persaud*

Christopher Lightfoot
Environmentally-driven sexual plasticity in mangrove rivulus fish
*Mentor: Ryan Earley*

Laura Mafla
Testing candidate genes thought to be associated with pupal weight in D. melanogaster
*Mentor: Laura Reed*

Pedram Maleknia
Can Rivulus Fish See Through the Müller-Lyer Visual Illusion?
*Mentor: Ryan Earley, Cheng Yu Li*

Hayden Martz
Spin Hall Effect in Thin Film Structures
*Mentor: Claudia Mewes*

Allison McCarthy
Synthetic Images of Simulated Galaxies
*Mentor: Jeremy Bailin*

Christopher McCullers
Expression Level Regulation of Transcription Factor Double Sex and Hox Protein Abdominal-B in Drosophila melanogaster Embryo
*Mentor: John Yoder, Heidi Michael*
Kayla Meeks  
Queen Conch -- A Monarchy in Trouble: Analysis of Conservation Efforts in the Caribbean  
*Mentor:* Michael Steinberg

Nathan Moniz  
Identifying Modulators of Neuronal Resilience in a C. elegans PD Model  
*Mentor:* Guy Caldwell, Anthony Gaeta

Emma Neumann, Jack Houck  
Evolutionary Relationships of Blueberries and Their Relatives  
*Mentor:* Michael McKain

Logan Norris  
Investigation of Dopamine Neuron Degeneration as a Consequence of Microbiome-Derived Bacteria  
*Mentor:* Kim Caldwell, Bryan Martinez, Laura Berkowitz

Clare Ols, Charles Pitsenberger, Vanessa Marshall  
DNA Barcoding as a Tool to Assess Pollinator Diversity in a Fragmented Landscape  
*Mentor:* Jeffrey Lozier

Emily Pabst  
Are Ultraconserved Elements an Informative Phylogenetic Marker in Molluscs?  
*Mentor:* Kevin Kocot

Anna Parker  
Chromium-based matrices for analyzing acidic peptides by MALDI mass spectrometry  
*Mentor:* John Vincent

Graham Parker  
Investigating the Intersection of Glutamatergic Neurotransmission and Dystonia using C. elegans  
*Mentor:* Guy Caldwell, Kim Caldwell, Chuan Xu

Elizabeth Payne  
Drought in Alabama: An Assessment of 32 Downscaled Models  
*Mentor:* David Keellings

Rylee Perentis  
Investigating a role of DAF-7/TGFβ mechanism on neurodegeneration susceptibility in response to a bacterial metabolite in a C. elegans Parkinson's model  
*Mentor:* Guy Caldwell, Hanna Kim

Taylor Perkins  
Influencing Charge State Distribution of Biological Peptides via Electrospray Ionization Mass Spectrometry Using Chromium(III) Nitrate  
*Mentor:* Carolyn Cassady

Jacob Powell  
The Importance of Mergers in the Growth of Galaxies  
*Mentor:* Preethi Nair

Carter Pruett  
Extracting Genetic Information from Alabama Molluscs  
*Mentor:* Kevin Kocot

Abigail Rankin  
Nutrient Limitations and the Effects of Mussel Abundance on Primary Productivity in the Sipsey River  
*Mentor:* Carla Atkinson, Brian van Ee, Zachary Nickerson

Thomas Richards  
Event Classification in EXO-200 with Deep Neural Networks  
*Mentor:* Igor Ostrovskiy

Ryan Rogers  
Determining the Age of Metamorphism of New Zealand's Lower Crust Using Isotope Geochronology  
*Mentor:* Harold Stowell, James Yelverton

Sebastian Rowe  
Determination of the Role of the C-Terminal Domain in Methyltransferase Proteins from Erythromycin Resistant Bacteria  
*Mentor:* Jack Dunkle

Benjamin Runge  
Examining Spiral Arm Pitch Angles in Relation to Physical Galaxy Characteristics with SpArcFiRe  
*Mentor:* Preethi Nair
Alec Rush 55
rasV12 Activation in the Developing Drosophila melanogaster Abdomen as an in vivo Model for Cancer Metastasis
Mentor: John Yoder, Tony Cremo

Keaton Schmitz 54
Characterization of Gut Stem Cell biology in a novel mutant for the brain tumor gene in Drosophila melanogaster
Mentor: Stanislava Chtarbanova-Rudloff

Neil Shimer 34
Exploration of Improved Preparations of Stereodefined Imidoyl Halides
Mentor: Timothy Snowden, Kyle Black

Caris Smith 30
Computational Chemistry Studies of Modular Approaches to Contemporary Complexants of Separations
Mentor: David Dixon, Monica Vasiliu

Brian Smithers 84
Development of a Bioassay System for Evaluation of Coordinated Dopamine and Double-stranded RNA Transport in C. elegans models of Parkinson's Disease
Mentor: Guy Caldwell, Kim Caldwell, Laura Berkowitz, Brucker Nourse

