



Spring 2016

# Honors Research Symposium Program Spring 2016

University Honors Program, Georgia Southern University

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# 2016 HONORS RESEARCH SYMPOSIUM

GEORGIA SOUTHERN UNIVERSITY  
UNIVERSITY HONORS PROGRAM

# SCHEDULE

## **Thesis Presentations**

Nessmith-Lane Classrooms

### **Session 1**

**11:00am to 12:00pm**

## **Reception and Poster Presentations**

Nessmith-Lane Ballroom

**12:15pm to 1:15pm**

## **Welcome**

Dr. Steven Engel

*Director, University Honors Program*

Dr. Diana Cone

*Interim Provost and Vice President for Academic Affairs*

**12:30pm**

## **Thesis Presentations**

Nessmith-Lane Classrooms

### **Session 2**

**1:30pm to 2:30pm**

### **Session 3**

**2:45pm to 3:45pm**

### **Session 4**

**4:00pm to 5:00pm**

# WELCOME

Welcome to the Ninth Annual Honors Research Symposium. This event is designed to showcase the research and creative activities of the honors students of Georgia Southern University. This year, over 100 honors students will present their work, bringing the total number of participants to over 600 since 2008. The symposium program falls into two main components: poster presentations and thesis presentations.

## POSTER PRESENTATIONS

Poster presentations are designed for freshmen, sophomores, and juniors. These students are presenting works based on research carried out in the context of honors classes, research based on experiential learning projects, or the preliminary studies for their Honors Theses. In all cases, poster presenters are eager to engage attendees and receive comments on their work. This is particularly true for juniors, who are, in most cases, just launching their thesis research projects.

Thesis presentations feature graduating seniors who are delivering oral presentations of the results of their Honors Thesis work. Every honors student, in order to graduate as an honors scholar, must complete an Honors Thesis or Capstone Project. As the titles and abstracts in this program indicate, these projects span the realms of inquiry and creativity available here at Georgia Southern University.

Also listed in this program are the faculty mentors who have worked with each of these students, providing advice, support, and mentorship as the students have completed these projects.

## THESIS PRESENTATIONS



## ENJOY THE SYMPOSIUM

Please silence cell phones and do not text during sessions in order to give full attention to all the presenters. Please refrain from leaving sessions early or arriving late if at all possible. If you do plan to leave early to see a different session, please wait until the speaker has finished his or her presentation. Presenters using electronic presentations should load their presentations on the computer prior to the beginning of the session. Moderators will be in each session to make sure presentations run the appropriate length and to moderate Q&A sessions.

## THE UNIVERSITY HONORS PROGRAM

The University Honors Program provides a small college atmosphere in the context of a large comprehensive university. The program is designed to foster the development of a critical sense of inquiry, a spirit of creativity, a global perspective, and an ethic of civic responsibility. A hallmark of the program is the emphasis on bringing ideas to life through undergraduate research, experiential learning, and service-learning opportunities.

11:00AM - 12:00PM

# ROOM 2903

## **Austin Bennett**

The Financial Effects of the Affordable Care Act on Small Businesses

## **Accounting**

### **Dr. Charles Harter**

A study of the new regulations in the 2008 Affordable Care Act and the likely and actual effects of these laws on healthcare costs for small businesses.

## **Don Faulk**

The Impact of Status Consumption on Luxury Consumption Behaviors: The Influence of Culture

## **Marketing**

### **Dr. Jacqueline Eastman**

This study examined why millennials consume for status from a cultural angle (individualism and collectivism, power distance, and ethnicity). The survey findings suggest that while the motivation to consume for status and the cultural variable of power distance significantly impacted status purchase intention, individualism/collectivism and ethnicity did not.

## **Samantha Akins**

*Brassica oleracea var. Italica* (Broccoli) and *Brassica oleracea var. Italica x Alboglabra* (Broccolini): A Comparison of Vitamin C Content and Consumer Acceptability.

## **Nutrition and Food Science**

### **Dr. Joelle Romanchik-Cerpovicz**

This study compared the vitamin C content and consumer acceptability of broccoli to broccolini, a hybrid of broccoli and kai-lan. Vitamin C contents were similar. Consumers rated the raw vegetables comparably. In steamed form, broccoli was preferred over broccolini. Acceptability differences may exist due to higher consumer familiarity with broccoli.

## SESSION 1

THESIS PRESENTATIONS  
11:00AM - 12:00PM

11:00AM - 12:00PM

# ROOM 2904

## **Collin Daly**

## **Electrical Engineering**

Novel H.265 Video Traffic Prediction Models Using Artificial Neural Networks

### **Dr. Rami Haddad**

Neural network models are used to predict H.265 ultra-high definition video bandwidth requirements for streaming over Ethernet networks. Various neural network models are proposed and tested. The more efficient model is further tested to determine optimal network configuration and video compression rate.

## **David Dylan John**

## **Construction Management**

Building Information Modeling (BIM) Technology Adoption and Implementation in the Sri Lankan Construction Industry; First part - The Diagnosis

### **Dr. Marcel Maghiar**

The first of a two-part study to assess the adoption and implementation levels of Building Information Modeling (BIM) in the Sri Lankan Construction industry. This study will be used as a foundation for further study and exploration in the second phase; the prescription phase.