Sydney Sudderth, Mae Crumbley 69
Temperature-Dependent Gonad Development in Mangrove Rivulus Fish
Mentor: Ryan Earley

Jessica Thompson 19
Convolutional Neural Networks as a Tool for Data Analysis in the MoEDAL Experiment
Mentor: Igor Ostrovskiy

Ryan Tuckey, Ed Griffin 78
Characterization of Cellular Mechanisms Underlying Pathology in Alzheimer's Disease using C. elegans
Mentor: Guy Caldwell, Ed Griffin

Melissa Uehling 85
One-carbon metabolism gene GCST-1 modulates amyloid-beta toxicity in Alzheimer's disease models
Mentor: Kim Caldwell, Guy Caldwell

Monica Vermillion 4
Analyzing Vegetation Change on Andros Island Using Remote Sensing
Mentor: Michael Steinberg, Jordan Cissell

Lillian Vogelson, Abigail Sisti, Allison Diamond 7
Wrack Line Pollution on Belizean Barrier Islands
Mentor: Michael Steinberg

Audrey Ward 76
Spatial learning is influenced by winning and losing aggressive contests
Mentor: Ryan Earley, Cheng-Yu Li

Brelahn Wyatt 58
Assessing the genetic- and sex-specific interactions of adult exercise and poor larval diet in Drosophila
Mentor: Laura Reed

Donna Xia 25
Actinide Aqueous Hydrolysis Reactions: Initial Steps in Actinide Aggregation
Mentor: David Dixon, Monica Vasiliu
<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
<th>Title</th>
<th>Mentor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caroline Babbin</td>
<td>103</td>
<td>Evidence-Based Practices in System Development</td>
<td>David Hale, Joanne Hale</td>
</tr>
<tr>
<td>Emily Baker</td>
<td>72</td>
<td>UAre. With Purpose.</td>
<td>Teri Henley</td>
</tr>
<tr>
<td>Brooke Bambis</td>
<td>26</td>
<td>A scoping literature review: Access to diabetes health services using Geographical Information Systems</td>
<td>Ann Graves</td>
</tr>
<tr>
<td>Garrett Barnes</td>
<td>56</td>
<td>Grocery Store Tour Increases Participants' Intentions to Purchase Fruits and Vegetables</td>
<td>Seung Jung, Yeon Shin, Alvin Niuh,</td>
</tr>
<tr>
<td>Mallory Bassett</td>
<td>22</td>
<td>The Capitol School Collaborative Health Education and Promotion</td>
<td>Michelle Harcrow</td>
</tr>
<tr>
<td>Jessica Bentley</td>
<td>44</td>
<td>The Effect of Celiac Disease on Bone Health in Children and Adolescents: a Systematic Review and Meta-analysis</td>
<td>Michael Fedewa</td>
</tr>
<tr>
<td>Landon Bentley</td>
<td>104</td>
<td>A Topical Analysis of Content Curation on Front-Page Based Content Aggregate Sites</td>
<td>Jeff Gray</td>
</tr>
<tr>
<td>Paul Bousquet</td>
<td>80</td>
<td>Responses to Recession</td>
<td>James Cover</td>
</tr>
<tr>
<td>Brooke Boyles, Bailee Gist</td>
<td></td>
<td>Reliability And Validity Of The Iddsi Flow Test As A Measure Of Liquid Consistency</td>
<td>Memorie Gosa</td>
</tr>
<tr>
<td>Anna Bragg</td>
<td>58</td>
<td>Bioavailability and Acute Effects of Bioactive Compounds in Watermelon Juice on Blood Pressure</td>
<td>Kristi Crowe-White, Amy Ellis</td>
</tr>
<tr>
<td>Sarah Burnash</td>
<td>47</td>
<td>Cardiovascular Drift: Menstrual Phase Fluctuations</td>
<td>Jonathan Wingo, Tori Stone</td>
</tr>
<tr>
<td>Taylor Burns</td>
<td>18</td>
<td>Knowledge and Intake of Nutrient-dense Dietary Patterns are Deficient among College Students</td>
<td>Kristi Crowe-White, Amy Ellis</td>
</tr>
<tr>
<td>Sarah Butler</td>
<td>99</td>
<td>Recycled Materials Web Map: Connecting Consumers to Producers</td>
<td>Andrew Graettinger, Clint Smith</td>
</tr>
<tr>
<td>Courtney Cochran</td>
<td>70</td>
<td>Study Abroad</td>
<td>Diana Gomez</td>
</tr>
<tr>
<td>Sarah Cole</td>
<td>40</td>
<td>Utilization of Technology for Assistance in Treating Depression: Evaluation of Mobile Applications</td>
<td>Lori Turner, Meghan Shewmake, Jennifer Evans</td>
</tr>
<tr>
<td>Brent Collier, Arrez Charania</td>
<td>34</td>
<td>Implementation of Telemedical Capabilities into Rural Ambulances</td>
<td>Nathan Culmer, Todd Smith</td>
</tr>
<tr>
<td>Lauren Crawford</td>
<td>77</td>
<td>Is There Evidence of Financial Contagion in North America?</td>
<td>Robert Reed</td>
</tr>
<tr>
<td>Darby Davenport</td>
<td>63</td>
<td>Cuban Vaccines and Maternal Health Rights</td>
<td>David Bolus</td>
</tr>
<tr>
<td>Name</td>
<td>Mentor</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Jakub Denkiewicz</td>
<td>Firat Soylu</td>
<td>Voxel Based Morphometry Study on Mild Cognitive Impairment</td>
<td></td>
</tr>
<tr>
<td>Isabela Di Loreto</td>
<td>Lori Turner</td>
<td>West Alabama Food Bank; Beyond Food, Feeding Smiles</td>
<td></td>
</tr>
<tr>
<td>Blayde Dill</td>
<td>Jeff Gray</td>
<td>CodePlayground: A Block-Based Language Designed for the Adafruit Circuit Playground</td>
<td></td>
</tr>
<tr>
<td>Luke Dolan</td>
<td>Amy Ellis, Kristi Crowe-White</td>
<td>Food Insecurity among College Students does not Differ by Affiliation in Greek Life</td>
<td></td>
</tr>
<tr>
<td>Lauren Donaldson, Justin Myers, Daniel McCool</td>
<td>Jefrey Naidoo</td>
<td>Developing Awareness of Services Offered by Pickens County Medical Center</td>
<td></td>
</tr>
<tr>
<td>Regan Dougherty, Mary Kaylin Veach, Lauren Cave</td>
<td>Marcia Hay-McCutcheon</td>
<td>AGE Study: Identified Barriers and Facilitators of Working with Older Adults Among Nutrition Students</td>
<td></td>
</tr>
<tr>
<td>Spencer Douglas, Jacob Inglis</td>
<td>Kevin Richards</td>
<td>Understanding the influence of a sport-based youth development program in an afterschool setting on children's social and emotional learning</td>
<td></td>
</tr>
<tr>
<td>Lauren Douglas, Emma Averna, Kaitlyn Rousey, Savannah Johnson</td>
<td>Sara Kaylor</td>
<td>The Path to End Human Trafficking</td>
<td></td>
</tr>
<tr>
<td>Riley Doyle</td>
<td>Paul Drnevich, Kristin Irwin</td>
<td>How to Become a Rich and Famous Researcher</td>
<td></td>
</tr>
<tr>
<td>Rachael Drake, Sarah Newton, Morgan Rippy, Alli Ruddle</td>
<td>Sara Kaylor</td>
<td>A Holistic Approach to Providing Care to Human Trafficking Survivors</td>
<td></td>
</tr>
<tr>
<td>Johnny Dwight</td>
<td>Lori Turner</td>
<td>Preventing Sleep Deprivation Among College Athletes</td>
<td></td>
</tr>
<tr>
<td>Jenna Dworak, Josie Rodriguez</td>
<td>Lori Turner</td>
<td>Quality of Life and Hearing Loss: A Preliminary Examination of Geographical Residency and Access to Hearing Health Care</td>
<td></td>
</tr>
<tr>
<td>Samantha Engel</td>
<td>Lori Turner, Meghan Shewmake</td>
<td>The Association of Sleep Behavior and Dietary Intake in Adolescents: Results from a National Survey</td>
<td></td>
</tr>
<tr>
<td>Emily Fahr</td>
<td>Mercedes Morales-Alemán</td>
<td>Provider Perceptions of the Use of Medical Interpreters in Primary Care in Alabama</td>
<td></td>
</tr>
<tr>
<td>Sara Ferguson</td>
<td>Michele Montgomery, Paige Johnson</td>
<td>Assessing Risk Factors for Cardiovascular Disease and Type 2 Diabetes in Preschool Children and Their Parents</td>
<td></td>
</tr>
<tr>
<td>Mike Finnegan, Connor Hollenbach</td>
<td>Paan Jindapon</td>
<td>The Impact of Naloxone Accessibility on Opioid Overdose Rates</td>
<td></td>
</tr>
<tr>
<td>Matthew Fisher</td>
<td>Paan Jindapon</td>
<td>State Lottery Demand Analysis</td>
<td></td>
</tr>
<tr>
<td>Henry Ford</td>
<td>Lori Turner Ken Hill</td>
<td>YMCA, Tuscaloosa</td>
<td></td>
</tr>
<tr>
<td>Cameron Fulgenzi</td>
<td>Lori Turner</td>
<td>WellBama - Crimson Couch To 5K</td>
<td></td>
</tr>
</tbody>
</table>
Collin Fuqua  
The Reliability and Validity of Commercially-Availably Physical Activity Monitors; A Case Report  
*Mentor:* Michael Fedewa