## **Sterling Holcomb**

## **Electrical Engineering**

Machine Learning Through Mimicry and Association

### **Dr. Rocio Alba-Flores**

Adaptability is a key missing feature that has impeded the growth of assistive robotics. In the traditional model, all actions must be explicitly coded by a skilled programmer familiar with the hardware. This project explores a method of teaching a webcam-equipped, arm-type robot new motions using visual demonstrations.

11:00AM - 12:00PM

# ROOM 2905

## **Giselle Devot**

## **Communication Studies**

Pursuit of Conflict: A Training and Development Packet for Conflict Management

### **Dr. Abby Brooks**

The purpose of this Training and Development Packet (TDP) is to explicate the concept of conflict management and gender communication in the workplace. The goal of this TDP is to recognize the need to understand complexities of human communication and to ultimately cultivate a conducive environment that enriches the organizational culture and productivity.

## **Kate Lawrence**

## **Public Relations**

The Media's Portrayal of the Measles Outbreak

### **Dr. Michelle Groover**

This thesis project examines how social media was used during the measles outbreak from February 2015-April 2015. This content analysis research project will examine social media, specifically Twitter and Facebook, on the basis of the Center for Disease Control and Prevention (CDC) and the World Health Organization (WHO).

11:00AM - 12:00PM

# ROOM 2908

## **Erica Teilhaber**

## **Recreation**

Perceptions of Adults with Intellectual Disabilities on Experiences at a Weeklong Camp

### **Dr. Brent Wolfe**

This study was conducted to understand the perceptions of a weeklong camp experience for adults with intellectual disabilities. A survey was administered to campers asking questions pertaining to the conceptual, social, and practical domains. Additionally, researchers sent a member check survey. Results showed positive feedback and convey participants perceived improvements.

## **Madison Monk**

## **Recreation**

Measuring Perceptions in Quality of Life After Camp

### **Dr. Brent Wolfe**

This study explores how a camp environment can impact adults' with intellectual/developmental disabilities (I/DD) perceptions of quality of life through providing opportunities to participate in recreation activities and socialize with other campers. Study findings suggest that the camp experience does positively impact perceptions of quality of life for adults with I/DD.

## **Sarah Holmes**

## **Psychology**

The Effect of Media on Self-Objectification and Gender-Role Conflict in College Students

### **Dr. Shauna Joye**

This study examined the effect that objectified images of women can have on women's self-objectification and men's gender-role conflict. Overall, women were more likely to self-objectify than men, and men experienced more gender-role conflict. Additionally, men experienced higher gender-role conflict in relation to success, power, and competition after viewing images with low objectification.

11:00AM - 12:00PM

# ROOM 2911

## **Alexis Davison**

## **History**

Shaping the Public Mind: Edward Bernays and the Rise of Public Relations

### **Dr. Craig Roell**

Edward Bernays, nephew of Sigmund Freud, used his uncle's ideas to pave the way for modern public relations and alter everything in our life. His ideas influenced the American breakfast, women's "decision" to smoke, the overthrow of the Guatemalan government, and the rise of Nazi Germany.

## **Markus Cotton**

## **History**

Typical Bavarian Soldiers?

### **Dr. Brian Feltman**

This thesis focuses on Eduard Husslein and Urban Weigand, who were two Bavarian farmers called up for military service in 1914. The introduction provides background information on both of the men, including how they lived and their family life at the time of war. The first and second chapters discuss the impact of the outbreak of war on their hometown and their specific involvement in the war, while the third chapter discusses demobilization and how it affected their return home. This thesis recreates the story of two typical Bavarian soldiers whose story had been lost over the generations.

## **William Wilson**

## **History**

The Orthodox Betrayal: How German Christians Embraced and Taught Nazism and Sparked a Christian Battle

### **Dr. Brian Feltman**

The Deutsche Christen movement became the driving force of Nazi ideology within the Protestant church and quickly dissented from orthodox Christian theology becoming heretical. The Deutsche Christen heresy was unique to Germany and could have only been formed within the borders and historical context of the German nation. This heresy created a division within the established Protestant church. As the division grew the heretics and the orthodox members struggled for power.

12:15PM - 1:15PM

# BALLROOM

POSTER PRESENTATIONS  
12:15PM - 1:15PM

## 1. Ashlee Charles

The Ecological Factors Impeding the Quality of Life for Medically Uninsured Women

### Dr. Ashley Walker

Rising healthcare costs in the United States are creating a need to understand how a lack of healthcare coverage is decreasing women's quality of life and leading to negative health outcomes. Through a focus group, I aim to identify what factors impede the quality of life for medically uninsured women.

## 2. Riley Theis

Spectroscopic, Structural, and Energetic Analysis of Noble Gas Cations

### Dr. Ryan Fortenberry

Due to the recent discovery of  $\text{ArH}^+$  in the Crab Nebula, questions of the existence of other potential noble gas cations have arisen. The spectroscopic data of  $\text{ArH}_2^+$ ,  $\text{NeH}_2^+$ ,  $\text{ArH}_3^+$ ,  $\text{NeH}_3^+$ ,  $\text{ArOH}^+$  and  $\text{NeOH}^+$  have been analyzed to discover its potential existence in the Interstellar Medium.