Ashley Gaynus-Mason  
Al’s Pals Mentorship Program  
*Mentor:* Lori Turner

Olivia Gevedon  
Price-Gouging of Prescription Drugs in America  
*Mentor:* Darren Surman

Alia Golightly-Robinson  
Flu Epidemic at DCH Health System  
*Mentor:* Lori Turner

Abigail Gorbett  
Implications of Bull and Bear Market Economic Trends for Cross-Border Mergers and Acquisitions  
*Mentor:* Paul Drnevich, Kristin Irwin

Tomasz Gruchala  
Digital Media Addiction: An Emerging Issue Among College Students  
*Mentor:* Alan Blum

Robert Hanslip  
The Effect of Hedging with Weather Derivatives  
*Mentor:* Josh Pierce

Tomisha Hicks  
Neglect to Address Historical Trauma Widens Health Inequity Gap  
*Mentor:* Angela Paschal, Rebecca Eaton

John Higginbotham  
Faith and College: An Examination of Religiosity and Religious Coping’s Efficacy among College Students and Substance Abuse  
*Mentor:* Lori Turner

Alex Huechteman  
Community Needs Assessment of an Underserved Nicaraguan Population  
*Mentor:* Alyssia Miller

Erin Jacobs  
Mindful Men, Floundered Phishing  
*Mentor:* Allen Johnston

Gretchen Johnson  
Driving for Independence: The Role of Resource Sharing Initiatives in New Venture Intentions and Business Formation  
*Mentor:* Lou Marino

Abigail Kappelman  
How Cuba Stopped Zika  
*Mentor:* Jacqueline Morgan

Sara Kazyak  
Effects of Isoflavone Consumption on Risk Factors of Cardiovascular Disease in Post-Menopausal Women  
*Mentor:* Amy Ellis, Kristi Crowe-White

Cassidy Kelley, Ambley Chambers  
Defining Successful Feeding: An Evidence Based Systematic Review  
*Mentor:* Memorie Gosa, Olivia May, Jennifer Barnes

Jordyn Kent  
Star Wars: Rent-Seeking for Morningstar Ratings  
*Mentor:* Chris Whaley

Jeffrey Kolar  
The Relationship between Body Mass Index and Body Fat Percentage in College Aged Men and Women  
*Mentor:* Michael Esco

Shu Hang Kwan  
Recent Developments in Starch-Guest Inclusion Complex  
*Mentor:* Lingyan Kong, Libo Tan

Catherine Lamont, Lauryn Woodyard  
Katter Longshore  
Determinations of sEMG Values of Oral-Facial and Pharyngeal Musculature During Normal Swallowing  
*Mentor:* Memorie Gosa, Todd Freeborn

Shaquela Leatherwood  
Sex-Related Differences In Physical Activity And Cell-Phone Addiction  
*Mentor:* Michael Fedewa
Victoria Lewis, Brittany Tretter 16
Domain-Specific Correlations Between Physical Activity Intensity And Cell-Phone Addiction In College Students
Mentor: Michael Fedewa

Anthony Lipscomb 54
Future of Sports Is Becoming Digital: An eSport Presentation
Mentor: Stacy Morgan

Grace Liu 5
Geographical analysis of diabetes education services in Alabama
Mentor: Ann Graves

Grant Logsdon 68
The Impact of Big Data on Airbnb
Mentor: Yuanyuan Chen

Haley Malone 8
West Alabama Food Bank
Mentor: Lori Turner

Emma Mansberg, Andrew Rutledge, Madeleine Spivey, Lily Anderson 1
Seeds of Hope Begin with Hands on Work
Mentor: David Bolus

Jakeias McGee 90
Trustworthy Robots in the Workplace
Mentor: Kimberly Stowers

Lauren McGuire 46
Encoding Activity in Sedentary versus Physically Active Jobs using fMRI
Mentor: Ian McDonough

Bailey McIntosh 83
The Impact of Bias in Technology
Mentor: Darren Surman

Erin McNeil, Hanna Benkhraba 94
Anonymity and TOR: Internation Weapons Trade on the Darknet
Mentor: Diana Dolliver

Kayleigh Meighan 32
Disparities in Obstetric Care Experience Across Demographic Groups in Alabama
Mentor: Lesley Weaver

Melanie Mew 28
Comparison of Income Inequality and Access to Health Care across Location Demographics
Mentor: Dana Patton

Ann Meyer-Rasmussen 65
Assessing Change and Continuity in Andean Healing Traditions across 30 Years
Mentor: Kathryn Oths

Ethan Mines 102
Vocabulary Tuning: Optimizing Byte-Pair Merges for Neural Machine Translation
Mentor: Jeff Gray

Haley Moog 21
University of Alabama Office of Health Promotion and Wellness
Mentor: Lori Turner

Mary Katherine Moore, Chris Mayhugh, 39
Young Adults with a Parent History of Alzheimer's Disease Show Early Abnormalities in Brain Activity and Brain Volume
Mentor: Ian McDonough

Mitch Morrow 86
Racial Bias: Consumer Evaluation of Employee Prosocial Behavior
Mentor: Thomas Baker

Alexie Moskowski 52
Sedentary Behavior Is Associated With Physical Activity And Cell-Phone Addiction In Young Adults
Mentor: Michael Fedewa

Ronald Nelson 12
Breastfeeding Intentions Among University of Alabama Students
Mentor: Jen Nickelson
Megan Nichols 4
West Alabama Food Bank: Secret Meals/ Backpack Meals
*Mentor:* Lori Turner

Courtney Oleksa 87
Creating a Partnership with the Board of Dental Examiners of Alabama to Analyze and Improve Dental Professional Wellness within the State of Alabama
*Mentor:* Russell Matthews, Marilyn Whitman

Emma Pasko 41
Utilization of Technology for Assistance in Treating Depression
*Mentor:* Lori Turner, Jennifer Evans, Meghan Shewmake

Abigail Payne 101
Increasing Optical Character Recognition by Adding Localization Algorithms
*Mentor:* Travis Atkison

Evan Pickard 33
A Comparison of Global Healthcare Systems
*Mentor:* Paul Pecorino

Karen Place 100
Long-Term Monitoring Web Portal
*Mentor:* Andrew Graettinger, Clint Smith

Aiyana Saferite 35
Potential Drug Leads for the Prevention and Cure of Alzheimer's Disease
*Mentor:* Lukasz Ciesla, Cayman Stephen

Joe Salek 98
Characteristics of Contributors to Open Source Software Applications Mozilla and Gnome
*Mentor:* Uzma Raja

Daniel Scruggs 74
Banking Concentration and Bank Failures in the United States
*Mentor:* Robert Reed

MacKenzie Senogles, Ethan Sij 62
Clinical and Demographic Statistics of Health Care and Stress in Granada, Nicaragua
*Mentor:* Alyssia Miller

Sarah Spruill 85
Making it Real: Personal Transformation and Policy Knowledge in Volunteer and Paid Service Experience
*Mentor:* Brenda Smith

Pierce Stegman 92
WebBCI: An Electroencephalography Toolkit Built on Modern Web Technologies
*Mentor:* Jeff Gray, Chris Crawford

Rachel Stoves 15
The Child Abuse Prevention Services of Tuscaloosa (CAPS)
*Mentor:* Lori Turner

Dawson Tan 84
Perceptions of Blameworthiness in Intelligent Machines
*Mentor:* Kimberly Stowers

Harry Tenenbaum 96
Mobile Payment Adoption
*Mentor:* Greg Bott

Aaron Tharsius 105
Complexity of Computing Categorified Invariants
*Mentor:* Lawrence Roberts

Chance Tudor 71
An Examination of the Fearsome Five's M&A Activity: Deal Antecedents and Implications For the Target and Acquirer
*Mentor:* Paul Drnevich

Lita Waggoner 11
West Central Alabama AHEC: From High School to the Health Professions Pipeline
*Mentor:* Lori Turner

Gabriel Ward 89
It’s Too Much: The Negative Impact of Service (Over) Recoveries on Customer Satisfaction and Intentions
*Mentor:* Stacey Robinson

Avery Watson 57
Relationship between Problematic Pediatric Feeding Behavior and Nutritional Intake
*Mentor:* Kristi Crowe-White
Alex Watts
Does the Stock Market Care About the Unemployment Rate Announcement?
Mentor: Subhabrata Chakraborti

Jesslynn Webb
Tuscaloosa VA Medical Center (TVAMC) Caring Companion
Mentor: Lori Turner

Amber Wesoloski, Emily Goldstein
Examining the Effectiveness of the Buzz in Pediatric Patients Undergoing an Injection
Mentor: Sherwood Burns-Nader, Jack Sykstus

Mark Wiegreffe
Extracting and Cleansing Open Source Data for Analysis
Mentor: Rishikesh Jena

Parker Wilgus
The Traveling Governor Problem
Mentor: Mesut Yavuz

Michaela Williams
Al's Pals Mentoring Program
Mentor: Lori Turner

Houston Wingo
Simulations For Next Generation Sequencing Technologies
Mentor: Janna Fierst