## 3. Salena Neuwar

A Study on Exploring Parents' and Occupational Therapists' Views on Facilitating Social and Emotional Development

### Dr. Katy Gregg

This study is looking at how parents of a child with a disability and the child's occupational therapist each facilitate social and emotional development with the child. Using the information gathered, I will look at the similarities and differences of facilitation among occupational therapists and the parents. Then I will look to make inferences at strategies that could be used in communication between the parent and occupational therapist as well as individually to better serve the child with a disability.

12:15PM - 1:15PM

# BALLROOM

## 4. Abbey Greer, Ben Martin, Julia Cote, Sidney Billingsly, and Bailey Adcock

Diverse Applications of Animal Assisted Therapy

**Dr. Jerri Kropp and Dr. Trent Maurer**

The benefits of animal-assisted therapy (AAT) cross fields and reach many different populations. We compiled research on the different populations that AAT caters to and the animals that AAT utilizes.

## 5. Lacey Dennis

Effect of Static Stretching on Pennation Angle and Muscle Power Production of the Gastrocnemius

**Dr. Daniel Czech and Dr. Li Li**

The purpose is how pennation angle is affected by stretching in the gastrocnemius muscles. The pennation angle will be measured before and after a stretching protocol. Then muscle power production will be measured after pennation angle. I hypothesize an increased pennation angle will be accompanied with less muscle power production.

## 6. Mackenzie Payne

Temporal, Spatial, And Age Distributions Of White-Tailed Deer, *Odocoileus virginianus*, Killed On Bulloch County Roadways

**Dr. Edward B. Mondor**

White-tailed deer (*Odocoileus virginianus*) are native to the state of Georgia. As there are over 1.2 million individual animals in the state, they are implicated in a large number of motor vehicle accidents (ca. 1 million) each year. It is currently unknown, however, if deer are more likely to be killed 1) at certain times of year, 2) in particular areas, and 3) of particular age classes. We addressed these questions by collecting the remains of white-tailed deer killed in motor vehicle accidents in Bulloch County, GA. Recommendations will be made as to where additional "deer crossing" signs should be posted in the county.

12:15PM - 1:15PM

# BALLROOM

## 7. Diana Tyler

Reliability of Gastrocnemius Muscle- Pennation Angle Measured by Ultrasound in Standing Position

**Dr. Li Li and Dr. Daniel Czech**

Pennation angle has been measured using ultrasound while in a prone position. The purpose of this study is to measure pennation angle of the gastrocnemius muscle with ultrasound while in a mechanically loaded position. This research expects to show that measurements of gastrocnemius muscle pennation angle during standing are reliable.

## 8. Megan Mears

Developing Molecular Tools for Diagnosis of Human Ehrlichiosis

**Dr. Marina Eremeeva**

*Ehrlichia chaffeensis* and *E. ewingii* cause febrile illnesses in humans and dogs. Uncultivable *E. ewingii* displays antigenic cross-reactivity with *E. chaffeensis*. Our project is using targeted RNA baits to characterize *E. ewingii* surface protein gene homologous to the major 120 kDa (gp120) diagnostic protein antigen gene of *E. chaffeensis*.

## 9. Molly McLaughlin

Reliability of Pennation Angle Measured Using Ultrasound With Different Plantar Flexion Angles During Upright Position

**Dr. Li Li**

The purpose of this research study is to measure pennation angles of the gastrocnemius muscle using ultrasound while in an upright position, as opposed to lying in the prone position seen in previous studies. While lying may be an easier method of getting an ultrasound image the muscle is relaxed but muscle pennation angle will change during contraction, such as while standing.

12:15PM - 1:15PM

# BALLROOM

## 10. Cassidy Keim

Replication and Extension of a Classroom Activity using the Bogardus Social Distance Scale

### Dr. Trent Maurer

This project was the first wave of a 3-year replication of Maurer's (2013) evaluation of a classroom exercise on social distance and discrimination. We hope to see more significant results in the future on how lecture affects attitudes and whether it holds a lasting effect on other targeted groups.

## 11. Haley Polane and Morgan Underhill

Animal Assisted Therapy in Prisons

### Dr. Jerri Kropp and Dr. Trent Maurer

Because of interests in the criminal justice field, our research incorporates our current studies in animal assisted therapy with our future career studies in the criminal justice field. Benefits have been proven with many populations using animal assisted therapy. We wanted to see if prisoners could benefit as well.

## 12. Margaret Kilpatrick

Factors Influencing Sports Participation for Individuals with Disabilities

### Dr. Brent Wolfe

Research and information was examined to determine factors that may affect sports participation among individuals with disabilities. Additional examination was conducted to compare how these factors affected people with congenital and acquired disabilities. Social, personal, and environmental factors were examined along with the scope of the disability

12:15PM - 1:15PM

# BALLROOM

## 13. Tony Hudson

The Beasts Within

### Dr. Srobana Bhattacharya

Why are Americans more afraid of one organization that has successfully attacked the U.S., rather than the increasing lone-wolf attacks within the country? I address this issue and present examples of recent lone-wolf terrorist attacks on U.S. soil to better understand why it happens and how to counter them.