D'Kota Wyatt
Sleep and Cortisol Levels in Early Childhood
Mentor: Dr. Maria Hernandez-Reif, Nahide Gungordu
<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
<th>Title</th>
<th>Mentor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henry Abrams</td>
<td>75</td>
<td>Rapid Photonic Annealing of Perovskite Solar Cells: A Pivotal Step in Developing Printed Solar Panels</td>
<td>Mentor: Dawen Li, Zhongliang Ouyang</td>
</tr>
<tr>
<td>Emily Adams</td>
<td>30</td>
<td>The Lost Cause: How to Perpetuate a Myth</td>
<td>Mentor: Darren Surman</td>
</tr>
<tr>
<td>Kendal Aldridge</td>
<td>34</td>
<td>Public Perceptions of the History of Slavery on Campus</td>
<td>Mentor: Rachel Stephens</td>
</tr>
<tr>
<td>Hani Alsuwaylih</td>
<td>79</td>
<td>Smart Shingles for Energy-Efficient Buildings</td>
<td>Mentor: Adam Hauser</td>
</tr>
<tr>
<td>Cameron Arnold</td>
<td>70</td>
<td>Thermodynamic Simulation and Experimental Validation of the Oxidation Behavior of NiAl-based Coatings in Comparison to High Entropy Alloys</td>
<td>Mentor: Mark Weaver, Brett Hunter</td>
</tr>
<tr>
<td>Henry Atkinson</td>
<td>54</td>
<td>Contact Angles of Ionic Liquid Drops on a Bismuth Telluride Surface</td>
<td>Mentor: Heath Turner</td>
</tr>
<tr>
<td>Bradley Beasley</td>
<td>36</td>
<td>The Admiralty Foreign Intelligence Committee/Naval Intelligence Department Reports Database</td>
<td>Mentor: John Beeler</td>
</tr>
<tr>
<td>Sally Bell</td>
<td>5</td>
<td>Women's Connection to the Evolution of Campus Architecture and Landscape</td>
<td>Mentor: Kristin Maki</td>
</tr>
<tr>
<td>Adam Benabbou</td>
<td>76</td>
<td>Application of High Fidelity Simulation Software for Aircraft Mission Simulation and Analysis</td>
<td>Mentor: Charles O'Neill</td>
</tr>
<tr>
<td>Sarah Beverly</td>
<td>52</td>
<td>Chemical Engineering in the United States: A Comprehensive Analysis</td>
<td>Mentor: Vincent Scalfani, Jason Bara</td>
</tr>
<tr>
<td>Olivia Boswell</td>
<td>9</td>
<td>LATR</td>
<td>Mentor: Brian Taylor</td>
</tr>
<tr>
<td>John Breland</td>
<td>41</td>
<td>Electrochemical Fabrication of Nano-channels</td>
<td>Mentor: Qiang Huang</td>
</tr>
<tr>
<td>Molly Buffington</td>
<td>28</td>
<td>A Faith That Sings: Lutheran Liturgy as a Theological Tool in the Reformation</td>
<td>Mentor: George McClure</td>
</tr>
<tr>
<td>Jacob Collins</td>
<td>50</td>
<td>Electrochemical Deposition of Magnetic Materials for Microdevices</td>
<td>Mentor: Qiang Huang</td>
</tr>
<tr>
<td>Andrew Cooper</td>
<td>77</td>
<td>Separation Point Analysis over a Rocket</td>
<td>Mentor: Semih Olcmen</td>
</tr>
<tr>
<td>Nadia DelMedico</td>
<td>32</td>
<td>Slavery and its Built Environment at The University of Alabama as revealed in the Basil Manly Diaries</td>
<td>Mentor: Rachel Stephens</td>
</tr>
<tr>
<td>Riecher Denmark</td>
<td>12</td>
<td>Glitch Art and the Production of Meaning</td>
<td>Mentor: Holland Hopson</td>
</tr>
<tr>
<td>Name</td>
<td>Page</td>
<td>Title</td>
<td>Mentor</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Arthur Dunlap</td>
<td>39</td>
<td>Military and Civilian Autocrats' Susceptibility to Coups in Sub-Saharan Africa</td>
<td>Holger Albrecht</td>
</tr>
<tr>
<td>Emily Elia</td>
<td>11</td>
<td>Trauma and Dictatorships: Postmemory in Spanish and Argentinian Cinema</td>
<td>Ana Corbalan</td>
</tr>
<tr>
<td>Mary Fahey</td>
<td>59</td>
<td>Bioimpedance of Forearm During Submaximal Contractions From Multiple Electrode Configurations</td>
<td>Todd Freeborn</td>
</tr>
<tr>
<td>Casey Fogleman</td>
<td>6</td>
<td>From Herero to Stage: Designing Costumes for &quot;We Are Proud to Present...&quot;</td>
<td>Donna Meester</td>
</tr>
<tr>
<td>Tim Foley</td>
<td>57</td>
<td>Updating and Integrating a User Interface for the ILLISLAB Pavement Analysis Software</td>
<td>Armen Amirkhanian</td>
</tr>
<tr>
<td>Jennifer Fourroux, Kira Yancey</td>
<td>25</td>
<td>Caregivers' Perspectives on the Human-Nonhuman Primate Relationship</td>
<td>Christopher Lynn</td>
</tr>
<tr>
<td>Abigail Furman</td>
<td>27</td>
<td>Great, Awesome, Terrific, and Fantastic: Analyzing the Lexical Semantic Change of a Set of Near Synonyms using Corpora</td>
<td>Dilin Liu</td>
</tr>
<tr>
<td>Victoria Grech</td>
<td>78</td>
<td>Montecito CA Debris Flow/Mudslide Warning Evaluation: A Weather Warning Improvement Study</td>
<td>Sara Gallman, Laura Myers, Darrell Arnold</td>
</tr>
<tr>
<td>Blake Griffith</td>
<td>83</td>
<td>The University of Alabama EcoCar High Compression Direct Injection Piston Design and Manufacture</td>
<td>Paul Puzinauskas, Alex Voris</td>
</tr>
<tr>
<td>Sommer Hallquist</td>
<td>17</td>
<td>The Hallquist Trunk: A History of Norwegian Painted Chests and the Transfer of Norwegian Culture to America</td>
<td>Rachel Stephens</td>
</tr>
<tr>
<td>Andrew Hanebuth, Trey Robbins, Montrel James, Tyler Rhodes</td>
<td>85</td>
<td>AIME Prototyping Lab 3D Printer Build Project</td>
<td>Ying Qin</td>
</tr>
<tr>
<td>Rhiannon Hein</td>
<td>29</td>
<td>Nationalist Sentiment in the Era of German Unification</td>
<td>Daniel Riches</td>
</tr>
<tr>
<td>Kyle Hornbuckle</td>
<td>60</td>
<td>Dependence of Bioimpedance Measurements on Phantom Surface Temperature</td>
<td>Todd Freeborn</td>
</tr>
<tr>
<td>Olivia Howe</td>
<td>3</td>
<td>grace.</td>
<td>Brian Taylor, Mallory Hardiman</td>
</tr>
<tr>
<td>Jamison Humburg, Julia Becker</td>
<td>56</td>
<td>Novel Septic System Design to Prevent Failure</td>
<td>Mark Elliott, Geoffrey Tick</td>
</tr>
<tr>
<td>Joshua Hunt</td>
<td>74</td>
<td>Pressure Changes in Homes During the Failure of Garage Doors in High Wind Events</td>
<td>Thang Dao</td>
</tr>
<tr>
<td>Katelyn Isbell, Leo Vanderburgh, Jonathan Platt</td>
<td>61</td>
<td>Radiolocation System using a Pseudo-Doppler Antenna Array with Polarization Diversity and Software Defined Radio</td>
<td>Yang-Ki Hong</td>
</tr>
<tr>
<td>Tristin Jones</td>
<td>47</td>
<td>Glycerol as a Source of Green Solvents for CO2 Capture</td>
<td>Jason Bara, Grayson Dennis, Shuai Qian,</td>
</tr>
<tr>
<td>Nikolas Kassouf, William Sides,</td>
<td>49</td>
<td>Electrodeposition of Iron Cobalt</td>
<td>Qiang Huang</td>
</tr>
</tbody>
</table>
W. Colton Knight, Claire - Wen Walsh
Reducing Thermoacoustic Oscillations in LDI Combustors
Mentor: Ajay Agrawal, Mitch Johnson