## 14. J. Alex Schenk

The Mobius Strip of Total Health

### Dr. Shauna W. Joye

Armed with the knowledge that mental and physical health are interdependent, we aim to test various methods of positive and negative motivation to effect change in physical performance and scores on measures of depression, anxiety, and stress for students enrolled in walking classes during the summer and fall of 2016.

## 15. Thomas Mulkey

Social Consequences of an Integrated Set of Games

### Dr. Brent Wolfe

This research discusses the social ramifications of integrating the Paralympic Games and the Olympic Games into a single set of games to determine if integration will improve the social well-being and livelihood of people with disabilities. The research addresses the positive and negative outcomes on both athletes and non-athletes.

12:15PM - 1:15PM

# BALLROOM

## 16. Jesse Powell and Bernadette O'Donnell

When Terror? When Just?

**Erin Cleary**

Our presentation will attempt to create a satisfactory definition of terrorism, as well as determine when, if ever, it is an acceptable means of ideological or social change, by reviewing historical accounts of terrorism and by consulting the literature concerned with determining its moral status.

## 17. Christina Morris, Meagan Moss, and Cassandra Thomasson

The Application of Animal Assisted Therapy to Mental Disorders

**Dr. Jerri Kropp and Dr. Trent Maurer**

Animal assisted therapy is still a growing field of research with benefits applying across many different spectrums of people. This is a collection of research on the application of animal assisted therapy to individuals of all age groups with mental disorders such as depression, anxiety, and dementia.

## 18. Emily Deyton

Innovative Pedagogy: American Music Education Then and Now

**Dr. David Langley**

Historically, American music education in the public school system has been centered on innovation and growth. These philosophies remain influential today. This project attempts to delineate how early American music education continues to impact contemporary classrooms and how the methodologies of modern educators have transformed to accommodate changing student needs.

## 19. Jonathan Taylor

Temperature-responsive Controlled Drug Delivery Using Functionalized Nanoporous Membrane

**Dr. Ji Wu**

Drug delivery is an exciting research area that has gained interest in recent years due to its importance in pharmaceutical science. Here, a temperature-responsive membrane is proposed to control the delivery rate of ibuprofen. In the future, we hope to use this membrane to control the delivery of anti-addiction drugs.

12:15PM - 1:15PM

# BALLROOM

## 20. Kyle Leep, John Lillard, Garfield Walsh, and Haydon Lynch

Classifying Hand Gestures through Neural Networks and Electromyography

**Dr. Rocio Alba-Flores**

A muscle's electrical activity can be recorded by using electromyography. This activity can be analyzed with artificial neural networks to classify the activity into different hand gestures. These gestures can then be used to control computer systems such as myoelectric prosthetic hands. This process provides more natural prosthetic limb control.

## 21. Eva Blais

The Effect of Static Stretching on Proprioception and Decreased Muscle Power Production

**Dr. Li Li and Dr. Daniel Czech**

Recent studies have shown that pre-exercise static stretching negatively affects performance. However, why this happens is unknown. This study will explore how stretching alters proprioception and therefore muscle power production. Using the Biodex, passive and active re-positioning will determine proprioception in the ankle joint. This will provide an explanation of why stretching affects muscle power production because of altered proprioception.

## 22. Taylor Hartley, Victoria Liggett, and Hollie Bryan

Animal Assisted Intervention and Children with Autism

**Dr. Jerri Kropp and Dr. Trent Maurer**

This project is consolidation of research from around the world on how the use of animal assisted activities affects the behaviors and overall quality of life in children with autism spectrum disorder.

## 23. Bailey Kirk, Emily Pressler, Julia Thomas, and Alex Nicholson

Project Pura Vida

**Dra. Leticia McGrath**

Our poster presentation focuses on the history and ongoing transformation of La Carpio, a shanty town founded by Nicaraguan immigrants to Costa Rica where more than 40,000 people live in abject poverty. It will be based on our research and our firsthand experiences on the Honors Project Pura Vida Trip.

12:15PM - 1:15PM

# BALLROOM

## 24. Kolyse Wagstaff

The Effect of Stretching the Gastrocnemius on Electromechanical Delay and Decreased Muscle Power Production

**Dr. Li Li and Dr. Daniel Czech**

Static stretching muscles before athletic events decreases muscle power produced. EMD is the delay between muscle stimulation and force. The purpose is to determine if the decrease in force production is due to longer EMD. Participants will jump on force plates recording force and EMD, testing power produced by the gastrocnemius, with and without stretching.

## 25. Ashlyn Avera

How Do We Teach Emotion?

**Dr. Nancy L. Malcom**

This study looks at movies to see if the messages shown to children about sadness have changed over time. This research compares *The Lion King* and *Beauty and the Beast* to *Big Hero 6* and *Inside Out*. Findings reveal that we have changed the way we teach children about sadness.

## 26. Morgan Gallahue, Martha Braselton, and Abigail Slattery

Race & Place

**Dr. Francis Desiderio**

Our poster shows the relationship between the past and present conditions concerning race and economics in the city of Statesboro. We want to examine the history of racial segregation, the process of desegregation, present day economic situations, and housing practices.

## 27. Marian Trainor, Kassie Bohannon, Michael Edwards, and Travis Anderson

Georgia Southern's Physical History and its Lasting Effects

**Dr. Francis Desiderio**

This is an examination of the historic architecture currently present on the Georgia Southern University campus, how the buildings have changed over time, the effects they have on the Georgia Southern campus, and ultimately if these effects promote traditional gender roles or stereotypes in any tangible way.

12:15PM - 1:15PM

# BALLROOM

## 28. Brady Gwynn and Paige Peterson

What Stood the Test of Time

**Dr. Francis Desiderio**

Statesboro was founded in 1803 and with its establishment came landmarks. This project will examine six landmarks: New Hope Methodist Church, Beaver House, First Baptist Church, Bank of Statesboro, Upper Black Tree Church, and the Old Walnut Tree. We will also examine the power memories hold within a city's history.

## 29. Mitchell Mayes, Sophia Fleri, Bethany Johnson, and Rebeca Gonzalez

The Devolution and Evolution of Downtown Statesboro

**Dr. Francis Desiderio**

Downtowns historically have been the central hub of economic and social activity. Statesboro's downtown has struggled since the introduction of the bypass and the resulting shift in business locations. We will discuss this shift, and newly proposed responses to it, as well as Georgia Southern's role in revitalization.

## 30. Elizabeth Leone, Brandon Sellers, and Reagan Hicks

Statesboro: Not Just a College Town

**Dr. Francis Desiderio**

Statesboro often has been defined in terms set by Georgia Southern. However, it is a place containing a rich culture in art, stemming from the region's musical history. We will focus on the role of culture found in the Averitt Center of the Arts, various local businesses, and the university.

1:30PM - 2:30PM

# ROOM 2903

## **Jasmine Smith**

## **Information Systems**

Accounting Information Systems: Ethics, Fraudulent Behavior, and Preventative Measures

## **Dr. Thomas Case**

The evolution of information technology within financial and accounting processes has brought new ethical issues, forms of fraudulent behavior, and mechanisms to prevent compromising confidential, sensitive, and personal information. This investigation focuses on the evolution of accounting information systems and their controls for limiting misconduct in financial and accounting processes.

## **Yolande Neil**

## **Information Systems**

Web Scraping the Easy Way

## **Dr. John N. Dyer**

Web scraping mimics human web surfing behavior by pointing to a website and collecting large amounts of data that would be difficult for humans to extract. This paper demonstrates web scraping using a program named Data Toolbar to expose academicians, students, and practitioners to its concept and necessity.

## **Zachary Davidson**

## **Computer Science**

Connecting the Business to IT Operations: The Coca-Cola Company

## **Dr. Andrew Allen**

There is currently a disconnect between the business and IT operations at The Coca-Cola Company. This project addressed this issue and produced a potential solution using Machine-Generated Data for The Command Center Services Team specifically for IT Job Scheduling.

## SESSION 2

# THESIS PRESENTATIONS 1:30PM - 2:30PM

1:30PM - 2:30PM

# ROOM 2904

## **James “Ronney” Miller III**

## **Mechanical Engineering**

Scalability of Microscale Fractal-Like Branching Channel Networks

### **Dr. David Calamas**

Fractal-like branching networks have been shown to reduce pressure drops and be more efficient at the microscale. The ability to scale these results up to the macroscale was tested and confirmed by comparing the Euler number to the position of the fluid in the flow network.

## **Stone Williford**

## **Mechanical Engineering**

Dynamic Simulation and Analysis of FSAE Racer for Development of Stability Control System

### **Dr. Aniruddha Mitra**

A computer model of an FSAE racer was developed to research stability under dynamic conditions. With this model of the car, roll and pitch data and traction were collected. The goal is to understand how to counteract vehicle movements and traction loss, and will help develop a self-adjusting suspension.

## **Valerie Welty**

## **Mathematics**

Mathematical Models for Infectious Disease Transmission with Stochastic Simulation of Measles Outbreaks

### **Dr. Patricia Humphrey**

The mathematical study of infectious disease provides important results to guide public health policy. Critical vaccination thresholds and models for infectious disease spread are presented and studied through a probabilistic simulation of measles outbreaks. The simulation makes use of a proposition we have made for varying contact rates called self-quarantine.

1:30PM - 2:30PM

# ROOM 2905

## **Allison Mueller**

## **Art**

Southern Steam Prints: Large Scale Reductive Printmaking

### **Prof. Patricia Carter**

Southern Steam Prints will be a steamroller printmaking event that will broaden my professional portfolio and teach valuable skills for the kinds of events that artists plan and participate in the professional world. My event will also create an exhibition of work that demonstrates community involvement and fine art mastery.

## **Kristen Flippo**

## **Writing & Linguistics**

Hans Christian Andersen: Retellings of Fairytales

### **Prof. Jared Yates Sexton**

This work includes retellings of Hans Christian Andersen’s original fairytales. It explores the darker emotions not usually expressed through modern retellings of Andersen’s work.

## **Michael Conner**

## **Writing & Linguistics**

*Reformation*

### **Prof. Jared Yates Sexton and Dr. Lisa Costello**

This is a novel grounded in the restoration of a country through mandated use of pharmaceutical drugs in humanity’s increasingly fervent desire for unattainable perfection at the expense of emotional and physical stature. *Reformation* explores the far-reaching consequences of everyday human decisions and their collective development into a dystopian society.