Lauren Lansdell
Senior Collection
Mentor: Brian Taylor

Kyle Leonard
Characterizing the Toxicity of Ionic Liquids to Mammalian Systems
Mentor: Chris Brazel

wenkang Li
Basic Knowledge of Industry Textbooks Used in Hefei during the Educational Revolution
Mentor: Margaret Peacock

Annemarie Lisko
Representations of Memory in Percy Shelley’s Italian-Period Poetry
Mentor: Stephen Tedeschi

Christina Lu
Chinese Diving Teams: Grey and White Platforms
Mentor: Jason Pontillo, Sonya Pritzker

Christina Lu
Little Children in My Heart: Examining the Many Meanings of Personal “Growth” in Beijing, China
Mentor: Christina Lu

Annsley Mace, Melisa Montalvo
Production of Three-Dimensional Porous Graphene for Energy Storage
Mentor: Ju Won Jeon

Alexandra Mannings, Alexia Acebo
Mixed Reality: A Dual Exploration
Mentor: Rebecca Salzer, Andrew Dewar, Rachel Raimist

Jacob Martin
Observe and Control: The Surveillant Gaze in Contemporary Spanish Cinema
Mentor: Ana Corbalán

Nate McCoun, Abram Aguilar,
Remote Sensing of Earth, Moon, and Mars: Investigating Orbits and Constellation of CubeSats
Mentor: Rohan Sood