1:30PM - 2:30PM

# ROOM 2908

## **Maximilian Fey**

Working Memory and Cued Recall

### **Dr. Karen Naufel**

The present study examined the extent to which cues, which varied in relevance to the recall task and imageability, affect one's recall ability in relation to working memory. The results showed that there was no difference between an individual's ability to recall and their working memory scores. However, the ambiguous cue condition recalled significantly more non-target memories.

## **Psychology**

## **Justin Kemple**

## **Psychology and Criminal Justice**

The Relationships between Psychopathy, Empathy, and Everyday Moral Decision Making in an Undergraduate Sample

### **Dr. Amy Hackney**

Psychopathy is a personality disorder characterized by low levels of interpersonal manipulation and empathy. The current study examined the relationships between psychopathy, empathy, and everyday moral decision making. Results showed that psychopathy was strongly related to lower feelings of guilt and lower feelings of empathy during moral decision making.

## **Kelsey Pierson**

## **Psychology and Spanish**

The Effects of Rape Myths and Expert Testimony on Juror Decision Making in a Sexual Assault Case

### **Dr. Amy Hackney**

The purpose of the current research was to assess rape myths regarding the timing of reporting a sexual assault to the police. We also investigated whether expert testimony that debunked such myths affected juror judgments regarding victim and defendant credibility and judgments of guilt.

1:30PM - 2:30PM

# ROOM 2911

## **Andrew Smallwood**

Who's in Charge of Whom? A Study into the Deference Paid By Federal Court Judges to Executive Agencies

### **Dr. Brett Curry**

In this examination of judicial deference paid by the judges of the U.S Court of Appeals of the District of Columbia Circuit towards executive agencies, I argue that as judicial tenure increases, the likelihood of a judge offering deference towards the EPA or NLRB decreases.

## **Political Science**

## **Ashleigh Rasheed**

Impacts of Prisons in Rural Communities: Economic and Social Factors

### **Dr. Joshua Kennedy**

What are the economic impacts associated with prisons? What effects do stigmas associated with prisons have on the residents living in the community? I argue that prisons provide a short term economic gain for rural communities by providing jobs, thus boosting the economy.

## **Political Science**

## **Seroyah Williams**

Police and Gangs Comparison

### **Dr. Adam Bossler**

Police have been said to be the largest gang in America with badges. With recent events occurring throughout the United States, including police shootings of unarmed citizens, some may say that the police have shown various characteristics similar to those of gangs. Does the public also view officers, in general, in the same perspective?

## **Justice Studies**

2:45PM - 3:45PM

# ROOM 2903

**Nathan Hayenga**

**Finance and Economics**

The Effect of Doctors without Borders on Low- and Middle-Income Countries in Sub-Saharan Africa

**Dr. Bill Yang**

This research studies the relationship between the activity of medical disaster-response humanitarian aid and the rate of growth in developing economies. Analysis revealed both conclusive and inconclusive results about the effectiveness of Doctors Without Borders as a form of international investment and about the disasters they respond to.

**Trevor Camper**

**Finance and Economics**

Catch 22: Perceived Issues with Quantitative Easing and the Asset Purchase Mechanism

**Dr. Bill Yang**

Quantitative Easing, an unusual monetary policy, was used by the countries of the US, Japan, and the European Union. Since the use of this policy, these countries have had difficulty re-stabilizing their economies. This study intends to show that the policy can have diminishing and contractionary economic effects.

## SESSION 3

THESIS PRESENTATIONS  
2:45PM - 3:45PM

2:45PM - 3:45PM

# ROOM 2904

## **Sarah Roessler**

## **Chemistry**

Incorporation of TEMPO and PEG Functionalities into ROMP Polymers via Click Reaction

### **Dr. Hans J. Schanz**

This research is on the development of ROMP polymers containing the functional groups TEMPO and PEG. The polymers when bonded to cell-free hemoglobin may be useful for the treatment of severe traumatic brain injuries as they convert the reactive oxygen species (ROS).

## **Audrey Scholz**

## **Chemistry**

Bio-Based Composites for Tissue Engineering from Tung Oil and Collagen

### **Dr. Rafael Quirino**

Collagen has been added to a tung oil-based thermosetting resin in order to enhance its thermo-mechanical properties. The samples prepared were characterized by thermogravimetric analysis (TGA), differential scanning calorimetry (DSC), and dynamic mechanical analysis (DMA). Improvements in composites' properties were observed with increasing amounts of collagen.

## **Shelby Scherer**

## **Chemistry**

Exploring the Relationship of MBD1 Protein Binding CpG Sites of Methylated DNA

### **Dr. Amanda Stewart**

Methylated DNA binding (MBD) proteins control transcriptional regulation by binding methylated DNA, silencing tumor suppressing proteins. By exploring structure/function relationships of MBD proteins, peptides that bind methylated DNA specifically can be synthesized. Initial structural and binding studies with the original MBD1 binding region will be reported as potential therapeutics.

2:45PM - 3:45PM

# ROOM 2905

## **Carmen Gray**

## **English**

Re-Presenting the Past: Valuing Perspective and the Plural Nature of Truth in the Historical Poems of Rita Dove

### **Dr. Joe Pellegrino**

Exploring perspective and the relative nature of truth by examining the intersection of personal history and larger historical events through the poetry of Rita Dove.

## **Lydia Biggs**

## **English**

The Odes Project

### **Dr. Joe Pellegrino**

An important step for education is to grow with technology. The Odes Project is meant to combine teaching with technology through an exploratory website. It presents six of Keats' most famous poems, the "Great Odes," as a better way to teach students how to interpret poetry.

## **McKinley May**

## **English**

Continuity in Color: The Persistence of Symbolic Meaning in Myths, Tales, and Tropes

### **Dr. Joe Pellegrino**

This presentation examines the symbolism of the colors black, white, and red from ancient times to modern. It explores ancient myths, the Grimm canon of fairy tales, and modern film and television tropes in order to establish the continuity of certain symbolisms through time.

2:45PM - 3:45PM

# ROOM 2908

## **Connor Ondrizek**

## **Psychology**

The Effects of Alcohol-Related Stimuli Priming on the Expression of Relational Aggression

### **Dr. Jessica Brooks**

There is a link between aggressive behaviors and alcohol. Alcohol expectancies contribute to problematic drinking. Alcohol expectancies of participants were assessed, and participants were randomly assigned to control or alcohol priming conditions. There was a significant difference between those primed with alcohol stimuli and those with control stimuli on hostility ratings.

## **Kelly E. Daniel**

## **Psychology**

The Effect of Peer Presence on Adolescent Risk-Taking Behaviors

### **Dr. Ty W. Boyer**

Research suggests peer presence increases adolescent risk-taking. This study examined this effect by implementing a virtual peer condition and manipulating perceived experimenter expectancies. Undergraduate participants in peer and virtual peer conditions took more risks than those in an alone condition, but only when the experimenter conveyed a risk-seeking expectancy.

## **Robin Lane**

## **Psychology and Art**

Schadenfreude, the Dark Triad, and the Effect of Music on Emotion

### **Dr. Ty W. Boyer**

Schadenfreude is a humorous response to others' misfortunes. In the present study we ask, does schadenfreude vary with Dark Triad personality traits (narcissism, Machiavellianism, and psychopathy) or the musical score that accompanies stimuli? The results indicated a relation between schadenfreude and psychopathy and an interaction between stimuli and musical score.

2:45PM - 3:45PM

# ROOM 2911

## **Joel Shafer**

## **Sociology**

Human Trafficking: Exploration of Best Practices for Restoration and Integration for Survivors in Southeastern United States

### **Dr. April Schueths**

Domestic human trafficking, especially of minors, has become a serious though hidden issue in the United States. Organizations exist, however, that initiate care and reintegration for survivors. Through the perspectives of service providers, this exploratory qualitative study examines the factors of vulnerability and the best practices when caring for survivors.

## **Morgan Podczervinski**

## **Political Science**

Human Trafficking: Legislation and Extent

### **Dr. Courtney Burns**

How would reducing the restrictions of the T-visa as well as legalizing prostitution impact the overall rate of sex trafficking in the U.S.? I argue that the restrictions on T-visas limit victims' access to resources and that the legalization of prostitution increases rates of sex trafficking.

## **Xavieria Jeffers**

## **Political Science and History**

The Persistence of the Welfare State: A Comparative Analysis

### **Dr. Jamie Scalera**

The welfare state is a component of many government systems in which the government provides social services to the citizens of a nation. I argue that the welfare state has become institutionalized in economies and governments around the world making it impossible for governments to remove the welfare state.

4:00PM - 5:00PM

# ROOM 2903

**Austin Glover**

**Accounting**

Publishing in the Top Journals: A Cross-Disciplinary Study

**Dr. Lowell Mooney and Dr. Axel Grossmann**

The purpose of this research is to determine the probability that faculty will publish in the top journals in their respective fields, and if the probability of publishing in those top journals is equally likely across accounting, finance, and management disciplines.

**Laura Elizabeth Willimon**

**Accounting**

The Evolution of the Annual Report to Shareholders

**Dr. Britton McKay**

This study examines the evolution of the annual report to shareholders between 2005 and 2014. I examined several elective elements of annual reports, specifically looking at sustainability, interactive interface, and length as it changed year to year. Additionally, I examined changes in independent auditor and classified companies according to GICS sectors.

**Mikaela Shupp**

**Business Management and Spanish**

A Human Resource Approach to Improving an Alternative Break Experience

**Dr. Trey Denton and Katy Kaesebier**

An exploratory study that examines the selection processes of seven unique alternative break (AB) programs. The objective is to identify characteristics that maximize the development of students and the impact of AB programs. Analysis of the processes is used to revise the selection process for Georgia Southern University's AB program.

## SESSION 4

**THESIS PRESENTATIONS  
4:00PM - 5:00PM**

4:00PM - 5:00PM

# ROOM 2904

## **Brittany Smith**

Sodium Indicator in Embryonic Systems

### **Dr. Vinoth Sittaramane**

The main aim of this study was to identify a method in which we could visualize the distribution of sodium ions in vivo. We designed an experiment in which zebrafish embryos were stained with a green-fluorescent sodium indicator. Embryos were then visualized and analyzed for sodium distribution levels throughout the body.