Jenna Minser
The Colonization of Climate Change
Mentor: Darren Surman, Ellen Spears

Sydney Morales
Relationship between mechanical properties and microstructures of high pressure die casting AA383 alloy
Mentor: Luke Brewer, Tao Liu

Shana Oshinskie
Social and Economic Impact of Graphic Design
Mentor: Darren Surman

Dennis Parnell Jr.
Demonstrating a direct-injection constant-volume combustion chamber as a validation tool for chemical kinetic modeling of liquid fuels
Mentor: Joshua Bittle

Emily Paul
Redefining Identities Through the Revolution of Modern Dance
Mentor: Lawrence Jackson

Emma Pepperman
Where Legends Were Forgotten: Enslaved Workers at the University of Alabama, 1831-1865
Mentor: Jenny Shaw

James Pezent
Mission Architecture to Explore Multiple Near-Earth Asteroids: An Extension to NASA’s NEA Scout Mission
Mentor: Rohan Sood

Matthew Pilus
Software Gyroscope: Data Acquisition for Angular Velocity Estimation using MEMS Accelerometers
Mentor: Vishesh Vikas, David Leech

Meghan Poljak
Public Relations Society of America Alabama Chapter: Developing an Ethical Logo
Mentor: Meghan Poljak
Serena Ralph
Analysis of Chemical Structures via Molecular Descriptors
*Mentor: Vincent Scalfani, Jason Bara*

Will Raney
Towards Open and Interactive Sharing of Polymer Membrane Gas Separation Data
*Mentor: Jason Bara, Vincent Scalfani*

Tyler Rhodes, William Bounds, Matthew Mason
Spherical Additive Manufacturing 3D Printing Project
*Mentor: Susan Burkett*

Austin Rogers
Surface Engineering of Layered LiCoO2 Cathode Material
*Mentor: Ruigang Wang, Junhao Li*

Morgan Ross
Rapid Ultra-High Temperature Testing of TaC and HfC
*Mentor: Greg Thompson, Chase Smith*

Qinfeng Ruan
Influence of Thermo Hydrogen Treatment on Microstructural Evolution and Hydrogen Desorption Behavior of Titanium Alloys
*Mentor: Ruigang Wang, Zhongqi Liu*

Nicole Sempertegui
A combined compression molding, heating, and leaching process for fabrication of micro-porous poly(ε-caprolactone) scaffolds
*Mentor: Shreyas Rao, Akshay Narkhede*

Jared Sikes
Spacecraft Trajectory Design and Visualization in 3-D and Virtual Reality: Investigating the Earth-Moon Dynamical System
*Mentor: Rohan Sood*

Zach Smith
Discrepancy Between Contemporary World Literature and English Translation
*Mentor: Emily Wittman*

Gracie Smith
The Modern Major General
*Mentor: Allen Linken*

Samantha Thomas, Pablo Ramos Ferrer
Water Processable Popylyprrole:Poly(2-acrylamido-2-methylpropane sulfonic acid) Electrode for Energy Storage Applications
*Mentor: Ju-Won Jeon*

Alexandra Thomasson, Charlotte McRae
Drawings of Hope
*Mentor: Beverly Roskos, Anneliese Bolland*

Garrett Tobin
Enzyme Immobilization in Two Dimensions
*Mentor: Qing Peng*

Jesse Tollison
Why Vine Died: A Deconstruction of Vine as an Artistic Social Media
*Mentor: Jeremy Butler*

Jared Tubbs
Internal: Sonifying the Human Body
*Mentor: Andrew Dewar, Todd Freeborn, Holland Hopson*

Lauren Tucker
Row Crops to Rocket Ships: How the Arrival of NASA Helped End Segregation in the South
*Mentor: Margaret Peacock*

Grace VandeWaa
The History of Native American Dances and the Influences on Modern Dance
*Mentor: Lawrence Jackson*

Cole Wagenhals
Analyzing NiAlZrSi as an advanced thermal protective coating for jet engine blades
*Mentor: Mark Weaver, Brett Hunter*

Minda Wagenmaker
Optimization of gain parameters for transient heavy duty testing
*Mentor: Paul Puzinauskas*
Maxwell Ware, Adam Alturaiki
Self-Healable Polyelectrolyte Films Through a Layer-by-Layer Assembly Process
*Mentor: Ju-Won Jeon*

Chloe Whitney
Impartially
*Mentor: Brian Taylor*

Lauryn Woodyard
MATLAB software tool towards automated analysis of surface electromyography data to support clinical research of musculature activity during swallowing
*Mentor: Todd Freeborn, Memorie Gosa*

Moon Yang
Tracing Heath
*Mentor: John Estes*

Julia Zimmerman
Scaling the Ladder: Sanitation Progress During the Millennium Development Goals
*Mentor: Mark Elliott*