## **Biology**

## **Shauntell Luke**

The Role of ITGA6 on Tumor Progression

### **Dr. Vinoth Sittaramane**

Cancer treatment strategies are limited, because they are nonspecific and cannot cure cancer. In order to develop a cure, examination of the tumor microenvironment is essential. Upregulation and downregulation of ITGA6, as well as an in vivo cleaving mechanism was studied to determine its role on tumor progression.

## **Biology**

## **Danielle Turner**

An Industrial Chemical Used in Coal-Washing Influences Plankton Communities in Freshwater Microcosms

### **Dr. Risa Cohen**

A chemical used to wash coal, 4-Methylcyclohexane methanol (MCHM), has potential to adversely affect microscopic plants and animals (plankton) at low concentrations. Freshwater plankton communities were exposed to MCHM for two weeks under greenhouse conditions. The resulting decrease in abundance of plankton groups suggests MCHM alters food availability to fish.

## **Biology**

## **Scott Oswald**

When the Leaves Fall: Modeling Seasonal Variation of Litter Flux in an Urban Forest

### **Dr. José Checo Colón-Gaud**

Using a small set of litter flux data collected at Herty Pines, I explore the seasonal variation in forest litter flux rates. To describe the observed patterns in the data, I discuss using a statistical model to describe and predict future litter flux rates as well as other potential applications.

## **Biology**

4:00PM - 5:00PM

# ROOM 2905

## **Jessica Davis**

Co-Teaching: Creating Differences in Teachers' Professional Identities

### **Dr. Yasar Bodur and Dr. Meca Williams-Johnson**

This research examined the differences in the professional identities of general educators and special educators in the co-taught classroom. Participants were asked to select from three metaphorical picture choices (a conductor, a gardener, and a juggler) in order to categorize their role identity in the classroom.

## **Early Childhood Education**

## **Kirsten Brodmann**

Teacher Attitudes toward Latin Instruction at the Elementary Level

### **Dr. Yasar Bodur**

The purpose of this study was to identify teacher attitudes toward Latin language instruction at the elementary level. Participants were questioned about their experience of Latin and observations of Latin's effects on other content areas. This study benefits educators interested in teaching Latin in an elementary level classroom.

## **Early Childhood Education**

## **Meredith Eby**

Integrating Reading into Mathematics Instruction

### **Dr. Meca Williams-Johnson and Dr. Yasar Bodur**

This study aimed to explore how teachers describe the relationship between mathematics and literacy skills, and to explore specific methods teachers used to accommodate low-level readers in their instruction. The researchers used a qualitative design to understand how teachers used literacy and accommodations for low-level readers in their mathematics classroom.

## **Early Childhood Education**

4:00PM - 5:00PM

# ROOM 2908

## **Brianna Carter**

## **Health Education and Promotion**

Association of Religious Commitment with Perceived Stress Levels in College Students

### **Dr. Ashley Walker**

College students report a higher level of stress related to daily functioning. Previous studies suggest that religion can be used as a coping resource. Utilizing the Transactional Theory of Stress and Coping, this study examined the association between religious commitment and perceived stress levels in undergraduate college students.

## **Kaitlyn Carmichael**

## **Exercise Science**

An Examination of Happiness between Race, Gender, and School Classification: An Echo Boomer Analysis

### **Dr. Daniel Czech**

Subjective well-being is often evaluated by happiness within specific domains. Results of previous studies may not translate to younger generations due to a lack of relevancy. The purpose of this study is to examine subjective happiness across race, gender, and school classification among college students without the focus on domains.

## **Asha Stegall**

## **Exercise Science**

Quantitative Study: Comparing the On and Off Field Anxiety Levels of Athletes and Non-Athletes

### **Dr. Daniel Czech**

The purpose of this study was to compare anxiety levels among collegiate basketball players and intramural athletes at Georgia Southern. This research looks at two different forms of anxiety: State Anxiety and Trait Anxiety. The results of this study can be helpful in understanding reasons of choking on and off the field.

4:00PM - 5:00PM

# ROOM 2911

## **Megan Bright**

## **International Studies**

Faces of Immigration: The American Dream is Not Dead

### **Dr. Darin Van Tassell**

This thesis looks at the United States' immigration policy through featuring three people from Middle Eastern countries who are linked to the immigration process. These stories give insight into the immigration process of the US and the adjustment of Arab immigrants to life in America in a post-9/11 world.

## **Jessica Shanken**

## **International Studies**

Creating Peace in Our Communities: An Analysis of Community Reconciliation Techniques

### **Dr. Darin Van Tassell**

This study surveyed college students before and after a forum on race to determine any impact it had on the opinions of attendees regarding race in their communities. An ideal model for intergroup dialogue was created based on the survey results, participant observation, and previous research.

## **Kimberly Rudolph**

## **International Studies**

The Importance of Music Festivals: An Unanticipated and Underappreciated Path to Identity Formation

### **Dr. Darin Van Tassell**

The purpose of this study is to understand and explain the growing popularity of music festivals around the world, through qualitative and quantitative research. Studying these mega events reveals the human desire to belong, and that music, as a global language, leads to not only creating communities within music festivals, but nations.



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